

Consultation Document – Alignment Selection

Beauly to Blackhillock to New Deer to Peterhead 400 kV OHL

REF: LT37 and LT359





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GLOSSARY

Term	Definition
Above Ordnance Datum (AOD)	It is a vertical datum used by an Ordnance survey as the basis for deriving altitudes on maps.
Alignment	A centre line of an overhead line, along with location of key angle structures.
Amenity	The natural environment, cultural heritage, landscape and visual quality. Also includes the impact of SSEN Transmission's works on communities, such as the effects of noise and disturbance from construction activities.
Ancient Woodland	In Scotland, Ancient Woodland are areas of woodland that have existed since 1750 and are relatively undisturbed by human development. They are considered irreplaceable and have complex biodiversity that have accumulated over hundreds of years.
Ancient Woodland Inventory (AWI)	The Ancient Woodland Inventory (AWI) is a provisional guide to the location of Ancient Woodland and has three categories of woodland:
	i. Ancient Woodland (1a and 2a) - Interpreted as semi-natural woodland from maps of 1750 (1a) or 1860 (2a) and continuously wooded to the present day. If planted with non-native species during the 20th century they are referred to as Plantations on Ancient Woodland Sites (PAWS).
	ii. Long-established woodlands of plantation origin (LEPO) (1b and 2b) - Interpreted as plantation from maps of 1750 (1b) or 1860 (2b) and continuously woodled since. Many of these sites have developed semi-natural characteristics, especially the oldest ones, which may be as rich as Ancient Woodland.
	iii. Other woodlands on 'Roy' woodland sites (3) - Shown as unwooded on the 1st edition maps but as woodland on the Roy maps. Such sites have, at most, had only a short break in continuity of woodland cover and may still retain features of Ancient Woodland.
Biodiversity Net Gain (BNG)	It is an approach to development which makes sure that the natural environment is left in a measurably better state than they were before the development.
Biodiversity Units (BU)	Biodiversity units are the metric used to quantify the biodiversity gains and losses of a development.
Birds of Conservation Concern	Birds of Conservation Concern (BoCC) provides the status of all regularly occurring birds in the UK, Channel Islands and Isle of Man. The current version is BoCC 5. Birds of highest conservation concern will appear on the Red List.
Buglife B-Lines	B-Lines are a series of 'insect pathways' running through the countryside and towns. B-Lines link existing wildlife areas together, creating a network that will weave across the UK landscape. This will provide large areas of brand new habitat benefiting bees and butterflies.
Class 1 and Class 2 Peatland	Class 1 — Nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas likely to be of high conservation value.
	Class 2 — Nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas of potentially high conservation value and restoration potential.
Construction Environmental Management Plan (CEMP)	A site specific environmental management plan setting out the environmental management procedures, legislation and requirements for a particular project and site.
Consultation	The dynamic process of dialogue between individuals or groups, based on a genuine exchange of views and, normally, with the objective of influencing decisions, policies or programmes of action.
Corridor	A linear area which allows a continuous connection between the defined connection points. The corridor may vary in width along its length; in unconstrained areas it may be many kilometres wide.

Term	Definition
Drinking Water Protected Areas (DWPA)	Bodies of surface water and groundwater identified in the Water Environment (Drinking Water Protected Areas) (Scotland) Order 2013 which are used for the abstraction of water intended for human consumption.
Effect	The direct or indirect physical consequence(s) of the proposed alignment option on receptors, under each of the various topic headings.
Electricity System Operator (ESO)	National Grid is the Electricity System Operator (ESO) for Great Britain. The ESC balances electricity supply and demand to ensure the electricity supply.
Environmental Impact Assessment (EIA)	Environmental Impact Assessment. A formal process codified by EU directive 2011/92/EU, and subsequently amended by Directive 2014/52/EU. The nationa regulations are set out in The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. The EIA process is set out in Regulation 4(1) of the regulations and includes the preparation of an EIA Report by the developer to systematically identify, predict, assess and report on the likely significant environmental impacts of a proposed project or development.
Freshwater Pearl Mussel (FWPM)	It is an endangered species of mollusc, found in clean, nutrient poor low-calcium rivers.
Gardens and Designed Landscapes (GDLs)	The Inventory of Gardens and Designed Landscapes lists those gardens or designed landscapes which are considered by a panel of experts to be of national importance.
Geological Conservation Review (GCR)	The Geological Conservation Review (GCR) is a process to select areas of national and international importance for their geology and geomorphology within Great Britain.
Geology	The study of the rocks and similar substances that make up the earth's surface.
Gigawatt (GW)	One billion watts.
Ground Water Dependent Terrestrial Ecosystem (GWDTE)	Wetlands which critically depend on groundwater flows. They are safeguarded by the Water Framework Directive (WFD) and are sensitive to hydrological and ecological changes.
Habitat	Term most accurately meaning the place in which a species lives, but also used to describe plant communities or agglomerations of plant communities.
Habitat Map of Scotland (HABMOS)	It is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.
Historic Environment Scotland HES	Historic Environment Scotland is the lead public body established to investigate, care for and promote Scotland's historic environment.
High Voltage Direct Current (HVDC)	A high voltage, direct current (HVDC) electric power transmission system uses direct current for electric power transmission, in contrast to the more common alternating current systems. Most HVDC links use voltages between 100 kV and 800 kV.
Holistic Network Design (HND)	The Holistic Network Design (HND) sets out the strategic network infrastructure to deliver 2030 offshore wind targets. This has been developed through the Offshore Transmission Network Review (OTNR), with the Electricity System Operator (ESO) working closely with SSEN Transmission and other GB Transmission Operators to deliver a more coordinated design, while ensuring an appropriate balance between environmental, social and economic costs.
Holford Rules	Guidelines on overhead line routeing first formulated in 1959 by Sir William later Lord, Holford. The Holford Rules set out a hierarchical approach to routeing which advocates avoiding areas of high amenity value, minimises changes in direction, which takes advantage of topography and which minimises visual interactions with other transmission infrastructure.
Hydrogeology	A branch of geology concerned with the occurrence, use, and functions of surface water and groundwater.

Term	Definition
Hydrology	The study of water on and beneath the earth's surface, with regards to its occurrence, distribution, movement and properties as well as its relationship with the environment within each phase of the water cycle.
Important Invertebrate Areas (IIAs)	Important Invertebrate Areas (IIAs) are the best places in Great Britain for the invertebrates, which have been identified using the most up-to-date data available from over 80 national expert recording schemes. They support some of the rarest and most threatened species, vulnerable habitats and unique assemblages of invertebrates.
Irreplaceable Habitat	Irreplaceable habitats are habitats which are very difficult (or take a very significant time) to restore, recreate or replace once destroyed, due to their age, uniqueness, species diversity and rarity.
Kilovolt (kV)	One thousand volts.
Land Capability for Agriculture (LCA)	It is a land evaluation ranking that groups soils based on their potential for agricultural purpose.
Landscape Character Type (LCT)	A distinct, recognisable and consistent pattern of elements in a landscape that differentiate the area from another.
Level of Impact	The outcome of a comparative appraisal of the combination of effects within a specific topic along a specific alignment option after a consideration of the potential for mitigation, using professional judgement based on experience.
Limit of Deviation (LOD)	The area either side of the proposed alignment within which micrositing of structures may take place in accordance with the conditions of the Section 37 consent.
Listed Building	Building included on the list of buildings of special architectural or historic interest and afforded statutory protection under the 'Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997' and other planning legislation. Classified categories A – C.
Local Nature Reserve	Areas of natural heritage that are locally important.
Long-Established woodlands of Plantation Origin (LEPO)	LEPO refers to the wooded areas that have a continuous history of being wooded since at least 1750.
Micrositing	The process of positioning individual structures to avoid localised environmental or technical constraints.
Mitigation	Term used to indicate avoidance, remediation or alleviation of adverse impacts.
National Cycle Network (NCN)	It offers a collection of signed walking and cycling paths connecting Scotland's cities, towns and countryside.
NCR	The National Cycle Routes are a UK-wide network of signed paths and routes for walking, wheeling, cycling and exploring the outdoors.
National Nature Reserve	Areas of natural heritage that are nationally important.
National Scenic Area (NSA)	A national level designation applied to those landscapes considered to be outstanding scenic value in a national context.
Native Woodland Survey of Scotland (NWSS)	The Native Woodland Survey of Scotland identified and mapped the location, extent, type and condition of all of Scotland's native woodlands.
NatureScot	NatureScot is the lead public body responsible for Scotland's natural environment.
Network Options Assessment (NOA)	The National Grid's Network Options Assessment (NOA) provides their recommendation for which network reinforcement Projects should receive investment, and when.
Ornithology	The study of birds, their behaviour, physiology and taxonomy.

Term	Definition
Overhead line (OHL)	An electric line installed above ground, usually supported by lattice steel towers or poles.
Plantation Woodland	Woodland of any age that obviously originated from planting.
Potential Alignment	The Potential Alignment presents the outcome of our initial appraisal, before consultation, of environmental, technical, and cost constraints. It is the alignment we consider is the best balance of the constraints identified.
Private Water Supply (PWS)	A water supply that is not provided by Scottish Water.
Proposed Alignment	The Proposed Alignment presents the outcome following consultation and is taken forward to detailed design and section 37 consent application.
RAG Rating	A Red, Amber, Green rating provided to assess the potential impact of the proposed OHL.
Ramsar	A wetland site designated to be of international importance under the Ramsar Convention.
Route	A linear area of approximately 1 km width (although this may be narrower/wider in specific locations in response to identified pinch points / constraints), which provides a continuous connection between defined connection points.
Routeing	The work undertaken which leads to the selection of a Proposed Alignment, capable of being taken forward into the consenting process under Section 37 of the Electricity Act 1989.
Schedule 1 Species	Birds listed on the Schedule 1 of the Wildlife & Countryside Act 1981, of which it is an offence to intentionally or recklessly disturb at, on or near an 'active' nest.
Scheduled Monument	A monument which has been scheduled by the Scottish Ministers as being of national importance under the 'Ancient Monuments and Archaeological Areas Act 1979'.
Scottish Environment Protection Agency (SEPA)	Scotland's principal environmental regulator, protecting and improving Scotland's environment.
Scottish Water (SW)	Scottish Water is a public company that provides public drinking water and sewerage services across Scotland. It is accountable to the public through the Scottish Government.
Semi-natural Woodland	Woodland that does not obviously originate from planting. The distribution of species will generally reflect the variations in the site and the soil. Planted trees must account for less than 30% of the canopy composition
Sites and Monument Record (SMR)	Sites and Monuments Record (SMR) holds documentary evidence and field inspections of all known archaeological sites and monuments.
Sites of Special Scientific Interest (SSSI)	Areas of national importance. The aim of the SSSI network is to maintain an adequate representation of all natural and semi-natural habitats and native species across Britain.
Span	The Section of overhead line between two structures.
Special Area of Conservation (SAC)	An area designated under the EC Habitats Directive to ensure that rare, endangered or vulnerable habitats or species of community interest are either maintained at or restored to a favourable conservation status.
Special Landscape Area (SLA)	Landscapes designated by councils, which are considered to be of regional/local importance for their scenic qualities.
Special Protection Area (SPA)	An area designated under the Wild Birds Directive (Directive74/409/EEC) to protect important bird habitats. Implemented under the Wildlife and Countryside Act 1981.
Stakeholders	Organisations and individuals who can affect or are affected by SSEN Transmission works.



Term	Definition
Study Area	The area within which the corridor, route and alignment study takes place.
Target Species	Legally protected and notable species of conservation concern.
The National Grid	The electricity transmission network in the Great Britain.
Vantage Point (VP)	A place, especially a high place, that provides a good, clear view of an area.
Volts	The international unit of electric potential and electromotive force.
Water Framework Directive (WFD)	European Community (EC)'s Water Framework Directive, sets out rules to halt deterioration in the status of water bodies and achieve good status for Europe's rivers, lakes and groundwater.
Wayleave	A voluntary agreement entered into between a landowner upon whose land an overhead line is to be constructed and Scottish Hydro Electric Transmission.
Wild Land Area (WLA)	Those areas comprising the greatest and most extensive areas of wild characteristics within Scotland.



1. INTRODUCTION

1.1 Purpose of the Document

This Consultation Document has been prepared by WSP UK Ltd ('WSP') on behalf of Scottish and Southern Electricity Networks Transmission (SSEN Transmission). SSEN Transmission, operating under licence held by Scottish Hydro Electric Transmission plc, owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands. This Consultation Document invites comments from all interested parties on the Potential Alignment identified for a new 400 kilovolt (kV) overhead line (OHL) to connect into new substation sites at Beauly, Blackhillock, New Deer and Peterhead.

This Consultation Document describes the alignment options appraisal undertaken, the alternatives considered during the selection of alignment options and the identification of the Potential Alignment. Comments are now sought from statutory authorities, key stakeholders, elected representatives and the public on the alignment selection process and the Potential Alignment identified.

All comments received will inform further consideration of the Potential Alignment.

The Consultation Document is available online at the Project website:

https://www.ssen-transmission.co.uk/Projects/beauly-blackhillock-new-deer-peterhead-400kV/

To complement this Consultation Document, a digital Consultation Document has been developed, which presents the key information included herein, alongside interactive maps and images. The digital Consultation Document can be accessed online via:

https://pinpointgis.wsp.com/portal/apps/storymaps/stories/883a0cf87537454283d9dcdf4f364ee5

1.2 Document Structure

This report is comprised of the following Sections:

- 1. Introduction setting out the purpose of the Consultation Document and document structure.
- 2. The Proposals describes the need for the proposals, a description of the proposals and the typical construction methods.
- 3. Alignment Selection Process sets out the alignment selection process and methodology that has been applied to date to derive a Potential Alignment.
- 4. Alignment Options provides a description of the alignment options.
- 5. Comparative Analysis of Potential Alignments summarises the key considerations of each alignment from an environmental, engineering and economic perspective, and provides a comparative appraisal of each alignment option in order to select a Potential Alignment.
- 6. Potential Alignment summarises the overall Potential Alignment.
- 7. Consultation on the Proposals invites comments on the alignment assessment process and identification of the Potential Alignment.

Appendix A: Alignment Appraisal Detail

1.3 Providing Feedback

As part of the consultation exercise, comments are sought from members of the public, statutory consultees and other key stakeholders on the Potential Alignment put forward in this report.

When providing comments and feedback on this Consultation Document, SSEN Transmission would be grateful for your consideration of the questions below:



- Has the approach taken to select the Potential Alignment been clearly explained?
- Are there any factors, or environmental features, that you believe we may not have already considered during the Potential Alignment selection process?
- Do you have any specific concerns in relation to the Potential Alignment? If so, is there anything we could do to mitigate the impact of this?
- Do you feel, on balance, that the Potential Alignment selected is the most appropriate for further consideration at the Environmental Impact Assessment stage?
- SSEN Transmission is currently developing a Community Benefit Fund to support communities in areas with new infrastructure. What suggestions for social or environmental community benefit opportunities do you have that you would like us to consider, or are there any local initiatives you would like us to support?

Comments on this Consultation Document should be sent to:

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All comments are requested by Friday 2 August 2024.

1.4 Next Steps

Following consultation, a Report on Consultation will be produced which will document the consultations received, and the decisions made in light of these responses. The Proposed Alignment will then be confirmed which will be taken forward into the Environment Impact Assessment (EIA).

Section 37 consent under the Electricity Act 1989 will be sought from the Energy Consents Unit of the Scottish Government for the proposed new OHL infrastructure.



THE PROPOSALS

2.1 The Need for the Project

In order to support the continued growth in onshore and offshore renewables across the north of Scotland, supporting the country's drive towards Net Zero, further investment in network infrastructure is needed to connect this renewable power and transport it from source to areas of demand across the country.

Extensive studies completed to inform the Electricity System Operator' (ESO)'s 'Pathway to 2030' Holistic Network Design (HND) study¹ have identified the need to reinforce the onshore corridor from Beauly to Peterhead, via Blackhillock and New Deer. Providing a new 400 kV connection between these locations enables the significant power transfer needed to take power from large scale onshore and offshore low carbon renewable generation connecting from the Western Isles (via a 1.8 GW subsea high voltage direct current (HVDC) link) and from connections north of Beauly (via a new Spittal to Loch Buidhe to Beauly 400 kV OHL), to the east at Peterhead and offshore via two subsea HVDC links to England. The additional connection points into Blackhillock and New Deer are also needed to pick up power en route from additional large scale onshore and offshore low carbon renewable generation required to connect into the northeast of Scotland.

This need was supported by instruction to 'proceed' in National Grid's Network Options Assessment (NOA) Refresh Report 2021/22².

Further information on SSEN Transmission Pathway to 2030 can be found at the following address: https://www.ssen-transmission.co.uk/projects/2030-projects/2030-need/

2.2 Project Overview

The project is referred to as the Beauly to Blackhillock to New Deer to Peterhead 400kV OHL Project (and hereafter as 'the Project') and will pass through the local planning authority areas of Highland, Moray and Aberdeenshire. An overview of the Project is shown on **Figure 2.1**: **Site Location Plan**. The Project comprises the following elements:

- construction of approximately 185 kilometres (km) of new 400 kV double circuit OHL between new substation sites proposed at Beauly (Fanellan 400 kV substation), Blackhillock (Coachford 400 kV substation), New Deer (Greens 400 kV substation) and Peterhead (Netherton Hub);
- diversion of the existing 400 kV Blackhillock to Rothienorman OHL into the new Coachford 400 kV substation near Blackhillock;
- removal of the existing 132 kV OHL from Beauly to Knocknagael substations; and
- rationalisation and crossings of the existing transmission network.

The location of the new substations required at Beauly, Blackhillock, New Deer and Peterhead, into which the OHL will connect, has been informed by separate site selection studies and consultation with stakeholders and the public. The substation developments are being progressed separately and do not form part of the Project.

¹ National Grid ESO (July 2022). Pathway to 2030: A holistic network design to support offshore wind deployment for net zero. Available: https://www.nationalgrideso.com/future-energy/the-pathway-2030-holistic-network-design

² National Grid ESO (July 2022). Network Options Assessment 2021/22 Refresh. Available: https://www.nationalgrideso.com/research-publications/network-options-assessment-noa



2.3 Proposals Overview

The Project would comprise steel lattice towers from the proposed SSEN Transmission ASTI SSE400 tower suite, with an average height of 57 m.

The size of towers and span lengths is generally dependent on three main factors: altitude; weather; and the topography of the route. Towers are typically closer together at high altitudes to withstand the effects of greater exposure to high winds, ice and other weather events. Higher towers may be required in certain locations to maintain the required ground clearance heights, such as at road, river and rail crossings³.

The proposed steel lattice towers would support six conductor bundles (three wires per bundle) on six cross-arms (three on each side) and an earth wire between the peaks. Typical tower designs can be seen in **Plate 2.1**⁴.



Plate 2.1 – Existing SSE400 steel lattice tower design

2.4 Construction Activities

The main construction elements associated with the Project are anticipated to include:

- establishment of temporary construction compound(s);
- establishment of permanent stoned access to areas identified as requiring operational access;
- establishment of temporary construction access to areas where permanent access is not operationally required;
- establishment of suitable laydown areas for materials and working areas for tower foundations and erection equipment;
- delivery of components and materials to site;
- undergrounding of distribution overhead lines that cross or are in close proximity to the alignment;

³ In certain locations, such as the Caledonian Canal, specific crossing towers may be required which will exceed the maximum height of the ASTI SSE400 tower suite and could be in the region of 90 m in height. This is to ensure that all statutory clearance requirements are maintained.

⁴ The existing SSE400 tower suite design is currently being modified to provide stronger tower structures. The final tower design and appearance may differ slightly from the existing SSE 400 tower suite shown in Plate 2.1.



- undergrounding or realigning of existing transmission 132 kV, 275 kV and 400 kV OHLs where required to clear a corridor for the Project;
- establishment of temporary diversions of existing OHLs where necessary to enable undergrounding or realignment;
- construction of approximately 214 km of 400 kV double circuit OHL;
- dismantling of existing 132 kV double circuit OHL from Beauly to Knocknagael;
- dismantling of redundant sections of the existing 400 kV OHL from Blackhillock to Rothienorman;
- remedial works would be carried out to reinstate the immediate vicinity, and any ground disturbed to pre-existing condition; and
- inspections and commissioning.

All construction activities will be undertaken in accordance with a Construction Environmental Management Plan (CEMP) which will define specific methods for environmental survey, monitoring and management throughout construction. A CEMP will be produced by the contractor and agreed with statutory stakeholders prior to the commencement of construction.

2.5 Programme

It is anticipated that construction of the proposed OHL would take place over a four year period, although detailed programming of works would be the responsibility of the Principal Contractor in agreement with SSEN Transmission. Subject to gaining the necessary consents, it is anticipated that construction would commence in 2026, with an estimated completion date of October 2030.

3. ALIGNMENT SELECTION PROCESS

3.1 Introduction

The approach to alignment selection has been informed by SSEN Transmission's guidance 'Procedures for Routeing OHLs and Underground Cables of 132 kV and above'⁵. This guidance considers within it the Holford Rules⁶, which sets out a hierarchical approach to routeing which advocates avoiding areas of high amenity value, minimises changes in direction, and takes advantage of topography to minimise visual interaction with other transmission infrastructure.

The guidance document sets out SSEN Transmission's approach to selecting a corridor, route or alignment for an OHL. This document helps SSEN Transmission to meet its obligations under Schedule 9 of the Electricity Act 1989, which requires transmission license holders:

- to have a regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interests; and
- to do what they reasonably can to mitigate any effect that the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

The guidance develops a process which aims to balance these environmental considerations with technical and economic considerations throughout the Project.

The guidance splits a Project into the following key stages:

- Stage 0: Routeing Strategy Development;
- Stage 1: Corridor Selection;
- Stage 2: Route Selection;
- Stage 3: Alignment Selection; and
- Stage 4: EIA and consenting.

The stages that are carried out can vary depending on the type, nature of and size of a Project and consultation is usually carried out at each stage of the process. The Project is currently at Stage 3 Alignment Selection.

This study has involved the following four key tasks:

- identification of the baseline situation;
- identification of alternative alignment options;
- · environmental analysis of alignment options; and
- identification of a Potential Alignment.

3.2 Methodology

3.2.1 Area of Search

The extent of the area of search, hereafter referred to as the study area, has been defined by the Proposed Route identified at the end of Stage 2: Route Selection for the Beauly to Peterhead 400 kV OHL, in addition to the study area for the Coachford OHL Diversion Project located to the southeast of Keith; **Figure 2.1: Site Location Plan** illustrates the combined Proposed Route.

 $^{^{5}}$ SSEN Transmission (September 2020). Procedures for Routeing Overhead Lines and Underground Cables of 132 kV and above. Revision 2.

⁶ Holford Rules: Guidelines for the Routeing of New High Voltage Overhead Transmission Lines with NGC 1992 and SHETL 2003 Notes.



3.2.2 Baseline Conditions

A series of desk-based studies and targeted site visits were undertaken to identify a broad range of potential constraints and opportunities at the route selection stage. The following additional information has been taken on board for the alignment selection stage:

- feedback obtained during the route selection stage stakeholder and public consultation;
- further ecological, cultural heritage and landscape site visits; including targeted protected species habitat suitability and targeted UKHab surveys (2022-2024); targeted scarce breeding bird (2023), flight activity (2022-2023), capercaillie (2023) and vantage point (2022-2023) surveys; and
- planning application review on 27 April 2024.

3.2.3 Alignment Options Identification and Selection Methods

The process for identifying alignment options within the study area used a combination of the following:

- An initial alignment and variants were identified within the Proposed Route, taking into account the presence of environmental and engineering constraints and their protection buffers.
- The initial identified alignment options were refined by the wider Project team including an
 experienced Landscape Consultant and OHL Engineer to take into account topography, land cover
 and the Holford Rules, and amending them as necessary; or including alternative alignments.
- The following Projects which are running in parallel also needed to be accommodated as they directly impact the alignment identification process due to the requirement to connect into them:
 - Fanellan 400 kV substation;
 - Coachford 400 kV substation:
 - Greens 400 kV substation; and
 - Netherton Hub substation.
- Due to the length of the study area, the alignment options were divided into 29 Sections to enable
 different alignments to be selected and be able to connect to one another. The Section breaks
 were therefore generally at locations where there was an opportunity to switch between
 alignment options, or to simplify the comparative appraisal.

Alignment options for the Coachford OHL diversion were included following the same methodology as above.

3.2.4 Appraisal Method

At this preliminary alignment stage, and to account for the likelihood of minor changes in the alignment as the Project moves into EIA and design stages, a buffer of 100 m either side of the alignment has been applied to the appraisal, also referred to as a Limit of Deviation (LOD). This has been included in the comparative appraisal.

Environmental Criteria

A series of appraisals were carried out by experienced professionally qualified individuals in the various specialist fields to enable an informed combined opinion on how the potential environmental effects identified during the baseline studies could influence potential alignment options. Appraisal of alignment options has involved systematic consideration against the following environmental topic areas:

 Natural Heritage – designations, protected species, habitats, ornithology, hydrology, geology and hydrogeology;



- Cultural Heritage designations and cultural heritage assets;
- Landscape and Visual designations, landscape character and visual amenity;
- Land Use agriculture, forestry and recreation; and
- Planning Proposals⁷.

The following should be noted:

- The topic 'Proximity to Dwellings residential properties and other sensitive receptors' is covered within the engineering criteria 'Proximity';
- 'Habitat' types have been defined in relevant UK Habitat Survey (UKHab categories⁸). For peatland, peatland classes as shown the Carbon Peatland Map of Scotland (2016) are also referenced. For woodland, the categories assigned to areas noted on the Ancient Woodland Inventory (AWI) are also referenced, where relevant. Woodland definitions may therefore differ from those used within the 'Forestry' Section descriptions.
- An estimate has been made of the approximate area of commercial coniferous and broadleaved woodland that would be impacted by an indicative alignment within each alignment option, assuming a 90 m wide Operational Corridor (OC) for conifer and 60 m wide OC for broadleaves. This information is obtained from National Forestry Inventory (NFI) data.
- The Biodiversity Net Gain (BNG) assessment focuses on the calculation of Biodiversity Units (BU) from blanket bog, Class 1 and 2 Peatland, and ancient woodland categories 1a and 2a of those habitat parcels which span the full width of the Alignment Option and are therefore considered unavoidable. This approach was determined based on the assumption that SSEN Transmission will follow their biodiversity commitments to avoid any form of impact unto irreplaceable habitats. Other ecologically important ancient woodland (category 1b, 2b, 3) were not considered within the BNG assessment. Therefore, where the BU is detailed, at this stage this is only the BU from these habitat types where they are unavoidable, it does not represent the total BU value within an Alignment Option as not all habitat types have been considered at this stage.
- For the BNG assessment, in the absence of field data at this stage, condition was assumed to be moderate for all habitats. Blanket bog habitats were identified using the Peatland Classification of Scotland and the HABMoS data. Only peatland Class 1 and 2 were taken forward as blanket bog. Again, this habitat was assumed to be of 'Moderate' condition. Connectivity followed the simplified SSEN Transmission Guidance, where habitats of 'High' were assigned 'Medium' connectivity. Online available resources were used where possible to assign strategic significance, which relates the mention of the relevant habitats within the local plans i.e. Local Biodiversity Action Plans (LBAPs). For areas within Moray, the interactive map of their development plan was used to identify sites of local conservation interest. In the absence of similar detailed being available for Highland or Aberdeenshire council areas, strategic significance was set at 'Moderate' to adopt a precautionary approach.

Engineering Criteria

Appraisal of alignment options has involved systematic consideration against the following engineering topic areas:

- Infrastructure Crossings major crossings and road crossings;
- Environmental Design elevation, atmospheric pollution, contaminated land and flooding;
- Ground Conditions terrain and peat;
- Construction/ Maintenance access and angle towers; and

 $^{^{7}}$ Planning proposal search was carried out in September 2023 $\,$

 $^{^{8}}$ UK Habitat Classifications. Available at: HM_Data Sheet_UKHab Classifications_A4 Landscape.pdf (habitat-matters.com)



 Proximity – clearance distance to buildings, wind farms, communication masts, urban environments and metallic pipelines.

Economic Criteria

Appraisal of alignment options has involved systematic consideration against the following economic topic areas:

- Capital Costs construction, diversions, public road improvements, tree felling and land assembly;
 and
- Operational Costs inspections and maintenance.

Comparative Appraisal

To identify the alignment which achieves the best balance between the technical, environmental and cost considerations, a series of multi-disciplinary workshops were held which focussed on differences between the alignment options and ways of avoiding or minimising the interaction with a constraint.

This was aided by a by the use of a Red-Amber-Green (RAG) approach similar to that undertaken at the route selection stage, however at the alignment stage the options are often similar and differences not as apparent from using this tool.

3.2.5 Identification of a Potential Alignment

The overall objective throughout the appraisal of alignment options is to take full consideration of all environmental, engineering and cost factors to minimise any potential adverse impacts on the environment. Alignment options have been considered in combination to arrive at a Potential Alignment for the Project. The Potential Alignment presents the outcome of our initial appraisal, before consultation, of environmental, technical, and cost constraints. It is the alignment we consider is the best balance of the constraints identified.

3.2.6 Identification of a Proposed Alignment

Following the consultation period, the consultation feedback and SSEN Transmission responses to the feedback will be reported in a Report on Consultation document which will be made publicly available. Its purpose is to record the stakeholder feedback received during the consultation process; explain how SSEN Transmission has responded, and how it has informed the selection of the Proposed Alignment. If the consultation does not feed into the Project design this will also be incorporated into the Report on Consultation, with an explanation provided.

The Potential Alignment will be subject to further review after consultation to ensure feedback is considered fully before a Proposed Alignment is identified and taken forward to detailed design and section 37 consent application.



4. ALIGNMENT OPTIONS

This Section provides a description of the alignment options, which have been divided into 29 Sections to provide OHL design flexibility and for ease of comparative appraisal. The alignment options are presented on **Figure 4.1: Alignment Options** and described below from west to east.

4.1 Section 1

Section 1 has three alignment options, all beginning in Fanellan to the east of Ruttle Wood.

Alignment 1A – Alignment 1A initially travels southeast and then turns northeasterly through Fanellan. It turns east northeastwards, just west of the River Beauly. The alignment ends just east of the river, in Balblair Wood.

Alignment 1B – Alignment 1B is the same as Alignment 1A until just west of the River Beauly, where it crosses the river at a location slightly to the south. It ends south of Balblair Wood.

Alignment 1C – Alignment 1C starts and finishes on the same alignment as 1B, taking a slightly more direct route to the southeast, crossing the River Beauly at a more southerly point than Alignments 1A and 1B.

4.2 Section 2

Section 2 has three alignment options.

Alignment 2A – Alignment 2A moves northeast out of Balblair Wood, then turns to run parallel to the existing OHL, through Croiche Wood, and ends after crossing the River Beauly.

Alignment 2B – Alignment 2B begins south of Balblair Wood. From here, it runs northeast and matches Alignment 2A from the point of the existing OHL.

Alignment 2C – Alignment 2C runs to the south of Alignments 2A and 2B and closer to the river. North of Groam of Annat, it diverts east and runs the same as Alignment 2A from the existing OHL.

4.3 Section 3

Section 3 has two alignment options. Both options begin east of the River Beauly and end east of the A831.

Alignment 3A – Alignment 3A runs directly east and crosses the A831 in two locations.

Alignment 3B – Alignment 3B runs southeast and over the A833. It then turns northeast and travels parallel to the A831.

4.4 Section 4

Section 4 has two alignment options. Both alignment options begin south of the A862 and end east of Moniack Burn, past Reelig House.

Alignment 4A – Alignment 4A travels eastwards, south of the A862 and then diverts southeast at Easter Moniack.

Alignment 4B – Alignment 4B is the same as Alignment 4A, until Easter Moniack, where it takes a line slightly to the west.

4.5 Section 5

Section 5 has seven alignment options. All options begin west of Newtonhill, travel through The Aird, crossing the Great Glen Way, and end on the western side of the Caledonian Canal.



Alignment 5A – Alignment 5A is the most northerly option in this Section and runs generally eastwards to the south of Altnacardich and North of Cnoc na Moine. It travels east until it meets existing OHLs, where it then runs in parallel with the existing lines into the Great Glen, past Dunain House, where it turns southeast and crosses the A82 and Great Glen to the end point.

Alignment 5B – Alignment 5B travels southeast through The Aird woodland area past Mam Mor, then diverts east past Cnoc na Moine and crosses the Great Glen Way before diverting southeastwards into the Great Glen near Lagnalean. Here it turns southeast and crosses the A82 and Great Glen to the end point.

Alignment 5C – Alignment 5C is the same as Alignment 5B until just west of the Great Glen Way, where it takes a more southerly route to the Great Glen near Lagnalean before continuing to the end point.

Alignment 5D – Alignment 5D is similar to Alignment 5C at the beginning, but takes a more southerly route and zig-zags across The Aird, close to Craig Leach and then on to the Great Glen near Lagnalean before continuing to the end point.

Alignment 5E – Alignment 5E starts the same as Alignment 5D, before taking a more direct route in a southeasterly direction and then east, taking a more northerly crossing to the Great Glen across the A82 and then travelling southeast to the end point.

Alignment 5F – Alignment 5F starts the same as Alignment 5D, before taking a more direct route in a southeasterly direction running slightly south of Alignment 5D towards the Great Glen near Lagnalean before continuing to the end point.

Alignment 5G – Alignment 5G is the most southern route and takes a southeasterly straight line towards the north of Balliemore, before diverting eastwards to the Great Glen near Lagnalean and then continues to the end point.

4.6 Section 6

Section 6 has three alignment options. All options begin in the same location, to the west of the Caledonian Canal. The end point of each option will be dependent on the alignment chosen for the following Section.

Alignment 6A – Alignment 6A travels east and then turns southeast before crossing over the Caledonian Canal, passing to the north of Essich and continuing past Balvonie of Leys to the end.

Alignment 6B – Alignment 6B travels southeast between Scaniport and Cullaird and then east to join the same alignment as 6A north of Essich.

Alignment 6C – Alignment 6C turns directly south across the Caledonian Canal and River Ness, and runs to the west and then south of Scaniport. It then diverts in a more easterly direction passing to the south of Essich to the end.

4.7 Section 7

Section 7 has two alignment options. Both options begin west of the B861 near to Balvonie of Leys and end east of the River Nairn south of Mains of Daltulich.

Alignment 7A – Alignment 7A begins in an east, northeastly direction, running parallel to the existing OHL. It diverts slightly towards the northeast and through Daviot Wood, over General Wade's Military Road, the A9 and B851, ending east of the River Nairn and north of Meall Mor.

Alignment 7B – Alignment 7B begins further south of Alignment 7A, taking a more direct route until General Wade's Military Road, where the two options meet and continue on the same alignment.



4.8 Section 8

Section 8 has three alignment options. All options begin east of the River Nairn and end south of Assich Forest.

Alignment 8A – Alignment 8A runs parallel to the existing OHL, running northeast and then east, to the north of Saddle Hill and past Assich Forest.

Alignment 8B – Alignment 8B runs south of Alignment 8A until Saddle Hill, where it joins and runs along the same route as Alignment 8A, passing to the north of Saddle Hill.

Alignment 8C – Alignment 8C runs south of Creagan Glas and Saddle Hill. Its end point is the same as Alignments 8A and 8B.

4.9 Section 9

Alignment 9 is the only alignment option in Section 9, as no deviations were identified that were sensible to take forward. It runs parallel to the existing OHL to the northeast and then diverts east, where it passes north of Clunas Reservoir. The alignment ends northeast of Clunas Reservoir.

4.10 Section 10

Section 10 has three alignment options. All options begin northeast of Clunas Reservoir and end east of Newlands of Fleenas Wood.

Alignment 10A – Alignment 10A runs northeast to just south of Dundeasal, then turns in an easterly direction to run generally parallel with the existing OHL, on its south side.

Alignment 10B – Alignment 10B runs parallel and to the south of the existing OHL until north of Mains of Clunas, where it turns eastwards and travels north of Alignment 10C.

Alignment 10C - Alignment 10C runs directly east and to the south of Alignments 10A and 10B.

4.11 Section 11

Section 11 has three alignment options. All options begin east of Newlands of Fleenas Wood and end north of Cairn Duhie, east of Ferness and generally follow the route, to the south, of the existing OHL.

Alignment 11A – Alignment 11A runs southeast and parallel but at a distance from the existing OHL, past Achagour. It diverts slightly more southward after crossing the River Findhorn, then crosses the B9007 before turning northeast, crossing the A939 and ends east of Ferness.

Alignment 11B – Alignment 11B is similar to Alignment 11A but further to the south of the existing OHL. It takes a straighter line towards Achnabechan in a southeasterly direction where it turns northeast after crossing the B9007, to then cross the A939 and ends east of Ferness.

Alignment 11C – Alignment 11C is the same as Alignment 11B until southwest of Achagour. From here, it deviates slightly more eastwards until it meets the existing OHL where it runs in parallel across the River Findhorn and then south to meet and then follow Alignment 11B.

4.12 Section 12

Section 12 has four alignment options. All options begin east of Ferness and end to the east of the Hill of Glaschyle.

Alignment 12A – Alignment 12A runs parallel to and to the south of the existing OHL, north of Cairn Eney. The alignment turns northeast after crossing the Dava Way. It ends just east of the Hill of Glaschyle.



Alignment 12B – Alignment 12B is the same as Alignment 12A until the Dava Way, where it deviates southeast to the Falls of Feakirk, before turning northeast and then finally north to the east of Tomcork before re-joining Alignment 12A.

Alignment 12C – Alignment 12C passes Cairn Eney on the south side. After the Dava Way, it turns north to join Alignment 12A near Bantrach and then follows Alignment 12A until the end.

Alignment 12D – Alignment 12D follows the same line as Alignment 12C until the Dava Way, where it turns northeastwards to join Alignment 12B near the Falls of Feakirk and then follows Alignment 12B until the end.

4.13 Section 13

Section 13 has three alignment options. All options begin east of the Hill of Glaschyle and end south of Torwinny.

Alignment 13A – Alignment 13A runs generally eastwards, passing to the north of Loch na Braan and over Loch na Speur. It then crosses open moor at Knock na Snaird before entering forestry at Moss of Bednawinny to the end.

Alignment 13B – Alignment 13B is the same as Alignment 13A but diverts southeast at Loch na Braan to re-join Alignment 13A at Knock na Snaird, before continuing along the same route to the end

Alignment 13C – Alignment 13C is the same as Alignment 13A initially but diverts southeast at Loch na Braan until Red Craigs, where it goes east through Moss of Bednawinny. It ends after crossing Glen Lossie.

4.14 Section 14

Section 14 has five alignment options starting generally south/southeast of Torwinny and ending west of Mill Our. Three of the options take a northern route past Glenlatterach Reservoir and two take a southern route.

Alignment 14A – Alignment 14A starts south of Torwinny, travels northeast through Moss of Bednawinny and then diverts northwards over Mill Buie, west of its peak. It continues north until meeting the existing OHL, where it turns northeast to run parallel and to the south of the existing line, before turning southeast across the northern end of Glenlatterach Reservoir.

Alignment 14B – Alignment 14B is the same as Alignment 14A, apart from at the start point which is approximately 1 km further to the southeast.

Alignment 14C – The start of Alignment 14C begins in the same location as Alignment 14B then heads in a more easterly direction until just south of Burn of Tippochs, where it heads north to end along the same line as Alignments 14A and 14B.

Alignment 14D – Alignment 14D initially follows Alignment 14C and then takes a more north northeasterly route at Burn of Tippochs, to the west of Moss of Longhillock and across the eastern slopes of Mill Buie. From here it heads southeast to the end point south of Glenlatterach Reservoir.

Alignment 14E – Alignment 14E initially follows Alignments 14C and 14D and then takes a more northeasterly route at Burn of Tippochs, through the Moss of Longhillock, to the east of Mill Buie peak. From here, the line continues east northeastwards until its end, south of Glenlatterach Reservoir.

4.15 Section 15

Section 15 has three alignment options. Two of which begin to the southeast of Glenlatterach Reservoir and one begins to the northeast. All options have the same end point, southeast of Coleburn Distillery and west of Brown Muir.



Alignment 15A – Alignment 15A begins at the southern end of Glenlatterach Reservoir and travels northeast around the north of Hart Hill, before crossing the A941 and ending west of Brown Muir.

Alignment 15B – Alignment 15B begins near Mill Our at the north end of Glenlatterach Reservoir and travels southeast and then northeast over the top of Hart Hill before crossing the A941 and ending west of Brown Muir.

Alignment 15C – Alignment 15C begins south of Glenlatterach Reservoir and travels east to join and then follow Alignment 15B.

4.16 Section 16

Section 16 has three alignment options. All options begin west of Brown Muir and end east of Greenside.

Alignment 16A – Alignment 16A travels north along the west side of Brown Muir and turns northeast to run parallel with, and to the south of, the existing OHL. The alignment ends at the western edge of Teindland Wood.

Alignment 16B – Alignment 16B is the same as Alignment 16A until north of Brown Muir. From here, it diverts southeast towards Teindland and then travels northwards to meet the same end point as Alignment 16A.

Alignment 16C – Alignment 16C travels northeasterly around the north side of Brown Muir and closer to the summit until turning north at Teindland. From here, it is the same as Alignment 16B.

4.17 Section 17

Section 17 has three alignment options. All options begin to the west of Altonside and end to the west of the River Spey.

Alignment 17A – Alignment 17A routes around the northern edge of Teindland Wood and then runs eastwards, crossing the railway line before turning southeast to the south of Balnacoul Wood, across the Spey Valley and ends to the west of the River Spey.

Alignment 17B – Alignment 17B travels northeasterly but to the south of Alignment 17A, through the northern edge of Teindland Wood and across a railway line before turning southeast to join Alignment 17A as it crosses the Spey Valley.

Alignment 17C – Alignment 17C is the same as Alignment 17B until east of Teindland Wood, where it turns southeast and runs parallel to the existing 275 kV OHL. This option would require the undergrounding of a section of the existing 275 kV OHL from south of Westerton to south of Burnside of Dipple.

4.18 Section 18

Section 18 has a total of seven alignment options. All options begin west of the River Spey at Burnside of Dipple. The options are split over two possible endpoints, one east of Aultmore to the northwest of Keith and the other to the southwest of Keith.

Alignment 18A – Alignment 18A runs east over the River Spey and zig-zags through Slorach's Wood to utilise an existing wayleave for a distribution OHL before crossing the A96. East of the wood, it turns southeast and travels past Forgie Hill until the endpoint, north of Auchairn, northwest of Keith.

Alignment 18B – Alignment 18B is the same as Alignment 18A until west of the B9016. From here, it travels southwards, past the west side of Aultmore Distillery. It crosses the A96 for a second time before crossing the railway line then the A95 before ending southwest of Keith.



Alignment 18C – Alignment 18C crosses the River Spey and runs parallel to the north of the existing 132 kV OHL in a southeasterly direction. It continues straight after passing through the Wood of Ordiequish and crosses the A96 and B9016 until the same end point as Alignment 18A, northwest of Keith.

Alignment 18D - Alignment 18D is the same as Alignment 18C until west of the B9016. From here, it turns south and joins the same as Alignment 18B, ending southwest of Keith.

Alignment 18E – Alignment 18E is the same as Alignment 18D until within the Wood of Ordiequish, where the two existing OHLs divert. From here, the Alignment turns southeast parallel with the existing 275 kV OHL, through Gow Moss. It crosses the A95, then ends in the same point as Alignment 18D, southwest of Keith.

Alignment 18F – Alignment 18F begins south of the Burnside of Dipple before crossing the River Spey. It travels east then southeast through the Wood of Ordiequish, south of the existing 275 kV OHL. It runs parallel to the existing OHL until the eastern edge of Gow Moss. From here it turns south and then southeast passing east of the Wood of Mulderie. It ends at the same point as Alignment 18D, southwest of Keith after crossing the railway line and the A95.

Alignment 18G – Alignment 18G is the same as Alignment 18F until northwest of Gow Moss. From here, it turns south, then southeast and runs east of the Hill of Mulderie. It then crosses the railway line and A95 to end in the same location as Alignment 18D, southwest of Keith.

4.19 Section 19

There are two separate elements within Section 19 as follows:

- alignment options for the Beauly to Blackhillock 400 kV OHL Alignments 19A, 19B, 19C and 19D;
 and
- alignment options for the Coachford 400 kV OHL Diversion, comprising:
 - Alignment A1 for which there is no alternative; and
 - Alignments B1, B2, B3, B4 and B5.

4.19.1 Beauly to Blackhillock 400 kV OHL

Section 19 has four alignment options for the Beauly to Blackhillock 400 kV OHL. Three begin northwest of Keith and one begins to the southwest. All options end at the proposed Coachford 400 kV substation.

Alignment 19A – Alignment 19A begins east of Aultmore and travels east, then diverts south to pass east of Newmill. It crosses the River Isla and runs straight, crossing the railway line and the A95 until it reaches the proposed Coachford 400 kV substation, approaching from the north.

Alignment 19B – Alignment 19B travels past Newmill to the west and south. From south of the River Isla, it is the same as Alignment 19A.

Alignment 19C – Alignment 19C is the same as Alignment19A until it passes Dunnyduff Wood to the southeast of Keith, here it deviates to the southwest and then southeast to reach the proposed Coachford 400 kV substation.

Alignment 19D – Alignment 19D begins west of Keith, where it travels southeast to the south of the town through the edge of Cairds Wood. It crosses the A96 then connects with the proposed Coachford 400 kV substation from the west.



4.19.2 Section 19 - Coachford OHL Diversion

The alignment options for the Coachford OHL diversion comprise one alignment option to the west (to connect from the existing Blackhillock substation to the proposed Coachford substation), and five alignment options to the east (to connect from the proposed Coachford substation to the existing Rothienorman substation). The section of existing OHL between the two connection points will be removed.

Alignment A1 – Alignment A1 leaves the proposed Coachford substation site heading north and then northwest, crossing the Burn of Drum and A96 before connecting into the existing OHL at Tower 4, just northeast of the existing Blackhillock substation. There is only one option for this connection.

Alignment B1 – Alignment B1 leaves the proposed Coachford substation heading north and then northeast until Mains of Auchoynanie. Here it travels northwest, crossing the Burn of Drum before joining the existing OHL at Tower 12, to the east of Drum.

Alignment B2 – Alignment B2 is the same as Alignment B1 until Mains of Auchoynanie. Here it travels northeast, over the top of Hill of Ardrone and crossing the railway and River Isla before joining the existing OHL at Tower 17, southwest of Stripeside.

Alignment B3 – Alignment B3 is very similar to Alignment B2 but takes a slightly more easterly alignment across Hill of Ardrone and the River Isla before joining the existing OHL at Tower 18, southeast of Stripeside.

Alignment B4 – Alignment B4 is very similar to Alignment B3 but takes a more easterly alignment which goes around Hill of Ardrone on the eastern side, crosses the railway and joins the existing OHL at Tower 20, before reaching the River Isla.

Alignment B5 – Alignment B5 is the same as Alignment B1 but deviates to the east to pass though the lower slopes of Balloch Wood and behind a row of the properties which are located immediately west of Balloch Wood.

4.20 Section 20

Section 20 has six alignment options. All options begin at the proposed Coachford 400 kV substation and end at the northern edge of The Bin Forest.

Alignment 20A – Alignment 20A travels initially northeast from the proposed Coachford substation site, then southeast across the Glen of Coachford and through the southern edge of Balloch Wood. It runs north of Garromuir Wood, through the southern edge of the Brownhill Plantation and ends southwest of Whitehill.

Alignment 20B – Alignment 20B runs east across the Glen of Coachford and through the southern edge of Balloch Wood before diverting southeast towards Garromuir Wood. From northwest of Garrowmuir Wood, it is the same as Alignment 20A.

Alignment 20C – Alignment 20C exits from the southeast side of the proposed Coachford 400 kV substation and across the Glen of Coachford. From east of Balloch Wood, it is the same as Alignment 20A.

Alignment 20D – Alignment 20D exits from the same point as Alignment 20C from the proposed Coachford 400 kV substation, before travelling eastwards then southeast and then turning northeast between Cairnwhelp and Garrowmuir Wood, to follow the same alignment as 20A until the end.

Alignment 20E – Alignment 20E exits from the same point as Alignment 20C from the proposed Coachford 400 kV substation, before travelling eastwards then southeast and then turning northeast through Garromuir Wood, to follow the same alignment as 20A until the end.



Alignment 20F – Alignment 20F begins the same as Alignment 20E however, it continues southeast passing to the south of Garromuir Wood, and to the north of Cairnie, where it then turns northeast until the end.

4.21 Section 21

Section 21 has four alignment options. All begin north of The Bin Forest and end east of the A97.

Alignment 21A – Alignment 21A travels east, over the B9022, the River Deveron and the railway line until north of Boghead. It then turns southeast, crossing the existing 400 kV OHL to the west of White Hill, where it runs parallel to the existing OHL. The alignment ends east of the A97.

Alignment 21B – Alignment 21B is the same as Alignment 21A until north of Boghead of Cobairdy, where it takes a more southeasterly route to the south of Cobairdy and over the A97.

Alignment 21C – Alignment 21C is the same as Alignment 21B until Boghead, where it diverts south and then east. It passes through Longmoor Wood and then joins Alignment 21B south of Cobairdy.

Alignment 21D – Alignment 21D begins north of The Bin Forest. It travels southeast, crosses the B9022 south of Haddoch, then crosses the River Deveron and the railway line. It runs north of Kinnoir, then east through Longmoor Wood following the same alignment as 21B to the end.

4.22 Section 22

Section 22 has four alignment options. All options begin west of the Burn of Drumblade. Three options end south of Gariochsburn. One ends south of the Glen Dronach distillery.

Alignment 22A – Alignment 22A travels northeast until Conland, where it turns east then southeast to run through Bogcoup woodland. It ends south of Glen Dronach distillery.

Alignment 22B – Alignment 22B runs northeast and crosses the existing 400 kV OHL, then runs southeast and parallel to the north of the existing OHL till the end.

Alignment 22C – Alignment 22C runs southeast until the east side of the Burn of Drumblade, where it turns northeast, crosses the existing OHL and runs in parallel with the existing OHL in a southeasterly direction the same as Alignment 22B.

Alignment 22D – Alignment 22D is the same as Alignment 22C but continues on a southeasterly direction, crossing two roads before going east to cross the exiting OHL.

4.23 Section 23

Section 23 has six alignment options. The first four options begin south of Gariochsburn and the last two begin east of Nether Comisty. All options end at Haremoss Loch.

Alignment 23A – Alignment 23A runs east then northeast and over Whin Burn. It travels through Woodlands and north of Feith Hill, where it continues straight to the end point at Haremoss Loch.

Alignment 23B – Alignment 23B is the same as 23A until Whin Burn, where it deviates east and takes a more southerly route but still north of Feith Hill; then rejoins Alignment 23A.

Alignment 23C – Alignment 23C is the same as 23A until Whin Burn, where it turns southeast and runs north of the Hill of Denmoss and south of Feith Hill. It runs east before travelling northeast to reach the end point at Haremoss Loch.

Alignment 23D – Alignment 23D runs southeast past the Mains of Freindraught and then northeast, north of Largue. From here, it routes towards the Hill of Denmoss where it is the same as Alignment 23C.



Alignment 23E - Alignment 23E runs southeast for approximately 1 km and then and then northeast to cross the existing OHL to the west of Mains of Frendraught. It then joins and follows the same alignment as 23C.

Alignment 23F - Alignment 23F runs southeast between the existing OHL and Gallows Hill and then northeast to cross the existing OHL to the east of Mains of Frendraught. It then joins and follows the same alignment as 23D.

4.24 Section 24

Section 24 has four alignment options. All options begin at Haremoss Loch and end at Little Colp.

Alignment 24A – Alignment 24A travels north and past the Hill of Cleftbog on the eastern side. It continues north until south of the B9024, where it turns east and crosses the A947.

Alignment 24B – Alignment 24B runs northeast and parallel to Alignment 24A. It also diverts east before the B9024, from where it is the same as Alignment 24A.

Alignment 24C – Alignment 24C travels east and then northeast and again east, passing north of Woodhead of Laithers until Silverwells, from here it runs northeast until the end point, over the A947.

Alignment 24D – Alignment 24D runs southeast and then northeast, passing south of Woodhead of Laithers. It turns north and is the same as Alignment 24C from Silverwells.

4.25 Section 25

Section 25 has three alignment options. All options begin at Little Colp and end at the proposed Greens 400 kV substation.

Alignment 25A – Alignment 25A runs northeast parallel to the Idoch Water on its north side. From here, it turns eastwards and continues towards Castlehill where it travels southeast towards the end point.

Alignment 25B – Alignment 25B is the same as Alignment 25A until Idoch Water, where it diverts southeast past Burnside of Idoch. It then runs directly east towards Castlehill where it rejoins Alignment 25A.

Alignment 25C – Alignment 25C travels east and to the south of the other two options in this section. It runs south of Burnside of Idoch, then northeast to Castlehill. From here it is the same as Alignment 25A.

4.26 Section 26

Section 26 has four alignment options. All options begin at the proposed Greens 400 kV substation and end northeast of New Deer, to the east of the B9028 and south of the B9029.

Alignment 26A – Alignment 26A travels northeast and turns eastwards after crossing the B9170. It continues eastwards towards Loanhead of Fedderate where it turns southeast, to the end point south of the B9029.

Alignment 26B – Alignment 26B is the same as Alignment 26A until northwest of the Hilton of Culsh, where it takes a more southerly route in a southeasterly direction to the end point.

Alignment 26C – Alignment 26C runs south of Newton and Corbshill in an easterly direction before turning northeast across the B9170. It continues on to a point northwest of Hilton of Culsh, and from there it is the same as Alignment 26A.

Alignment 26D – Alignment 26D is the same as Alignment 26C until Hilton of Culsh, where it then follows the same route as Alignment 26B.



4.27 Section 27

Section 27 has seven alignment options. All of which begin east of New Deer, south of the B9029 and east of the B9028.

Alignment 27A – Alignment 27A travels eastwards south of Maud. At Waterhill of Bruxie it turns southeast and passes Wind Hill on the northeast side. The alignment ends at the B9030, southwest of Stuartfield.

Alignment 27B – Alignment 27B is the same as Alignment 27A until southwest of Waterhill of Bruxie, where it turns southeast and passes over the top of Wind Hill and Hill of Dens and continues to the end point.

Alignment 27C – Alignment 27C is the same as Alignment 27A until the southeast of Maud, where it turns southeast and runs west of the Hill of Dens. The alignment ends at Jock's Hill.

Alignment 27D – Alignment 27D is the same as Alignment 27A until Littlehill, where it turns southeast. It takes a route further west than Alignment 27C past Blackhill of Clackriach and ending east of Bruntbrae.

Alignment 27E – Alignment 27E is the same as Alignment 27D until south of Blackhill of Clackriach. From here, it runs south and ends west of Bruntbrae.

Alignment 27F – Alignment 27F travels south and then turns southeast at East of Gowkhill, passing north of Drymuir. It continues straight and then turns east at Meikle Kirkhill, then south to end east of Bruntbrae.

Alignment 27G – Alignment 27G is the same as Alignment 27F until the end of the section. It ends west of Bruntbrae.

4.28 Section 28

Section 28 has seven alignment options. All of which finish north of Aulton of Coynach Farm.

Alignment 28A – Alignment 28A begins southwest of Stuartfield at the B9030. It runs east passing north of Mains of Crichie, then turns to continue in a southeastly direction south of West Knock before ending north of Aulton of Coynach Farm.

Alignment 28B – Alignment 28B begins at the same point as Alignment 28A southwest of Stuartfield and runs southeast, then in an easterly direction passing south of Mains of Crichie and is the same as Alignment 28A from south of West Knock.

Alignment 28C – Alignment 28C begins at Jock's Hill and runs east towards Woodside Croft and then northeast to join Alignment 28A from south of West Knock.

Alignment 28D – Alignment 28D begins at Jock's Hill, initially runs southeast then travels generally northeast towards the Mains of Crichie. From this point, it is the same as Alignment 28B.

Alignment 28E – Alignment 28E begins at Jock's Hill where it travels southeast until it meets the existing 400 kV OHL at West Crichie. Here it turns east and runs in parallel before diverging away from the existing OHL in a northeasterly direction from North Auchtylair to Aulton of Coynach Farm.

Alignment 28F – Alignment 28F is the same as Alignment 28D except at the western end where it begins further west, to the east of Bruntbrae and runs east to join 28D.

Alignment 28G – Alignment 28G begins west of Bruntbrae where it travels southeast until it meets the existing OHL at West Crichie and continues on the same route as Alignment 28E.



4.29 Section 29

Section 29 has five alignment options. The first four options begin at Aulton of Coynach Farm and all options end at the proposed Netherton Hub.

Alignment 29A – Alignment 29A travels northeast, over the A952. It passes between Inverquhomery and Gallows Hill before turning southeast until the end.

Alignment 29B – Alignment 29B travels generally east over the A952. It passes south of Millbreck and south of Newmill at the Burn of Ludquharn. From here it runs east until the end.

Alignment 29C – Alignment 29C is similar to Alignment 29B but passes north of Newmill.

Alignment 29D - Alignment 29D is similar to Alignment 29B but takes a more direct path.

Alignment 29E – Alignment 29E begins at Turfhill of Auchtylair and travels northeast before diverting southeast, around North Auchtylair and then runs parallel to the existing 400 kV OHL in a generally easterly direction. At Newton of Ludquharn, it turns northeast to join Alignment 29D before entering the proposed substation site.



5. COMPARATIVE ANALYSIS OF ALIGNMENT OPTIONS

5.1 Introduction

The following is a summary of the key considerations of each alignment per Section from an environmental, engineering and economic perspective, and provides a comparative appraisal of each Section in order to select an overall Potential Alignment. The following figures accompany the text in this section and illustrate potential environmental baseline constraints identified under each topic.

- Figure 5.1 Ecology, Hydrology and Peat Constraints
- Figure 5.2 Cultural Heritage, Landscape and Land Use Constraints
- Figure 5.3 Woodland Constraints
- Figure 5.4 Agricultural Constraints

Appendix A: Alignment Appraisal Detail provides more detail on individual alignment option considerations for each topic as listed in Section 3.2.4 above. It should be noted that whilst the tables in Appendix A focus on the individual alignment option summaries, the environmental appraisals in this chapter draw upon the full comparative analysis picture within each Section as a whole.

Where topics are not mentioned specifically within the text, there is no notable preference between the alignment options. This does not mean that there are no potential impacts relating to that topic, but that the topic does not differentiate between the options sufficiently to have a bearing on the alignment option choice.

The comprehensive EIA surveys have not yet been completed on the Project, however some surveys have been carried out in 2022 and 2023 in target areas, which is why some (but not all) Sections have survey data referenced.

5.2 Section 1

5.2.1 Environment

Overall, from an environmental perspective, Alignment 1C is least constrained.

Alignment 1C impacts less woodland and therefore less potential habitat for bat species, pine marten and red squirrel. It is favoured for habitats as it is the only option where Annex I woodlands do not span the LOD and therefore may be possible to avoid. Alignment 1C has the shortest crossing of the Beaufort Castle Garden and Designed Landscape (GDL), with potential to avoid a tower being placed within the GDL, and therefore most likely to avoid direct physical impact, and it is furthest from Kiltarlity Old Parish Church scheduled monument (SM5570). From a landscape and visual perspective Alignment 1B and 1C provide the opportunity to cross the River Beauly in a marginally more discreet location, in comparison to Alignment 1A; additionally from a visual perspective Alignment 1C avoids an angle tower at the river and therefore is slightly favoured over Alignment 1B.



All alignment options pass through areas of commercial forestry. Alignment 1C has the least impact and is therefore favoured from a forestry perspective. Alignment 1B has less impact on commercial forestry than Alignment 1A.

5.2.2 Engineering

Overall, from an engineering perspective, Alignment 1C is least constrained.

All of the alignment options in Section 1 feature a single crossing of the River Beauly. The longest crossing is Alignment 1B and the shortest crossing is Alignment 1A, however all crossing distances are constructable. Each alignment option also crosses two minor roads. Alignment 1C features some steeper slopes, of less than a single span length, on the east side of the River Beauly. Tower placement adjacent to the river crossing would need to be carefully considered to avoid the steeper areas. All alignment options feature greater than 5% of their lengths being vulnerable to flooding in a 1-in-10 year event, on low-lying land to the east of the River Beauly.

From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 1C requires one fewer angle tower position than the other options. Alignments 1A and 1C pass within 170 m of a single residential property, whereas Alignment 1B is located within 170 m of two residential properties. Based on minor distinguishing factors, including the lowest number of angle positions, the shortest and most direct route, and the lower number of residential properties within 170 m, Alignment 1C is least constrained from an engineering perspective.

5.2.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Alignments 1B and 1C have similar estimated operational costs. Alignment 1A has the highest estimated operational cost and is greater than 140% of the lowest cost option. This is due to a requirement for an additional low voltage crossing which will require additional inspections.

5.2.4 Multi-Disciplinary Appraisal

Alignment 1C has been selected as the Potential Alignment as it is least constrained from both an environmental and engineering perspective and is one of the lower cost options.

5.3 Section 2

5.3.1 Environment

Overall, from an environment perspective, Alignment 2B and 2C are less constrained when compared to Alignment 2A.

Alignment 2C impacts less woodland than the other alignment options and therefore also less potential habitat for protected species such as bats, red squirrel, and pine marten. Alignment 2C is also favoured from a landscape perspective for this reason, as woodland is a characteristic of the Landscape Character Type of the area,



and removal of woodland to facilitate the operation of an OHL would negatively impact the character of the area. Alignment 2C also avoids Balblair Wood, which is understood to be a popular walking area. Despite this, Alignment 2C it is located in closest proximity to visual receptors within the meanders of the river bends. Alignment 2C has the least impact on forestry and is favoured from this perspective.

From a visual perspective, Alignment 2A is more distant from existing sensitive receptors around Cruives, and more visually contained within woodland. However, it would require more angle towers adjacent to the river if taken forward in combination with either Alignment 1B or Alignment 1C. As Alignment 2C is located in closest proximity to visual receptors within the meanders of the river bends, overall Alignment 2B is considered preferable in visual terms and in combination with either Alignment 1B or 1C. Alignment 2B is favoured from a cultural heritage designations perspective as it continues from the previous alignment option and has a higher possibility of reduced effects from changes of the setting of the Kiltarlity Old Parish Church (SM5570) Scheduled Monument.

Alignment 2A is favoured from a cultural heritage assets perspective due to the increased distance from local Listed Buildings to the north and south, however it passes through a significant area of native commercial conifer and is therefore more constrained from a forestry perspective.

All options pass through the edge of Croiche Wood, which is designated as ancient woodland of semi-natural origin, at a location adjacent to an existing OHL to minimise tree loss.

5.3.2 Engineering

Overall, from an engineering perspective, Alignment 2B is least constrained.

All of the alignment options in Section 2 feature a single crossing of the River Beauly. All the options cross the river at the same location, with a required span of approximately 130 m and at a slightly oblique angle. Alignments 2A and 2B cross a single restricted access road, while Alignment 2C crosses two additional restricted access roads. From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 2B requires one fewer angle tower position than the other options, and also allows for a straight crossing of the River Beauly from Alignment 1C in the preceding section. Alignment 2C requires two larger angle deviations and is not favoured for this reason. There are two residential properties located within 170 m of Alignment 2B, and one residential property within 170 m of Alignments 2A and 2C. However, Alignments 2A and 2B maintain a larger minimum distance from residential properties than Alignment 2C.

Overall, Alignment 2C is more constrained due to the greater number of angle towers and reduced separation from residential properties. Alignment 2B is marginally favoured over Alignment 2A as it allows for the straightest crossing of the River Beauly from the preceding section.

5.3.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Operational costs are estimated to be similar for all options, with similar lengths and number of crossings for all options.



5.3.4 Multi-Disciplinary Appraisal

On balance, Alignment 2B has been selected as the Potential Alignment, as it is one of the least constrained options from an environmental perspective and has the least engineering constraints. All options were considered equally acceptable from a cost perspective.

5.4 Section 3

5.4.1 Environment

Overall, from an environment perspective, Alignment 3A is least constrained.

Whilst Alignment 3B is least constrained from a habitats perspective due to containing no unavoidable Annex I or irreplaceable habitat, it is less favoured in every other environmental category. Alignment 3A is least constrained for protected species as it has less woodland and therefore less potential habitat for bats, red squirrel, and pine marten. It is favoured for ornithology as the alignment option would parallel the existing OHLs. Due to this paralleling, Alignment 3A is also least constrained from a landscape and visual perspective. Containing OHL infrastructure to one area is preferrable for minimising impacts to landscape character and is strongly favoured visually, as taking Alignment 3B forward would result in 'boxing in' of properties around Meikle Phoineas. Alignment 3B would also be closer in proximity to properties at Balchraggan, Cabrich and Ballindoun. Alignment 3A is favoured for cultural heritage designations and assets as it is further from Beaufort Castle GDL (GDL00052), and Listed Buildings within 1 km to the south. Alignment 3A is also slightly favoured for forestry as it provides the opportunity to run parallel with the existing 132 kV OHL, reducing woodland removal on the north side of the operational corridor between the new alignment and the existing OHL; the majority of the coniferous woodland is currently felled for this option. Lastly, Alignment 3A is least constrained from a planning proposals perspective as there is a permitted planning application east of Crioche Wood and the River Beauly for new visitor accommodation (20/01783/PIP). Alignment 3A passes just through the north of the application boundary, whereas Alignment 3B passes through the middle of the application boundary and is therefore more constrained, as there would be challenges in locating an OHL in close proximity to holiday accommodation.

5.4.2 Engineering

Overall, from an engineering perspective, Alignment 3A is least constrained.

Alignment 3A crosses the A862 twice, whilst Alignment 3B crosses the A833 once. Alignment 3A also crosses a single restricted access road, and Alignment 3B crosses one minor road and a restricted access road. From a construction and maintenance perspective, both alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 3A requires no angle tower positions, whereas Alignment 3B requires two large angle deviations to the south of the A862. Alignment 3A passes within 170 m of two residential properties. There are no existing residential properties located within 170 m of Alignment 3B, however, as noted within the environmental summary above, there is a permitted planning application for new visitor accommodation located within 100 m of the alignment option. Alignment 3A is therefore less constrained due to the lower number of angle towers and greater separation from the proposed visitor accommodation.



5.4.3 Economic

Alignment 3A is the lowest capital cost option. Alignment 3B is over 120% of the lowest cost option and is therefore least favoured.

Alignment 3A has the lowest estimated operational cost. Alignment 3B requires one additional low voltage crossing and is over 140% of the lowest cost option.

5.4.4 Multi-Disciplinary Appraisal

Alignment 3A has been selected as the Potential Alignment as it is least constrained from both an environmental and engineering perspective and is the lowest cost option.

5.5 Section 4

5.5.1 Environment

Overall from an environment perspective, Alignment 4A is slightly less constrained.

Alignment 4A is slightly less constrained for cultural heritage designations as the two Sites and Monument Record (SMR) entries in close proximity are likely to be more easily avoided through design. It is also favoured for cultural heritage assets as it has an increased distance from Listed Buildings in the west. Alignment 4A is also slightly favoured visually as it is further from a greater number of properties at Easter Moniack and Reelig, although closer to Wester Craggach.

In all other environmental topics, both alignments are likely to be very similar in their impacts.

5.5.2 Engineering

Overall, from an engineering perspective, either alignment option is considered to be acceptable.

There are no major crossings required for either alignment option, and both options cross two minor roads. Both alignment options cross areas identified within the SEPA flood maps as being within the 1 in 10 year flood zone, surrounding the Conan Water and Moniack Burn. These flood risk areas are unavoidable, and towers will be required within the flood zone. Both alignment options also pass through a wetland area (Conan Bank wetland) which may pose some construction challenges. Tower placement would require careful consideration in this area. From a construction and maintenance perspective, both alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Both alignment options also require two angle tower positions. There are six residential properties located within 170 m of Alignment 4A and five located within 170 m of Alignment 4B, with the closest property located 102 m from both alignment options. As there is little to distinguish between the two alignment options, either is considered to be acceptable from an engineering perspective.

5.5.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.



Alignment 4A has the lowest estimated operational cost. Alignment 4B requires one additional low voltage crossing and is greater 140% of the lowest operational cost option.

5.5.4 Multi-Disciplinary Appraisal

Alignment 4A has been selected as the Potential Alignment as it is least constrained from an environmental perspective and has the lowest estimated operational cost. Both options were considered equally acceptable from an engineering perspective.

5.6 Section 5

5.6.1 Environment

From an environmental perspective, Alignments 5E and 5F are least constrained when compared to the other options.

Alignment 5F is favoured from a habitats perspective due to the lack of irreplaceable and Annex I habitats, unlike many of the other alignment options in this Section. It is also favoured from a cultural heritage assets perspective due to having an increased distance from the Listed Buildings within 1 km to the east and west, although Alignment 5G is similar. However, Alignment 5G is more constrained for cultural heritage designations as it crosses on the southern slopes of Cnoc na Moine and has more potential for impacts through changes to the setting of Dochfour GDL.

From a landscape and visual perspective Alignment 5A utilises the natural 'notch' in the landscape to run parallel the existing OHL infrastructure into the Great Glen. Alignment 5A avoids an angle tower at top of the hill slope into the Great Glen and concentrates infrastructure into the same location, as well as being located on lower ground, with a potentially less distinct wayleave. Alignment 5A is therefore strongly favoured from a landscape and visual perspective. However, Alignment 5A passes through a section of ancient woodland of semi-natural origin (AWI Category 1a) at Dunain, currently observed to be in favourable condition with mixed broadleaves and numerous healthy veteran trees throughout. Alignment 5A is therefore highly constrained from a forestry perspective and it is considered unlikely that this area of woodland would be given consent to be removed. The second choice for landscape and visual impacts is either Alignment 5E or 5F, as they both avoid the requirement for a prominent angle tower on entry into the Great Glen. From a landscape perspective, Alignment 5E has a more oblique angle into the Great Glen that does not take such good advantage of the 'notch' and is slightly less favoured compared with Alignment 5F.

Alignment 5F impacts the least amount of commercial forestry overall, closely followed by Alignment 5E. Alignment 5E passes through a small area of ancient woodland of semi-natural origin (AWI Category 1a) on the eastern slopes of Craig Leach, however field surveys have established that this is currently a commercial woodland and young restock plantation. To the east of Craig Leach, Alignment 5E also follows the gaps between the trees leading across the A82 into a much smaller strip of veteran broadleaves and avoiding ancient Caledonian pine trees, greatly reducing the impact to native woodland, ancient woodland and ancient/veteran trees that are present in the area. On balance, Alignment 5E is therefore considered to be least constrained from a forestry perspective, although careful tower placement would be required to minimise physical impacts to the area of Category 1a ancient woodland on Craig Leach.

All options pass though the Torvean Geological Conservation Review (GCR) site and SSSI.



5.6.2 Engineering

Overall, from an engineering perspective, Alignment 5F is least constrained.

All alignment options cross the A82 trunk road once. Alignments 5A and 5G require a lower total number of minor and local/restricted access road crossings than the other options, but this is a marginal difference and is not considered to be a significant constraint. All alignment options feature more than 25% of their length at elevations over 200 m, with Alignments 5E, 5F and 5G exceeding 300 m in elevation in places. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. Areas of steeply sloping ground are present across the Aird, especially on the eastern slopes of Creag Leach. Alignments 5C, 5D and 5G all feature greater than 5% of their lengths within the 1 in 10 year flood zone, whereas Alignments 5A, 5B, 5E and 5F have between 2 and 5% of their lengths within the flood zone. The difference between all options is however marginal and it may be possible to span across the areas of flood risk. Alignments 5C and 5E have a maximum gradient exceeding 35 degrees for greater than a span length, which could pose challenges with tower placement. These alignments do however appear to have good existing access throughout the areas of steeper slopes, which may make them constructable. Alignments 5A and 5G have the lowest percentage of their total lengths crossing steeply sloping ground, however the maximum slopes encountered on these alignments are still significant.

From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 5F requires two angle tower positions, whereas the other alignment options all require between one and four additional angle towers. Alignment 5D is least favoured due to these additional angles. Alignments 5B, 5C, 5D, 5F and 5G would allow for a straighter crossing of the Caledonian Canal and River Ness if progressed in combination with Alignment 6A in the following section. However, although the canal and river crossing itself it straight, these combinations do result in an angle tower being situated adjacent to the canal which is not preferred. Alignment 5E would allow for a straighter crossing of the canal if progressed in combination with Alignment 6B in the following section, with suspension towers placed either side of the canal. A straighter crossing is typically preferred from an engineering perspective, in order to ensure that the taller crossing towers required adjacent to the canal are suspension towers rather than tension (angle) towers. The reason for this is to minimise the construction works to be carried out at height. Tension towers require the conductors to be terminated at them, which requires the use of large platforms and mechanical equipment and therefore the preference is for this to be done at the lower towers. There are no residential properties located within 170 m of Alignments 5D, 5F and 5G. There are two residential properties located within 170 m of Alignment 5E.

Overall, Alignment 5F is least constrained from an engineering perspective, as it requires the fewest number of angle towers and remains over 170 m away from the nearest residential properties, however Alignment 5E also provides construction benefits where it crosses the Caledonian Canal, so is also considered acceptable.

5.6.3 Economic

Alignment 5A is over 120% of the lowest capital cost option and is least favoured from this perspective. All other alignment options are within 120% of the lowest cost option and are therefore considered acceptable.

Operational costs estimated to be similar for all options, with similar line lengths and number of crossings for all options.



5.6.4 Multi-Disciplinary Appraisal

Alignment 5E has been selected as the Potential Alignment, primarily due to the reduced impacts on forestry, ancient woodland and ancient and veteran trees. Alignment 5E also provides the opportunity for a straight crossing of the Caledonian Canal and River Ness, if progressed in combination with Alignment 6B in the following section. All options apart from Alignment 5A were considered equally acceptable from a cost perspective.

5.7 Section 6

5.7.1 Environment

Overall, from an environmental perspective, Alignment 6B is least constrained.

Alignment 6A was favoured from an ornithology, cultural heritage designations and visual perspective. For ornithology, the closer proximity of Alignment 6A to the existing OHL is preferable. From a cultural heritage assets perspective, Alignment 6A is favoured because it is the furthest away from Listed Buildings within 1 km. Visually, Alignment 6A is most densely screened by vegetation and sits on slightly lower ground across Drumashie Moor. Whilst this alignment would result in the 'boxing in' of a number of scattered properties, it is better screened overall, both by woodland and topography, as well as sitting 'behind' properties at Cullaird, making it preferable in visual amenity terms.

However, from a forestry perspective Alignment 6A passes through AWI Category 2b Long Established Woodland of Plantation Origin (LEPO) in favourable condition, with numerous veteran broadleaved trees present throughout which would be difficult to avoid. Alignment 6C also passes through a significant area of undesignated broadleaved woodlands with numerous veteran trees throughout, making it difficult to avoid or reduce impacts on native woodland and veteran trees. Alignment 6B affords the opportunity to avoid or reduce impacts to native broadleaved woodlands by passing through an area of commercial forestry within AWI Category 2b LEPO, however veteran exotic conifers are present and would need to be avoided where possible through micrositing of towers in this area, Alignment 6C was least favoured for heritage assets, recreation and planning proposals and had a wider extent of influence from a landscape character perspective and more visibility from the lochs and canal.

Alignment 6B on balance was therefore the favoured option.

5.7.2 Engineering

Overall, from an engineering perspective, Alignment 6B is least constrained.

All of the alignment options in Section 6 cross the Caledonian Canal and River Ness. Alignment 6A has the longest combined canal/river crossing at 230 m and Alignment 6C has the shortest crossing at 170 m. All crossing distances are considered constructable. The canal is navigable and can accommodate vessels with a maximum mast height of 35 m. Special crossing towers in the region of 90 m height will be required in this location to maintain the required electrical clearances. Alignment 6A would allow for a straight section on the approach to the Caledonian Canal, if progressed in combination with Alignments 5B, 5C, 5D, 5F or 5G in the preceding section. However these combinations would still result in an angle tower as one of the tall crossing towers, which is not preferable from a construction and



maintenance perspective. Alignment 6B would allow for a straighter crossing of the canal with no angle towers at the edge of the canal, if progressed in combination with Alignment 5E in the preceding section. A straighter crossing is typically preferred from an engineering perspective, in order to ensure that the taller crossing towers required adjacent to the canal are suspension towers rather than tension (angle) towers to limit complex works at height.

Alignments 6A and 6B cross two 132 kV underground cables, one 275 kV underground cable and one 275 kV OHL. Alignment 6C crosses one 275 kV underground cable, one 275 kV OHL and passes very close to the existing Knocknagael substation. The constraints imposed by the existing OHL entering the substation, and the substation site itself, make Alignment 6C potentially unviable from an engineering perspective. Alignment 6B is least constrained in terms of number of road crossings, requiring only one B road and one minor road crossing. Alignments 6A and 6C cross up to three additional minor roads of various categories.

Alignments 6A and 6B feature between 10% and 25% of their total lengths at elevations above 200 m. Alignment 6C features more than 25% of its length above 200 m elevation. From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 6A requires three angle tower positions, whereas Alignments 6B and 6C require two angle tower positions. The angles required for Alignment 6C are significantly larger and therefore not favoured. There are no existing residential properties located within 170 m of Alignment 6B. There is one residential property located within 170 m of Alignment 6A and three residential properties within 170 m of Alignment 6B is least constrained overall due to the reduced number of road crossings, avoidance of the existing Knocknagael substation, smallest number of angle tower positions and greater separation distance from residential properties.

5.7.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

The estimated operation cost of Alignments 6A and 6B is greater than 140% of the least cost option (due to the requirement for an additional low voltage crossing).

5.7.4 Multi-Disciplinary Appraisal

Alignment 6B has been selected as the Potential Alignment as it is the least constrained option from both an environmental and engineering perspective. All options were considered equally acceptable from a capital cost perspective.

5.8 Section 7

5.8.1 Environment

Overall, from an environment perspective, Alignment 7B is slightly least constrained.

Alignment 7B is slightly favoured for protected species as there are fewer waterbodies present compared to Alignment 7A, therefore reducing the habitat suitability for great crested newts. From a cultural heritage assets perspective, Alignment 7B is slightly favoured as it is further from Leys Castle (LB8053) and The Grange, Leys Castle (LB8055), reducing the potential for settings impacts. The residential receptors in this Section are concentrated along the valley of the River Nairn. Both options



follow the same alignment through this area. Alignment 7B is located slightly further away from Balvonie of Leys such that any angle tower would be more distant and better backdropped by woodland at Drummossie and is therefore slightly favoured visually.

However, Alignment 7A is slightly favoured for ornithology, landscape character and forestry due to the ability to close parallel with the existing OHL. On balance, there is a slight preference for Alignment 7B.

Both options pass through an area of Category 1a ancient woodland of semi-natural origin, however as the woodland is in a gorge, the tree would be over-sailed as per the existing OHL.

5.8.2 Engineering

Overall, from an engineering perspective, Alignment 7A is least constrained.

Both alignment options in Section 7 cross the A9 dual carriageway and the Perth to Inverness railway line as well as two B roads and three minor roads. Both alignment options exceed elevations of 200 m for over 25% of their length. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. There are some areas of moderate slopes, however these are likely to be spanned across with appropriate tower placement. There are no known areas of peatland located within either alignment option. From a construction and maintenance perspective, both alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Both alignment options required three angle tower positions and there are no residential properties located within 170 m of either option. Overall, Alignment 7A is marginally favoured from an engineering perspective as it is slightly shorter in length and parallels the existing 275 kV OHL, which would allow for shared access for operation and maintenance.

5.8.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Operational costs are estimated to be similar for all options.

5.8.4 Multi-Disciplinary Appraisal

Alignment 7A has been selected as the Potential Alignment as it is the least constrained option from an engineering perspective and from an ornithology, landscape character and forestry perspective, due to the ability to close parallel with the existing OHL. It is noted that it is slightly more constrained than Alignment 7B from the perspective of protected species, cultural heritage assets and visual effects perspective, however on balance Alignment 7A is considered to be the least constrained option. All options were considered equally acceptable from a cost perspective.



5.9 Section 8

5.9.1 Environment

Overall, from an environment perspective, Alignment 8C is least constrained.

Alignment 8C is the furthest from Battle of Culloden (BTL69) and Culloden Muir Conservation Area and is therefore favoured from a cultural heritage perspective. This is because it is located to the south of Saddle Hill, which provides some screening, though careful micro siting would be necessary to avoid direct impacts on the cairnfields. It also passes through the least woodland and is therefore also favoured for protected species and forestry.

Alignment 8C is least favoured from a landscape designation perspective as it passes closest to the Dava Moors Special Landscape Area. In addition, it is marginally less favoured for landscape character as the area of influence of OHL infrastructure would be spread over a slightly wider area if this alignment option was taken forward. Despite this, Alignment 8C is preferable for visual amenity as it is located further away from residential properties south of the B851 in the Valley of the River Nairn and Culloden and would have lower portions of towers screened behind Saddle Hill. All three routes risk being skylined. Overall, the visual benefits are thought to outweigh the landscape designation and Character disadvantages.

Alignment 8A and 8B also have their benefits. Alignment 8A would be favoured from an ornithology perspective due to more being closer to the existing OHL, and also landscape character due to close parallel. Alignment 8B passes through the least blanket bog habitat.

5.9.2 Engineering

Overall, from an engineering perspective, Alignments 8A and 8C are least constrained.

None of the alignment options in Section 8 require any major crossings or road crossings. All alignments feature 100% of their length at elevations above 200 m, with a maximum elevation of 318 m on Alignments 8A and 8B, and 322 m on Alignment 8C. All alignment options feature some steeply sloping ground, meaning tower heights in this area are likely to be variable. Alignments 8A and 8B cross some areas of peatland, with estimated peat depths of up to 1 m. Alignment 8C crosses some more extensive areas of peatland with estimated depths of up to 1.5 m. From an engineering perspective, where the soil type is identified as peatland, it poses challenges in terms of constructability and access. In areas of significant peat depth, alternative foundation designs such as piling will need to be considered. For all alignment options, peat depth surveys would be required at the next stage of the design process, to inform micrositing of tower locations and access tracks to avoid the areas of deepest peat.

From a construction and maintenance perspective, Alignments 8A and 8C are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 8B is further from existing access and may require the installation of more permanent access tracks to facilitate construction and maintenance. All alignment options require two angle tower positions. There are no residential properties located within 170 m of any of the alignment options. Overall, Alignments 8A and 8C are favoured due to the availability of existing access within 1 km.



5.9.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Operational costs are estimated to be similar for all options.

5.9.4 Multi-Disciplinary Appraisal

Alignment 8C has been selected as the Potential Alignment as it is the least constrained option from both an environmental and engineering perspective. All options were considered equally acceptable from a cost perspective.

5.10 Section 9

5.10.1 Environment

There is only one option in Section 9, Alignment 9A, and therefore a comparative appraisal is not necessary. Further alignment design will seek to minimise impacts on peatland as far as possible and there will be careful consideration of tower placement to minimise impacts on the Scheduled Monument on the northern side of the existing OHL.

5.10.2 Engineering

There is only one option in Section 9, Alignment 9A, and therefore a comparative appraisal is not necessary. The majority of the alignment is at elevations between 200 and 300 m, with a maximum elevation of 274 m which is not considered to be a significant constraint. The alignment passes through extensive areas of peatland, estimated to be less than 1 m in depth in most locations. Peat depth surveys would be required at the next stage of the design process, to inform micrositing of tower locations and access tracks to avoid the areas of deepest peat. Alignment 9A is also located within 300 m of an MBNL/Telefonica communications mast. Further investigation may be required with the mast operators to confirm if any interference is likely to occur or if mitigation is required.

5.10.3 Economic

There is only one option in Section 9, Alignment 9A, therefore a comparative cost appraisal is not necessary.

5.10.4 Multi-Disciplinary Appraisal

Alignment 9A is being taken forward as the Potential Alignment.



5.11 Section 10

5.11.1 Environment

Overall, from an environmental perspective, Alignment 10B is least constrained.

The environmental appraisal for the alignment options in Section 10 were largely similar, however Alignment 10B is marginally favoured. This is because visually Alignment 10B close parallels the existing OHL for the longest distance at the western end, then cuts a straight line more distant from Mains of Clunas than Alignment 10C and with less tight 'boxing in' of the property west of Cluaisnahadig and at Meikleburn Farm compared to Alignment 10A.

5.11.2 Engineering

Overall, from an engineering perspective, Alignment 10C is least constrained. Alignment 10B is also acceptable.

Alignment 10C requires six crossings of minor roads of various categories, whereas Alignments 10A and 10B require five minor road crossings. Throughout Section 10 the land is generally at moderate elevations and rolling or gently sloping. Alignments 10A and 10B feature less than 10% of their length at elevations above 200 m. Alignment 10C features a slightly higher percentage of its length above 200 m. Alignment 10A features some areas of steeply sloping ground, some of which may be too long to span, meaning that tower heights are likely to be variable. Alignments 10B and 10C feature less extensive slopes which can most likely be spanned out. All alignment options pass through a small pocket of Class 1 peatland east of Meikleburn Farm, however it may be possible to avoid the areas of peat through micrositing of tower locations.

From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 10A requires two angle tower positions, while Alignments 10B and 10C require only one angle tower position. There are two residential properties located within 170 m of Alignment 10A and one residential property within 170 m of Alignments 10B and 10C.

Alignments 10B and 10C are both considered acceptable, due the lower number of angle tower positions required, less extensive slopes and lower number of residential properties within 170 m. Alignment 10C is marginally favoured over Alignment 10B as it is the shortest and most direct option.

5.11.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Alignments 10B and 10C are estimated to have similar operational costs. The estimated operation cost for Alignment 10A is greater than 140% of the lowest cost option, due to the requirement for one additional low voltage crossing.



5.11.4 Multi-Disciplinary Appraisal

Alignment 10B has been selected as the Potential Alignment as it is the least constrained option from an environmental perspective and considered to be acceptable from an engineering and cost perspective.

5.12 Section 11

5.12.1 Environment

Overall, from an environment perspective, Alignment 11C is least constrained.

All three alignment options in Section 11 were very similar in their RAG ratings, however Alignment 11C is marginally favoured due to its potential for a better close parallel of the existing OHL across the River Findhorn. Should close parallel be achievable with tower placement consistent with the existing OHL, the overall visual influence of Alignment 11C is likely to be slightly reduced. Should this not be achievable however, then Alignment 11B would be favoured is it creates a greater distance between the two OHLs, separated by woodland, and is likely to benefit receptors immediately adjacent, reducing the risk of 'wirescaping', particularly from Ardclach bell tower. The potential for close parallel would also be beneficial for landscape character through the more intimate valley landscape of the River Findhorn and helps contain the extent of OHL influence in the Narrow Wooded Valley - Moray & Nairn (LCT 286) landscape. Alignment 11C is also least constrained for ornithology due to the close parallel and for forestry as it has the least amount of forestry loss.

5.12.2 Engineering

Overall, from an engineering perspective, Alignments 11B and 11C are least constrained.

With regards to major crossings, Alignment 11A crosses within close proximity (30 m) of recreational fishing lakes at Achagour. Alignments 11B and 11C maintain greater separation from the fishing lakes and are therefore favoured. All alignment options cross the River Findhorn. Whilst the river itself is relatively narrow, there are steep banks on each side which may necessitate a longer span in order to establish suitable tower locations on either side. All alignment options cross the A939, B9007 and one minor road. Alignment 11A crosses an additional two restricted local access roads and Alignment 11C crosses one additional restricted local access road. The eastern end of all of the alignment options follows the alignment of the existing 275 kV OHL, which would necessitate the realignment of approximately 2 km of the existing OHL. This realignment is required in order to avoid interaction with the consented Cairn Duhie Wind Farm turbine locations (ECU Application Reference: ECU00003255).

From a construction and maintenance perspective, all alignment options are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 11A requires three angle tower positions, Alignment 11B requires two angle positions and Alignment 11C requires five angle positions. There are no residential properties located within 170 m of Alignments 11B and 11C, whereas there is one residential property located within 170 m of Alignment 11A.

Alignment 11A is the most constrained due to the proximity to Achagour fishing lakes. Alignment 11B is marginally favoured over Alignment 11C from an engineering perspective, due to the lower number of angle towers required.



5.12.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Operational costs are estimated to be similar for all options.

5.12.4 Multi-Disciplinary

Alignment 11C has been selected as the Potential Alignment as it is the least constrained option from both an environmental and engineering perspective. All options were considered equally acceptable from a cost perspective.

5.13 Section 12

5.13.1 Environment

Overall, from an environment perspective, Alignment 12A is least constrained.

Alignment 12A is least constrained for forestry due to significantly less woodland removal, which is also beneficial for potential protected species as it is the shorter length. It is slightly favoured for habitats as it contains the least amount of unavoidable irreplaceable habitat. It is slightly favoured for ornithology due to being located furthest from ornithologically sensitive features (i.e. nest sites and lek sites) and its closer proximity to the existing OHL.

For landscape character and visual Alignment 12B is favoured as it runs on slightly lower ground north of Cairn Eney in close parallel to existing OHL infrastructure (the same as Alignment 12A) but avoids the more intimate landscape northwest of Lurg, where there is more obvious 'boxing in' of a small number of properties. Alignment 12B however results in removal of significant areas of commercial forestry.

5.13.2 Engineering

Overall, from an engineering perspective, Alignment 12A is least constrained.

All alignment options cross the A940 and a number of minor roads of various categories. All alignment options also cross the Dava Way long distance walking and cycling path. All alignment options feature greater than 25% of their length at elevations above 200 m. Alignment 12A is slightly favoured as it has a reduced length through higher elevations compared to the alternative options. All alignment cross through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. Peat depth surveys would be required at the next stage of the design process, to inform micrositing of tower locations and access tracks to avoid the areas of deepest peat.

From a construction and maintenance perspective, Alignments 12A and 12B are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignments 12C and 12D are also accessible, but are located further from existing suitable accesses. Alignment 12A requires three angle towers, Alignments 12B and 12C require five angle towers, and Alignment 12D requires six angle towers. There is one residential property located with 170 m of all alignment



options. All alignment options in Section 12 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the OHL to pass through, but there is no flexibility for micrositing the alignment in this area. Alignment 12A is least constrained overall due to availability of existing access, smaller number of angle tower positions and slightly lower elevations along the alignment.

5.13.3 Economic

Alignments 12A and 12B have the lowest capital cost and are considered acceptable. Alignments 12C and 12D are greater than 120% of the lowest cost option and are therefore least favoured from this perspective.

Operational costs are estimated to be similar for Alignments 12C and 12D. The estimated operational cost for Alignments 12A and 12B is greater than 140% of the lowest cost option, due to the requirement for one additional low voltage crossing.

5.13.4 Multi-Disciplinary

Alignment 12A has been selected as the Potential Alignment as it is the least constrained option from both an environmental and engineering perspective. It also has the lowest capital cost option, but the estimated operational cost is greater than 140% of the lowest cost option. However on balance 12A is considered to be the least constrained option.

5.14 Section 13

5.14.1 Environment

Overall, in Section 13 there is no clear environmental preference.

Alignment 13A is the least constrained option with regards to forestry loss and protected species, due to the smaller area of woodland that is crossed and shorter route length. All alignment options are dominated by coniferous plantation woodland but contain pockets of irreplaceable peatland habitat and of Annex I woodland, although Alignment 13C contains the least and is therefore the least constrained option for habitats.

For ornithology, Alignment 13C is least constrained as it passes almost entirely through coniferous plantation woodland, which is typically of low importance to ornithological species of conservation concern. For cultural heritage designations, Alignment 13A is favoured as it encounters no known designations, unlike Alignments 13B and 13C. For visual amenity, all three options should be backdropped by forestry in views from the north with forestry providing a good degree of visual screening. Alignment 13C is located slightly further from the majority of scattered properties and is therefore slightly favoured, but there is little to distinguish between them. From a planning perspective all alignment options will pass through the Clash Gour Wind Farm compensatory planting area, however they avoid the Habitat Management Areas and proposed/consented turbine locations.



5.14.2 Engineering

Overall, from an engineering perspective, Alignment 13C is least constrained.

Alignment 13A crosses Loch na Speur, a small loch on the slopes of Knock na Snaird. Alignments 13B and 13C feature no major crossings and are therefore favoured from this perspective. There are no road crossings within any of the alignment options. All alignment options pass through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. The peatland is located at the western end of the alignments north of Johnstripe and also to the north of Moss of Bednawinny. Alignment 13A passes through a slightly longer length of peatland than the other options. Peat depth surveys would be required at the next stage of the design process, to inform micrositing of tower locations and access tracks to avoid the areas of deepest peat.

From a construction and maintenance perspective, all alignments are considered to have moderate existing access, however the area to the south of Auchness has a limited network of existing tracks or roads within 1 km, making access to this section of all of the alignment options more challenging. Alignment 13A requires three angle towers, Alignment 13B requires five angle towers and Alignment 13C requires four angle towers. There are no residential properties located within 170 m of any of the alignment options. Overall Alignment 13C is marginally favoured, as it avoids the crossing of Loch na Speur on Alignment 13A and requires one less angle tower than Alignment 13B.

5.14.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Operational costs are estimated to be similar for all options.

5.14.4 Multi-Disciplinary

Alignment 13C has been selected as the Potential Alignment as it is the least constrained option from an engineering perspective and there is little to distinguish the options from an environmental perspective. All options were considered equally acceptable from a cost perspective.

5.15 Section 14

5.15.1 Environment

Overall, from an environment perspective, Alignment 14E is least constrained with Alignment 14D next favoured.

Alignment 14E, alongside Alignment 14D, are favoured from a natural heritage designations perspective as they are further from Buinach and Glenlatterach SSSI.

Alignment 14E (followed by 14D) is favoured with regards to protected species and forestry, due to the smaller area of woodland that is crossed which makes for a smaller amount of suitable habitat for red squirrels, pine marten and bat species than in other options. Alignment 14E does not encounter any known cultural heritage designations or assets in comparison to the other alignment options. Visually, Alignment 14E is favoured as it pushes the OHL slightly further from properties and does



not cross over Mill Buie, and hugs Cairn Uish so that the wind farm acts as a backdrop to contain infrastructure in this area. For this reason, Alignment 14E is also marginally preferable for landscape character. Glenlatterach Reservoir is part of a Drinking Water Protected Area (DWPA) which extends to the south, Alignment 14D is more constrained as it is upgradient of the reservoir and in close proximity.

From a planning proposal perspective, all alignment options are in close proximity to the consented Kellas Wind Farm (Moray Council ref: 13/00615/EIA) and the proposed Kellas Drum Wind Farm (ECU ref: ECU00005054). As discussed in the engineering section below, Alignment 14E is highly constrained by the consented Kellas Wind Farm and therefore strongly unfavourable from a planning proposals perspective. Alignment 14D has the potential to be highly constrained by the proposed Kellas Drum Wind Farm and would be strongly unfavoured if the application gains consent.

Environmentally, Alignment 14C would be the next favoured option after Alignments 14D and 14D, as it maintains the same alignment for the western section before deviating around the consented and proposed turbine locations.

5.15.2 Engineering

Overall, from an engineering perspective, Alignments 14A, 14B or 14C are least constrained.

All alignment options are in close proximity to Glenlatterach Reservoir and some micrositing of towers may be required in this area. Alignments 14A and 14B cross three minor roads of various categories, while Alignments 14C, 14D and 14E all cross between six and eight minor roads in total. Alignments 14A, 14D and 14E feature greater than 5% of their length within the 1 in 10 year flood zone, whereas Alignments 14B and 14C feature between 2 and 5% of their lengths within the flood zone. Alignments 14D and 14E pass through a long section of Class 1 and Class 2 peatland to the north of Cairn Uish, with estimated peat depths of 0.5 m to greater than 1.5 m. It is unlikely that it will be possible to microsite towers to avoid this area completely. The other alignment options also pass through areas of Class 1 and Class 2 peatland, but for slightly shorter distances or through lower peat depths. Peat depth surveys would be required at the next stage of the design process, to inform micrositing of tower locations and access tracks to avoid the areas of deepest peat.

From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignments 14B, 14C, 14D and 14E all require three angle tower positions, whereas Alignment 14A requires four angle tower positions. There are no residential properties located within 170 m of Alignment 14A, although the closest property is at 173 m distance. There is one residential property within 170 m of all of the other alignment options.

Section 14 skirts the boundary of a large existing wind farm (Rothes Wind Farm) and all alignment options are in close proximity to the consented Kellas Wind Farm (Moray Council ref: 13/00615/EIA) and the proposed Kellas Drum Wind Farm (ECU ref: ECU00005054). Alignments 14A, 14B and 14C would maintain the required three times rotor diameter distance from both the proposed and the consented wind farm turbine locations, however if the turbines were microsited closer under their limit of deviation this could impact the viability of these alignment options. Alignment 14E would impact on two of the proposed Kellas Drum Wind Farm turbine locations, and would also impact on four of the consented Kellas Wind Farm turbine locations. Alignment 14D would impact on four of the proposed Kellas Drum Wind Farm turbine locations, but would avoid impacting on the consented turbine locations. Alignments 14C, 14D and 14E also pass within 80 m of a communications mast. Further investigation may be required with the mast operators to confirm if any interference is likely to occur or if mitigation is required.



Alignment 14D is considered least constrained from an engineering perspective if the proposed Kellas Drum Wind Farm does not obtain planning consent, as it avoids interaction with the currently consented Kellas Wind Farm but maintains a shorter, more direct route than Alignments 14A, 14B and 14C. Alignments 14A, 14B or 14C would be considered least constrained if the proposed Kellas Drum Wind Farm does obtain planning consent.

5.15.3 Economic

Alignments 14D and 14E are strongly favoured from a capital cost perspective. The cost associated with the additional line length (more than 40% longer than Alignment 14E) pushes all the other options to greater than 140% of the lowest cost option.

Operational costs are estimated to be similar for all options.

5.15.4 Multi-Disciplinary

Alignment 14D has been selected as the Potential Alignment in the event that Kellas Drum Wind Farm application does not proceed. Should the wind farm application be consented, the Alternative Potential Alignment would be 14C, as it is the least constrained option which avoids the proposed wind turbine constraint.

5.16 Section 15

5.16.1 Environment

In Section 15, there is no clear preference from an environmental perspective.

For natural heritage designations, Alignment 15C is slightly favoured as it is further from the three SSSIs within 10 km. For protected species and forestry Alignments 15B and 15C are of equal preference, due to the smaller area of woodland that is crossed. Alignment 15A has no unavoidable Class 1 peatland, and is therefore favoured for habitats. For hydrology, geology and hydrogeology, Alignment 15B is favoured as it is not located within a SEPA DWPA (surface water) and Scottish Water (SW) DWPA. For cultural heritage designations, Alignment 15A is less constrained as it avoids Netherglen, standing stone, which is an SMR entry of higher significance, however for cultural heritage assets, Alignments 15B and 15C are favoured as they are the furthest from Listed Buildings in the area. For landscape character, Alignment 15A is favoured due to it crossing lower slopes, and its location closer to existing OHL infrastructure. Visually, Alignment 15B is slightly favoured as there are fewer properties in close proximity compared with Alignment 15A and it is located on slightly lower ground around Mill Our when compared to Alignment 15C. Alignment 15A is less constrained for planning proposals as it does not pass through the Habitat Management Plan area for Rothes III Wind Farm. There is no preference for ornithology, landscape designations, agriculture and recreation.

5.16.2 Engineering

Overall, from an engineering perspective, Alignments 15B and 15C are least constrained.



All of the alignment options cross the A941 arterial road and two minor roads. Alignments 15B and 15C pass through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging from 0.5 to 1.5 m. Alignment 15A does not cross any areas of known peatland. From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. All alignment options require three angle tower positions.

There are seven residential properties located within 170 m of Alignment 15A and one property located within 100 m. There are no residential properties located within 170 m of Alignments 15B and 15C. All alignment options in Section 15 skirt the boundary of the existing Rothes Wind Farm and are in close proximity to the proposed Kellas Drum Wind Farm development (ECU Ref: ECU00005054), but are not within three times rotor diameter of any of the proposed turbine locations. Alignment 15A is also in close proximity to an active quarry on the northern slopes of Hart Hill. This alignment option could constrain further expansion of the quarry.

Alignments 15B and 15C are considered least constrained overall, as they maintain greater separation from residential properties and the active quarry to the north of Hart Hill. However, as both of these alignment options pass through known areas of peatland, peat depth surveys would be required at the next stage of the design process, to inform micrositing of tower locations and access tracks to avoid the areas of deepest peat.

5.16.3 Economic

Alignments 15B is the lowest capital cost option and Alignment 15C is also acceptable from a capital cost perspective. Alignment 15A is over 120% of the lowest cost option, due to increased forestry costs.

Operational costs are estimated to be similar for all options.

5.16.4 Multi-Disciplinary

Section 15 will be influenced by the final decision of the alignment taken forward for Section 14, which depends on the outcome of the proposed Kellas Drum Wind Farm application. Alignment 15C has therefore been selected as the Potential Alignment, with 15B as the Alternative Potential Alignment, as they are the least constrained options from both an engineering perspective and for environmental topics with the exception of peatland and planning proposals.

5.17 Section 16

5.17.1 Environment

Overall, from an environment perspective, Alignments 16A and 16C are least constrained.

For natural heritage designations, Alignment 16C is slightly favoured due to being further from Coleburn Pasture SSSI than other options (which are adjacent to the SSSI). For protected species and forestry, Alignment 16A is favoured due to crossing a smaller area of woodland that decreases the habitat suitability for bat species. For habitats, Alignment 16C is favoured as the Annex I habitat does not span 100 m either side of the alignment and therefore may be avoidable. For ornithology, Alignment 16A is favoured due to its closer proximity to existing OHL infrastructure. For cultural heritage designations, Alignments 16B and 16C are favoured as they



avoid all designations and for cultural heritage assets, Alignment 16C is favoured as there are unlikely be significant effects on the Listed Buildings within 1 km. For landscape character, Alignment 16A is favoured as it parallels the existing line most closely and remains on lower slopes. Visually, Alignment 16C is potentially least favoured because of its visibility in the wider landscape due to being located on higher ground, but there is little to distinguish between Alignment 16A and 16B is visual terms. For planning proposals, Alignment 16C is marginally favoured as it has no known applications within 500 m.

5.17.2 Engineering

Overall, from an engineering perspective, Alignment 16A is least constrained.

All alignment options require two minor road crossings. Alignments 16A features between 10% and 25% of its length at elevations above 200 m. Alignments 16B and 16C feature greater than 25% percent of their length above 200 m. Alignments 16A and 16B pass through areas of slopes greater than a span length. Alignment 16C does not exceed a span length over 20 degrees, however it does pass through a short area with steeper slopes of up to 31 degrees. This could pose challenges for tower placement and access, but due to being less than a typical span length may be avoidable.

From a construction and maintenance perspective, Alignments 16A and 16B are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 16C passes through an area on the northern slopes of Brown Muir with no existing access within 1 km, making access to this section more challenging. Alignments 16A and 16C require three angle towers and Alignment 16B requires four angle towers. Alignments 16A and 16B are located within 170 m of one residential property. There are no residential properties located within 170 m of Alignment 16C. Alignment 16A is considered least constrained overall, due to the lower number of angle towers and greater availability of existing access.

5.17.3 Economic

Alignment 16A is the lowest capital cost option and Alignment 16C is also acceptable. Alignment 16B is 120% of the lowest cost option due to a greater length, additional angle tower and triple the forestry costs.

Operational costs are estimated to be similar for all options.

5.17.4 Multi-Disciplinary

Alignment 16A has been selected as the Potential Alignment as it is the least constrained option from an environmental, engineering and cost perspective.

5.18 Section 17

5.18.1 Environment

Overall, from an environmental perspective, Alignment 17B is least constrained.



Landscape and visual impacts were the driver for the Potential Alignment selection in Section 17, with the visual conclusion taking precedence over landscape designation and landscape character.

For landscape designations, all alignments would increase the extent of influence and intensify the adverse effects of infrastructure on the Spey Valley SLA designation due to increased size of infrastructure adjacent to the River Spey. Alignment 17C contains the influence of OHLs along the line of the existing 275 kV OHL, but results in the presence of two terminal towers and sealing end compounds (to cross the existing 275 kV OHL), such that any 'benefit' of close parallel is largely offset. Achieving a genuine close parallel of the existing 275 kV OHL and the proposed 400 kV OHL (i.e. tower placement running parallel and not more than 80 m distance between the two OHLs) would concentrate effects into the existing corridor more noticeably. As such, Alignment 17C may be slightly favoured. Conversely, if genuine close parallel is not achievable, then a greater separation would be preferable (Alignments 17A or 17B).

For landscape character, all alignments will have a major impact on local character. Alignment 17A is longer and requires more angle towers than the other two alignments, whilst Alignment 17C would contain the OHL infrastructure into the existing corridor. There is therefore some merit in close paralleling the infrastructure so as to concentrate its effects more fully into the existing corridor. As such, Alignment 17C may be slightly favoured. However, any benefits in close paralleling are largely offset by the requirement for two terminal towers and sealing end compounds to cross the existing 275 kV OHL close to the river. There is consequently an argument for keeping greater separation of the lines, both to avoid the presence of terminal towers and sealing end compounds and to avoid further intensification where genuine close parallel (i.e. tower placement matching) is not achievable. The location of any terminal towers and sealing end compounds adjacent to the River Spey would be particularly disruptive of the character of the valley.

Visually, as with landscape, all alignments will have a major impact. The presence of large-scale infrastructure across an area already heavily impacted would intensify the visual effects of OHL infrastructure in both local views and from wider views from surrounding hillsides. For Alignment 17C, the presence of sealing end compounds adjacent to the River Spey would be particularly discordant in views across the Spey valley. Whilst all alignments would be seen in the context of the existing OHLs, the 400 kV OHL will be larger and 'chunkier' in appearance, with all alignments requiring the crossing of one or more of the existing lines (potentially via oversailing). Alignments 17B and 17C are more direct and 'box in' slightly fewer properties, so would be marginally preferable to Alignment 17A. Alignment 17C concentrates the OHL infrastructure into a similar location, intensifying effects in this existing corridor (particularly for properties at Orbliston, Westerton and to the south) but preventing wider and such strong visual intrusion for receptors further north. However, the presence of two sealing end compounds (to cross the existing 275 kV OHL) would be particularly intrusive across the floodplain. The crossing of the Ordiequish viewpoint is also critical from a visual perspective. All alignments would strongly compromise the quality of the view around the designated viewing point. A second line paralleling the existing 275 kV OHL (Alignment 17C) would be particularly intrusive from the viewpoint on Ordequish Hill, but conversely, would enable some visual containment of infrastructure into the existing corridor. Despite Alignment 17B extending the visual extent of infrastructure across the floodplain and resulting in the 'boxing in' of additional properties, on balance of the three options this would be the option that is suggested be taken forward.

From a Hydrogeology perspective, the alignments pass through the DWPA for Spey boreholes, Dipple and the Ordequish Collecting Chambers, with the borehole abstractions being located to the north of the alignments. Alignments 17A and 17B are in closer proximity to the abstraction points and therefore have a greater potential for adverse impacts and are least favoured, however mitigation measures for construction in sensitive environments will be implemented for all alignment



options within this area to reduce the potential impacts. For cultural heritage assets the preference is for Alignment 17C as this has the least setting impact on listed buildings.

5.18.2 Engineering

Overall, from an engineering perspective, Alignment 17B is least constrained.

All alignment options cross a single track railway line, the B9103 and the B9815. Alignment 17A crosses four minor roads, Alignment 17B crosses three minor roads and Alignment 17C crosses two minor roads. Alignments 17A and 17B cross an existing 132 kV OHL and an existing 275 kV OHL. Alignment 17C crosses an existing 275 kV OHL. Due to the proximity of properties, approximately three spans of the existing 275 kV OHL would either need to be realigned or undergrounded to provide sufficient space for the 400 kV OHL along this alignment option. According to SEPA flood maps, more than 5% of each alignment option is located within the 1 in 10 year flood zone, associated with the River Spey. This flood risk area is unavoidable and towers will be required within the flood zone.

From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 17B requires two angle tower positions, whereas alignment 17A requires four angle tower positions and Alignment 17C requires three angle tower positions.

There are nine residential properties located within 170 m of Alignment 17A, five within 170 m of Alignment 17B and four within 170 m of Alignment 17C. Alignment 17A and 17B cross a Scottish Gas Networks (SGN) high pressure gas pipeline. Alignment 17C also crosses the pipeline and parallels the pipeline for approximately 2.5 km, introducing a risk of AC interference.

Alignment 17B is considered to be least constrained overall, due to the lower number of angle tower positions and reduced number of residential properties within 170 m compared with Alignment 17A. Alignment 17C is most constrained due to the paralleling of a gas pipeline and the requirement to realign or underground a section of the existing 275 kV OHL.

5.18.3 Economic

Alignment 17C is the lowest estimated capital cost option and Alignment 17B is also acceptable. Alignment 17A is over 120% of the lowest cost option due to additional length and additional crossings of existing infrastructure.

Alignment 17C has the lowest estimated operation cost. Alignments 17A and 17B have significantly higher operational costs due to the high number of low voltage crossings and associated cable sealing end compounds requiring inspection and maintenance.

5.18.4 Multi-Disciplinary

Alignment 17B has been selected as the Potential Alignment as it is the least constrained option from an environmental and engineering perspective and considered acceptable from a capital cost perspective. It is noted that operational costs are higher, however on balance Alignment 17B is considered to be the least constrained option.



5.19 Section 18

5.19.1 Environment

Overall, from an environmental perspective, Alignment 18C is least constrained.

Alignment 18C is favoured over Alignment 18A as it is shorter in length, parallels the existing OHLs and runs across lower ground and in woodland. It is therefore favoured for ornithology, landscape character and visual. Alignment 18C is also favoured for cultural heritage designations as it only comes into proximity to a single SMR entry, Tor Castle, which is thought to be a natural feature of no heritage value. Alignment 18A is favoured from a habitats perspective as there are no Annex 1 habitats where there are in Alignment 18C, associated with Douglasshiel Moss, and from a forestry perspective as there is less forestry loss.

The remaining alignments are less favourable. Alignments 18E, 18F and 18G all pass through an area of Class 1 peatland, Gow Moss, which is currently part of a national peat restoration project. These options are therefore potentially contrary to national planning policy and are most constrained. Alignment 18D also passes through peatland at Douglasshiel Moss. From a landscape character perspective Alignment 18D is favoured over Alignment 18B as it parallels the existing OHL for the longest length, then remains on lower ground south of Bogbain, helping to slightly contain the spread of OHL influence in the area. Visually, this alignment option is also favoured as it remains in woodland with less severe 'boxing in' than Alignment 18B. Alignment 18B is favoured from a habitats perspective as there are no Annex 1 habitats where there are in Alignment 18D, and from a forestry perspective as there is less forestry loss.

5.19.2 Engineering

Overall, from an engineering perspective, Alignment 18A is least constrained.

All alignment options cross the River Spey, with the crossing point going from largely flat ground on the west bank across to raised ground on the east bank of the river. All crossing points are considered to be spannable. Alignment options 18A, 18C, 18F and 18G all avoid crossing any existing OHL transmission infrastructure. Alignments 18B, 18D and 18E all require crossings of an existing 132 kV OHL and an existing 275 kV OHL, which would result in additional costs and impacts to the existing transmission network. This would also result in multiple crossings of the same circuits as these were also required to be crossed in the previous section. This is not preferable and introduces complexity on how the network can be safely maintained and operated. Alignments 18A, 18B, 18C and 18D cross a 320 kV underground cable and Alignment 18E runs parallel to the cable for approximately 2 km. Alignment 18A and 18C cross the A96 trunk road and the B9016. Alignments 18E, 18F and 18G cross the A95 trunk road once. Alignments 18B and 18D cross the A96 trunk road twice and the A95 trunk road once, and are therefore least favoured from this perspective. All alignment options except for 18A and 18C also cross a single-track heritage railway line. With regards to minor road crossings, Alignment 18F is least favoured as it crosses a total of 15 minor roads of various categories.

All alignment options are considered acceptable in terms of elevation and terrain, although Alignments 18F and 18G are located above 200 m elevation for over 25% of their length. These alignments also pass through some areas of steeper slopes, however only for a short distance so this is not considered to be a significant constraint. Alignments 18E, 18F and 18G pass through an area of Class 1 peatland at Gow Moss, with estimated peat depths of 0.5 m to greater than 1.5 m, and it is unlikely that it would be possible to microsite towers of the peatland areas. All other alignment options do not pass through any known areas of peatland.



From a construction and maintenance perspective, all alignment options are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 18C requires the lowest number of angle tower positions (two), followed by Alignment 18A and 18D which required four angle towers. Alignment 18G requires a total of seven angle tower positions.

There are no residential properties located within 170 m of Alignment 18E, and between one and three residential properties located within 170 m of Alignments 18A, 18B, 18C and 18D. There is one residential property located within 100 m of Alignments 18F and 18G, therefore these options are least favoured from this perspective. A communications mast has been identified in close proximity to Alignments 18C, 18D and 18E that is owned and operated by Airwave Solutions, who are responsible for communications related to emergency services and government organisations. All these options come within 100 m of a mast which may cause issues and would require further checks with the mast operator.

Alignment 18A is considered to be least constrained overall, due to the reduced number of major crossings, avoidance of known areas of peatland and flood zones, maintenance of at least a 100 m buffer from residential properties and avoidance of the communications mast.

5.19.3 Economic

Alignments 18C is the lowest estimated cost option and Alignment 18A is also considered acceptable. All of the other alignment options are greater than 120% of the lowest cost option and are therefore less favoured.

Alignments 18A and 18C have the lowest estimated operational costs. All other alignment options are greater than 120% of the lowest operational cost option.

5.19.4 Multi-Disciplinary

Alignment 18A has been selected as the Potential Alignment as it is the least constrained option from an engineering perspective and environmentally for peatland habitats and forestry loss. It is noted that it is more constrained than alternative alignment options for other environmental topics, however on balance Alignment 18A is considered to be the least constrained option. Alignment 18A is also acceptable from a cost perspective.

5.20 Section 19

As described in Sections 4.19 of this document there are two separate elements within Section 19 as follows:

- alignment options for the Beauly to Blackhillock 400 kV OHL Alignments 19A, 19B, 19C and 19D;
- alignment options for the Coachford 400 kV OHL diversion:
 - Alignment A1 for which there is no alternative; and
 - Alignments B1, B2, B3, B4 and B5.

The following subsections provide a summary of the comparative appraisal of the key considerations for each element of Section 19 in isolation, followed by an appraisal of the two elements considered in combination with each other, to ensure that cumulative impacts are fully considered as part of the appraisal process.



5.20.1 Environment

Beauly to Blackhillock 400 kV OHL

Overall, from an environmental perspective, Alignment 19D is least constrained.

For landscape character, Alignments 19A, 19B and 19C cross the more open and exposed landscape to the northwest of Newmill, whilst Alignment 19D sits slightly lower in the landscape, particularly on the approach to Keith and is therefore favoured.

From a visual perspective Alignments 19A, 19B and 19C around Keith and Newmill would be widely visible in the broad open valley of the River Isla, crossing the line of the existing OHLs and adding to the existing, already considerable, 'wirescape'. They also cross the steep sides of Burn of Drum and Dunnyduff Wood, and whilst backdropped by Balloch Wood, the elevation potentially increases visibility from Keith. Alignment 19B crosses the River Isla where the valley is directly overlooked by the south side of Newmill, making it least favoured. Alignment 19D is strongly favoured as it crosses on lower ground below Keith, with the more complex terrain tending to restrict wider visibility.

Alignment 19D is favoured recreationally as it crosses fewer core paths and is also further from the Moray and Nairn Coast SPA/Ramsar site than the other alignment options. All alignment options pass through SW DWPAs, Alignment 19D for a marginally longer distance.

There is little difference in the alignment options from the perspective of the other environmental disciplines.

Coachford 400 kV OHL Diversion

Overall, from an environmental perspective, Alignment A1 with B1 is least constrained.

Alignment A1 has limited constraints, there is the potential for the presence of protected species and water abstractions in the area. From a landscape character perspective, the alignment runs largely against the grain of the landscape, particularly on the more elevated foothills. It runs across a landscape already characterised by overhead line (OHL) infrastructure so would result in a slight increase in the adverse effect of OHLs on the local landscape. Visually there would be local impacts on individual properties, however the undulating landscape and rising hills of The Balloch would largely limit wider visual influence.

For landscape character, Alignment B1 follows a much less steep, flatter path across the landscape by maintaining the existing alignment for longest, but it then cuts through Mill Wood onto the higher slopes around Mains of Auchoynanie. Alignment B5 has the same benefits as Alignment B1 initially but then deviates across the lower slopes of Balloch Wood, against the grain of the landscape. Alignment B4 crosses the landscape more sympathetically than Alignments B2 or B3 and is the favoured alignment of those crossing at Hill of Ardrone.

From a visual perspective Alignment B1 is slightly favoured as it remains on lower ground and still removes a reasonable length of existing 400 kV OHL around Keith. Alignment B5 is similar to Alignment B1 however it passes to the rear of properties beneath Balloch Wood such that their key views to the front are less disrupted by infrastructure. However, the line sits much higher in the landscape, with a risk of being skylined in views further west. Of the alignments crossing Hill of Ardrone, Alignment B4 is favoured as it is set back off the summit of the hill, sitting into the hillside of Balloch Wood more sympathetically.



Alignments B3 and B4 are favoured from a natural heritage designations perspective as they do not pass over or in close proximity to Mill Wood SSSI. From a habitats perspective as there is no Annex I or irreplaceable habitat in Alignments B3 and B4 and, although Alignments B1 and B5 pass directly through ancient woodland of semi-natural origin, it would be over sailed and therefore not adversely impacted. Alignment B5 would have a significantly greater impact on commercial forestry and both public and private water supplies than the other alignment options.

Combination of Beauly to Blackhillock 400 kV OHL and Coachford 400 kV OHL Diversions

Alignment 19D is favoured in both landscape and visual terms as it sits slightly lower in the landscape and avoids three new OHLs coming in across Hill of Greenwood; therefore, any option in combination with Alignment 19D is also favoured. Of the Coachford 400 kV OHL Diversion Alignments, Alignment B1 is preferred in landscape terms as it retains the existing 400 kV OHL within the lower lying River Isla floodplain for longer. In visual terms, Alignment B1 is followed closely by Alignment B5 as it passes to the back of adjacent property, albeit at the risk of some skylining. The favoured combination is therefore Alignments 19D + A1 + B1 for both landscape and visual, followed closely by Alignment B5 for visual.

However, should Alignments 19A, 19B or 19C be taken forward along with the Coachford 400 kV OHL Diversion Alignments, the visual preference would alter. In this instance, when considered in combination, Alignment 19C in combination with Alignment A1 and B5 would be the preferred combination, as it allows the brief paralleling of two OHLs (Alignments 19C and A1) plus greater separation between these and the Blackhillock diversion option of Alignment B5. The preferred combination in this instance in visual terms would therefore be Alignments 19C + A1 + B5. From a hydrological perspective however Alignment B5 passes in close proximity to public and private water supplies and is therefore more constrained.

Overall, and on balance, It is considered that the visual preference in either instance should be taken as the preferred combination and therefore overall Alignment 19D+A1+B1 (or B5) is favoured.

5.20.2 Engineering

Beauly to Blackhillock 400 kV OHL

Overall, from an engineering perspective, Alignment 19A is least constrained.

Alignments 19A and 19C cross the River Isla, the Burn of Drum, the A95 trunk road, the B9017 and a single track railway line. Alignment 19B requires all the same major crossings as Alignments 19A and 19C, as well as a crossing of the B9116. Alignment 19D crosses the River Isla, the A96 trunk road, the B9014 and a single track railway.

Alignment 19D crosses two 132 kV OHLs and one 275 kV OHL. Alignments 19A, 19B and 19C cross one 132 kV OHL and one 400 kV OHL. It should be noted however that the 400 kV OHL is proposed to be diverted into the proposed Coachford 400 kV substation site as part of this Project, which will remove the requirement for a 400 kV OHL crossing on any of these alignment options. Alignments 19A and 19C cross the Moray West underground cable route three times, Alignment 19C crosses it once and Alignment 19D crosses it twice. This may restrict tower positions at the crossing locations, and could result in construction constraints for the third party owner of the cables if future works are required beneath the OHL.



Alignment 19D is situated at a higher elevation for a longer proportion of its length compared with the other alignment options. With regards to contaminated land, Alignments 19A, 19B and 19C pass close to an aircraft crash site, but this is designated low for unexploded ordnance hazard. Alignment 19D passes within 100 m of a historical rifle range that was in use between at least 1886 and 1945. There is a high unexploded ordnance risk associated with this site. Alignments 19A, 19B and 19C feature greater than 5% of their lengths within the 1 in 10 year flood zone adjacent to the River Isla. Alignment 19D features less than 5% of its length within the flood zone.

Alignments 19A, 19B and 19D all require three angle tower positions, whereas Alignment 19C requires five angle tower positions. There are two residential properties located within 170 m of Alignments 19A and 19C and one property within 170 m of Alignment 19D. There are eleven properties located within 170 m of Alignment 19B and one property within 100 m. Alignment 19B is therefore more constrained in terms of proximity to properties. There is one small wind turbine located close to Alignments 19A and 19B and two small wind turbines close to Alignment 19C. It is likely that the turbines would need to be relocated or removed to facilitate any of these alignment options. Alignment 19B crosses two gas pipelines and Alignment 19D crosses three gas pipelines. Alignment 19D also parallels within 65 m of the pipeline for approximately 1.5 km which could result in AC interference. There are no gas pipelines within 250 m of Alignments 19A or 19C.

Overall, Alignment 19A is considered least constrained, due to having the least interactions with existing electricity and gas pipeline infrastructure in comparison with Alignment 19D, reduced impacts to residential properties in comparison with Alignment 19B and reduced number of angle tower positions in comparison with Alignment 19C. Alignments 19B or 19C are considered to be less constrained from an engineering perspective than Alignment 19D, due to the significantly reduced number of electricity and gas infrastructure crossings.

Coachford 400 kV OHL Diversions

There is only one option (A1) for the diversion to connect from the existing Blackhillock substation to the proposed Coachford substation, therefore a comparative appraisal is not necessary.

Alignment A1 crosses the A96 trunk road, a medium pressure SGN pipeline and the Moray West 220 kV underground cable route. The alignment also crosses three restricted local access roads. There is an existing network of roads and tracks within 1 km of the alignment. Alignment A1 requires two angle towers and there is one residential property located within 170 m. There is one small 11 kW wind turbine located near Birkenburn Farmhouse, with a rotor diameter of 13 m. The turbine is more than 3 x rotor diameter from the alignment option, but there would be limited potential to microsite the alignment further east without impacting on the wind turbine.

For the diversion to connection from the proposed Coachford substation to the existing Rothienorman substation, Alignment B1 is the least constrained from an engineering perspective.

Alignments B2, B3 and B4 cross the Aberdeen to Inverness single track railway line, whereas Alignments B1 and B5 avoid this crossing. All alignment options cross a number of minor roads of various categories and also the Moray West 220 kV underground cable route. Alignment B3 crosses the Moray West cable route three times and Alignment B4 crosses it four times, making these options least preferable from this perspective. Alignment B2 features more than 5% of its length within a high-risk flood area associated with the River Isla and it is likely that a tower would be required within the flood area. Alignment B5 traverses across a significant side slope



for a large proportion of its route. This may pose challenges with construction and tower placement, and further constructability assessments would be required to determine the viability of this option.

There is an existing network of roads and tracks within 1 km of all alignment options. Alignments B1, B2 and B3 require three angle tower positions, Alignment B4 requires four angle tower positions and Alignment B5 requires five angle tower positions. There are no residential properties located within 170 m of Alignments B1, B2, B3 and B5 and two within 170 m of Alignment B4. All alignment options cross several Scottish Water pipelines, some of which are recorded as being made of cast iron. These are unlikely to cause a significant constraint but should be noted in relation to tower placement. There is one Telefonica fixed link between Millstone Hill and Hill of Ardrone. Alignments B2 and B3 are within approximately 300 m of the mast and Alignment B4 is within 75 m of the mast, therefore additional checks may be required to ensure there is no risk of impacts to the link.

Alignment B1 is least constrained overall due to the reduced number of major crossings, avoidance of steep side slopes, increased clearance from residential properties and avoidance of potential impacts to a communications fixed link.

Combination of Beauly to Blackhillock 400 kV OHL and Coachford 400 kV OHL Diversions

From an engineering perspective, there are no cumulative factors to be considered in selecting the least constrained alignments for this Section. The overall least constrained combination from an engineering perspective is therefore Alignment 19A+A1+B1.

5.20.3 Economic

Beauly to Blackhillock 400 kV OHL

Alignment 19D has the lowest estimated capital cost and is favoured from this perspective. Alignment 19B is over 120% of the lowest cost option, due to its increased line length. Alignments 19A and 19C are over 140% of the lowest estimated capital cost option, again due to their increased length in comparison to Alignment 19D. Alignment 19C has the highest estimated capital cost as it requires a greater proportion of tension towers than the other options.

Alignment 19A has the lowest estimated operational cost. Alignment 19C is over 120% of the lowest cost option, due to a greater number of crossings. Alignments 19B and 19D are over 140% of the lowest operational cost option, again due to the higher number of crossings requiring inspection.

Coachford 400 kV OHL Diversions

Alignment A1 is the only option available for the diversion between the existing Blackhillock substation and the proposed Coachford substation so is considered to be the lowest cost.

Alignment B1 has the lowest estimated capital cost. Alignments B2 and B3 are within 120% of the lowest cost option and are also considered acceptable. Alignments B4 and B5 are over 120% of the lowest cost option due to their increased length.

Alignment B1 has the lowest estimated operational cost. Alignments B2 and B3 are over 120% of the lowest estimated operational cost option due to additional low voltage crossings. Alignments B4 and B5 are over 140% of the lowest cost option and are least favoured from an operational cost perspective.



Combination of Beauly to Blackhillock 400 kV OHL and Coachford 400 kV OHL Diversions

From an economic perspective, there are no cumulative factors to be considered in selecting the least constrained alignments for this Section. The overall lowest cost combination is therefore Alignment 19A+A1+B1.

5.20.4 Multi-Disciplinary

Alignment 19A has been selected as the Potential Alignment in Section 19, as it is the least constrained option from an engineering perspective. Whilst Alignment 19D is least constrained from an environmental perspective, the engineering constraints associated with the number of electricity infrastructure crossings required are considered to be too significant to take forward this option.

Alignments A1 and B1 have been selected as the Potential Alignments for the Coachford 400kV OHL diversions. Alignment A1 is the only option for the diversion between Blackhillock and Coachford substations. Alignment B1 is the least constrained option from both an environmental and engineering perspective and is also the lowest cost option.

5.21 Section 20

5.21.1 Environment

Overall, from an environmental perspective, Alignment 20D is favoured. Alignment 20F is most constrained.

From a habitats perspective, Alignment 20B is favoured as the habitat composition would allow for the least amount of impact to ecologically valuable habitats. From a cultural heritage designations perspective, Alignments 20B and 20C are favoured as they only encounter one SMR entry. From a cultural heritage assets perspective, Alignments 20A, 20B and 20C are favoured as there are no cultural heritage assets within 1 km. For landscape character, Alignments 20A, 20B or 20C are favoured as they sit slightly lower and less prominently in the landscape. Visually, Alignment 20D is marginally favoured as it passes fewer properties in close proximity in comparison to other alignment options, despite its exposure across Cairn Hill.

It is worth nothing that Alignment 20F is least favoured from a natural heritage designations due to proximity to Mortlach Moss SAC/SSSI, cultural heritage designations, cultural heritage assets and visual. From a visual perspective this is due to its proximity to Cairnie where it would be highly visible for residents of the village, users of the primary school and from the wider landscape. It is however favoured for forestry due to its requiring less forestry removal, closely followed by Alignment 20E.

5.21.2 Engineering

Overall, from an engineering perspective, there is no clear preference.



There are no major crossings required for any of the alignment options. Alignment 20C requires the greatest number of minor road crossings (ten), whilst Alignments 20D, 20E and 20F require the fewest number (five). From a construction and maintenance perspective, there is an existing network of roads and tracks located within 1 km of all alignment options. Alignments 20A, 20B and 20C are slightly closer to existing access than Alignments 20D, 20E and 20F, but the difference is marginal. Alignments 20B and 20C require two angle tower positions, Alignments 20A and 20F require three angle tower positions, and Alignments 20D and 20E require four angle tower positions. There are four residential properties located within 170 m of Alignments 20D, 20E and 20F, six within 170 m of Alignment 20C, seven within 170 m of Alignment 20A and nine within 170 m of Alignment 20B. There is one communications mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. This mast provides coverage for emergency services so has to be safeguarded. Alignments 20D, 20E and 20F are within 300 m of an additional communications mast on Coachford Hill, however this is not registered with Ofcom.

5.21.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Alignments 20D, 20E and 20F are the lowest operational cost options. Alignments 20A and 20C are over 120% of the lowest cost option, and Alignment 20B is over 140% of the lowest cost option and therefore least favoured.

5.21.4 Multi-Disciplinary

Alignment 20D has been selected as the Potential Alignment as it is the favoured option from an environmental perspective, predominantly due to visual impact; and has the lowest operational cost. All options were equally acceptable from an engineering perspective.

5.22 Section 21

5.22.1 Environment

Overall, from an environment perspective, Alignment 21D is least constrained.

Alignment 21D is least constrained as it is not expected to cause direct impacts to Arn Hill, stone circle (SM4), through changes within the setting of the Scheduled Monument, unlike the other alignment options in Section 21. It is also one of the favoured alignment options for landscape character (alongside Alignment 21C), as it results in less 'wirescaping' around White Hill by maintaining a greater distance from the existing 400 kV OHL for longer. Alignment 21D is also favoured visually as it avoids the densest grouping of residential properties. From a habitats perspective, Alignment 21A is the only alignment option which entirely avoids Annex 1 habitats and is favoured, although the other alignments options have the potential to avoid it depending on the detailed design. For forestry, Alignment 21A is favoured due to the reduced amount of woodland removal, however Alignment 21B or 21D would be a second preference.



5.22.2 Engineering

Overall, from an engineering perspective, Alignment 21D is least constrained.

All alignment options cross the Aberdeen to Inverness railway line, the River Deveron, the A97 trunk road and the B9022. Alignment 21D requires one minor road crossing, compared to between three and five minor road crossings for the other alignment options. Alignment 21A crosses an existing 400 kV OHL, however all other alignment options will need to cross the existing 400 kV OHL in the following section, so this is not considered to be a significant differentiator. Alignments 21A and 21C cross a slightly wider area at risk of flooding than the other options. The flood zone at Burn of Cobairdy along Alignment 21A is approximately 290 m wide, but it may be possible to span this depending on tower positions. All alignments pass through similar elevations, but Alignment 21A passes through an area of steeper slopes at Cobairdy Hill, which could pose challenges during construction due to its proximity to the existing 400 kV OHL.

From a construction and maintenance perspective, all alignments have an existing network of roads and tracks located within 1 km. However, Alignment 21B has marginally closer existing access compared to the other options and may therefore require fewer new access roads for construction. Alignments 21B and 21D require four angle tower positions, Alignment 21A requires five angle tower positions and Alignment 21C requires six angle tower positions, including two larger angle changes to the east of the River Deveron. There is one residential property located with 170 m of Alignment 21B, four within 170 m of Alignments 21C and 21D and six within 170 m of Alignment 21A. Alignments 21B, 21C and 21D would result in several households being located between the existing 400 kV OHL and the new OHL, although Alignment 21D maximises the distance between the two OHLs whilst also remaining furthest from the surrounding properties. Alignments 21C and 21D cross a 300 m buffer to a communications mast within the sawmill, however no links are associated with the mast so this may just be used for radio communications on site.

Alignment 21D is least constrained overall, as it requires the lowest number of minor road crossings, avoids areas of flood risk and steep slopes associated with Alignment 21A, requires the lowest number of angle tower positions and maintains the best separation from residential properties when considered in combination with the existing 400 kV OHL. Alignments 21A and 21C are least favoured, due to the crossing location of the existing 400 kV OHL for Alignment 21A and the significant angle changes required for Alignment 21C.

5.22.3 Economic

Alignments 21B, 21C and 21D are similar in capital costs, with minimal difference between the options. Alignment 21A is over 140% of the lowest cost option due to the requirement for a crossing of the existing 400 kV OHL. However, all alignment options will need to cross the existing 400 kV OHL at one location, so this is not considered to be a significant differentiator.

Operational costs are relatively high for Section 21, with several infrastructure crossings for all options. Alignment 21A is favoured for operational cost, with Alignments 21C and 21D least favoured and over 140% of the lowest cost option.



5.22.4 Multi-Disciplinary

Alignment 21D has been selected as the Potential Alignment as it is the least constrained option from an environmental, engineering and capital cost perspective. It is least favoured from an operational cost perspective however on balance Alignment 21D is considered to be least constrained.

5.23 Section 22

5.23.1 Environment

In Section 22, there is no clear preference, however Alignment 22A is most constrained from an environmental perspective. The design solution for the crossing of the two OHLs and alignment selection decisions for the Sections on either side will influence the choice for this Section.

From a protected species perspective, Alignment 22D is favoured due to crossing a smaller area of woodland, decreasing the habitat suitability for red squirrels, pine marten and bat species. For ornithology, Alignment 22B is favoured as it has the closest proximity to the existing OHL, keeping the OHL infrastructure in one place. For cultural heritage designations and assets, Alignment 22B is favoured as it encounters no designations, and no direct impacts to assets are anticipated. For landscape designations Alignment 22B is slightly favoured as the Section of close parallel to the existing 400 OHL, slightly reduces the additional extent of effects on the adjacent Deveron Valley SLA by containing it into the existing OHL corridor area. Alignment 22A is most constrained for cultural heritage designations due to likely significant effects on Raich stone circle scheduled monument; and for landscape designations as it is located partially within the SLA boundary, thereby directly impacting it. From a forestry perspective, Alignment options 22A and 22B pass through areas of mixed age commercial forestry, with Alignment 22A least favoured as it impacts the most broadleaved woodland. Alignments 22C and 22D are least constrained from a forestry perspective.

The visual preference in Section 22 is likely to be influenced by the overall Potential Alignment in Section 21 and 23 and the design solution for the crossing of the two 400 kV OHLs. Alignment 22B parallels the existing 400 kV OHL, containing the influence of OHL, although the crossing of the existing 400 kV OHL would be locally intrusive. If genuine close parallel is not achievable for a reasonable distance, then clear separation would be preferable. All alignments require the crossing of the existing 400 kV OHL, the design likely to be an overhead crossing design rather than an underground section resulting in terminal towers and sealing end compounds. If Alignment 21A (close parallel) is chosen as the Proposed Alignment following consultation, and Alignments 23D or 23F (close parallel) were chosen as the Proposed Alignment, then maintaining a close parallel through Section 22 would be sensible (i.e. Alignment 22B). However, if southern alignments for Section 21 are taken forward following consultation, and northern alignments for Section 23 are taken forward, then maintaining a greater separation between the OHL infrastructure would be preferable for Section 22 (i.e. taking Alignment 22A).

5.23.2 Engineering

Overall, from an engineering perspective, Alignment 22C or 22D are marginally least constrained.

All alignment options in Section 22 cross the existing 400 kV OHL. However, if Alignment 21A was selected in the previous section, the crossing of the 400 kV OHL would occur in Section 21 rather than 22, and there would be no requirement for a 400 kV crossing in Alignments 22A or 22B. If Alignment 23E is selected in the



following section, the crossing would occur in Section 23 rather than 22, and there would be no requirement for a 400 kV crossing in Alignment 22D. Regardless of which alignment is ultimately selected, there will be a requirement for a single crossing of the existing 400 kV OHL at some point along the OHL alignment between Sections 21 and 23, so this is not considered to be a significant differentiator.

Alignment 22A crosses two minor roads and one restricted local access road. Alignments 22B, 22C and 22D cross two minor roads. According to SEPA flood maps, all alignment options feature greater than 5% of their length within the 1 in 10 year flood zone. Alignments 22B is least favoured from this perspective, as the location of the 400 kV OHL crossing is within the flood zone.

From a construction and maintenance perspective, all alignments are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignments 22A and 22C require two angle tower positions, whereas Alignments 22B and 22D only require one angle tower position. There are no residential properties located within 170 m of any of the alignment options.

There is little to distinguish between the alignment options from an engineering perspective. Alignments 22D reduces the number of angle tower positions required and also avoids an area of flood risk associated with the Burn of Cobairdy.

5.23.3 Economic

Alignment 22D is the lowest capital cost option and Alignments 22B and 22C are also considered acceptable. Alignment 22A is greater than 140% of the lowest cost option, due to the substantially higher costs associated with its additional length.

Alignment 22D is the lowest operational cost option. All other alignment options are over 140% of the lowest cost option and are therefore not favoured.

5.23.4 Multi-Disciplinary

Alignment 22D has been selected as the Potential Alignment as it is the least constrained option from an engineering and cost perspective and connects to the Potential Alignments in Sections 21 and 23. Environmentally there was no clear preference with the exception of Alignment 22A being the most constrained.

5.24 Section 23

5.24.1 Environment

Overall, from an environment perspective, Alignments 23C and 23E are least constrained, with 23E slightly less constrained than 23C.

Alignments 23C and 23E are favoured as they will have the least setting impacts on stone circle Scheduled Monuments in the area, as these alignment options are further away and may sit lower in the landscape and therefore be less visible between stone circles, for which there is a visual relationship between them. In addition, Alignments 23C and 23E avoid potential significant effects on a Category A Listed Building (Frendraught House) as they are located to the north of it, which is not an important view from the house. From a forestry perspective Alignment 23F is favoured due to least forestry removal required, although Alignments 23A and 23B are



similar. Significantly more forestry removal would be required for Alignments 23C, 23D and 23E; however Alignment 23E has slightly less removal than Alignment 23C. There is little to distinguish the alignment options in landscape and visual terms, however Alignment 23A is slightly favoured for visual effects and Alignments 23A, 23B, 23C, and 23D are favoured for landscape. From a habitats perspective, Alignments 23D and 23F have no irreplaceable habitat or Annex 1 habitats present and are favoured, although the other alignments options have the potential to avoid it depending on the detailed design. Alignment 23F is the least constrained in terms of highland commercial sports. These two alignments are however most constrained for cultural heritage and least favoured for landscape and visual.

Although Alignments 23C and 23E may not be favoured for all topics, the cultural heritage designations and asset benefits described above are considered to outweigh the benefits other alignment options may provide. Alignment 23E is slightly favoured due to having slightly less forestry loss.

5.24.2 Engineering

Overall, from an engineering perspective, all alignment options are considered acceptable.

All alignment options cross the B9001 and between six and nine minor roads of various categories. Alignment 23F requires the highest number of minor road crossings. Alignments 23E and 23F cross the existing 400 kV OHL, however all other alignment options would need to cross the existing 400 kV OHL in one of the previous sections (21 or 22), so this is not considered to be a significant differentiator. All alignments pass through similar elevations, but Alignments 23A, 23B,23C and 23E pass through an area of sloped terrain, mostly north of Drumblair Wood where the slopes reach 30 degrees. This could pose construction challenges and may limit where towers can be positioned and constructed. Alignments 23D and 23F appear to be in flatter terrain and do not pose the same challenges.

From a construction and maintenance perspective, all alignment options are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 23A requires two angle tower positions, Alignments 23B, 23C, 23D and 23E require four angle tower positions and Alignment 23F requires six angle tower positions. There is one residential property located within 170 m of Alignment 23E, two residential properties within 170 m of Alignment 23F. Alignments 23C, 23D and 23E maximise the separation distance from residential properties compared with the other options.

5.24.3 Economic

Alignment 23A is the lowest estimated operational cost option. Alignments 23B, 23C and 23D are within 120% of the lowest capital cost option and are also considered acceptable from a capital cost perspective. Alignments 23E and 23F are over 120% of the lowest cost option due to increased line length.

Alignments 23C and 23D are the lowest estimated operational cost options. Alignments 23A, 23B, 23E and 23F are over 120% of the lowest cost option.

5.24.4 Multi-Disciplinary

Alignment 23E has been selected as the Potential Alignment as it is the least constrained option from an environmental perspective and is considered to be acceptable from an engineering perspective, although it is noted that it is least favoured from a cost perspective. It also connects into the Potential Alignments for Sections 22 and 24.



5.25 Section 24

5.25.1 Environment

Overall, from an environment perspective, Alignment 24C is least constrained.

Alignments 24A and 24B are both in close proximity to Turriff and would be highly visible from a large number of close receptors, and directly cross the Deveron Valley SLA, introducing OHL infrastructure into a portion of the SLA that is currently unaffected by such; there are also planning applications in close proximity to these alignment options. Of the remaining two alignment options, Alignment 24D is most constrained as it has the potential for significant setting impacts on a stone circle Scheduled Monument, would impact Annex I habitats and is least favoured due to forestry loss. Alignment 24C is therefore the favoured option.

5.25.2 Engineering

Overall, from an engineering perspective, Alignment 24C is least constrained.

All alignment options cross the A947 and between three and five minor roads of various categories. Alignments 24A, 24B and 24D all feature greater than 5% of their length being within the 1 in 10 year flood zone. Alignments 24A and 24B run close to the Burn of Turriff and Idoch Water which have considerable flood risk areas around them. Alignment 24D is also exposed to this area but also the Burn of Kingsford. Alignment 24C is not as exposed, with only 2-5% of its route within the 1 in 10 year flood zone. Alignments 24C and 24D cross an area of steeper slopes where they cross the A947 in the Wood of Darra. The alignments pass through this small block of woodland on a steep slope, however due to the change in elevation across the A947 it may be possible to avoid siting a tower on the steeper slopes, assuming statutory clearances can be obtained.

From a construction and maintenance perspective, all alignment options have an existing network of roads and tracks located within 1 km. However, Alignment 24C has a slightly closer existing road network than the other options. Alignment 24A and 24B require five angle towers, whereas Alignments 24C and 24D require three angle towers. There are two residential properties located within 170 m of Alignment 24B, three within 170 m of Alignments 24A and 24D and five within 170 m of Alignment 24C. There are two wind turbines close to the eastern end of the alignment options, closest to Alignment 24A. Based on an 82 m rotor diameter, all alignments remain more than three rotor diameters away. It should be noted however that, although the centreline alignment of Alignment 24A remains out with three rotor diameters, if accounting for the crossarm length and outer conductors this alignment option could be at risk of interaction with the wind turbine. It may be possible to microsite the alignment to mitigate this issue. Alignment 24B crosses the largest number of fixed links, and could potentially have interference issues on the Braehad to Turriff fixed link as the alignment is almost parallel with the link as it crosses it.

5.25.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Alignment 24A has the lowest operational cost. Alignments 24C and 24D are least favoured, with operational costs over 140% of the lowest cost option.



5.25.4 Multi-Disciplinary

Alignment 24C has been selected as the Potential Alignment as it is the least constrained option from an environment, engineering and capital cost perspective. It is least favoured from an operational cost perspective however on balance Alignment 24C is considered to be least constrained.

5.26 Section 25

5.26.1 Environment

Overall, from an environment perspective, Alignment 25C is least constrained.

Alignment 25C is favoured for protected species as it has the smallest length of tree and hedge lines to cross, decreasing the habitat suitability for bat species. For ornithology, Alignment 25C is favoured based on its lesser interaction with the Idoch Water, compared to the other two options, which birds may use to commute along. For cultural heritage assets, Alignment 25C is favoured as it is located furthest from the Dovecot, Idoch Castle (LB16430, Category B) and is unlikely to have any impacts that could lead to significant effects. For landscape character, Alignment 25C is favoured, as it is a slightly better fit to the form of the landscape. Alignment 25C is also favoured visually due to sitting better in the landscape, and therefore it is slightly less visible from Turriff. Alignment 25C is favoured for forestry due to having the least forestry loss and recreation as it is furthest from core paths in the area.

5.26.2 Engineering

Overall, from an engineering perspective, Alignments 25B or 25C are least constrained.

Al alignment options cross the B9170. Alignments 25A and 25B cross five minor roads of various categories and Alignment 25C cross four minor roads. Alignment 25A features greater than 5% of its length within the 1 in 10 year flood zone. This occurs around the Idoch Water which it crosses three times. Alignments 25B and 25B feature between 2% and 5% of their length within the 1 in 10 year flood zone. All alignments cross a small pocket of Class 1 peatland, but it should be possible to microsite tower locations out of this area.

From a construction and maintenance perspective, all alignments have an existing network of roads and tracks located within 1 km. However, Alignment 25A has closer existing access compared to Alignments 25B and 25C and may therefore require fewer new access roads for construction. Alignment 25C requires four angle tower positions, Alignment 25A requires five angle tower positions and Alignment 25B requires six angle tower positions. There are three residential properties located within 170 m of Alignment 25B, five within 170 m of Alignment 25C and seven within 170 m of Alignment options in Section 25 pass close to an approved wind turbine at Wagglehill, Boghead, with 29.1 m rotor diameter. The planning application was approved in 2015 but has not yet been constructed, therefore it is considered likely the planning consent has now lapsed. All alignment options cross the 300 m buffer for two or three existing wind turbines, however none are within three rotor diameters of the turbine locations.



5.26.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

All alignment options are within 120% of the lowest operational cost option, so all options are considered acceptable from an operational cost perspective.

5.26.4 Multi-Disciplinary

Alignment 25C has been selected as the Potential Alignment as it is the least constrained option from both an environmental and engineering perspective. All options were considered equally acceptable from a cost perspective.

5.27 Section 26

5.27.1 Environment

Overall, from an environment perspective, Alignment 26A is least constrained.

The main driver for the preference of Alignment 26A is the presence of the Culsh Monument, which is a Category B Listed Building and a viewpoint; the OHL therefore has the potential to impact upon it from a cultural heritage assets perspective and also to create visual impacts from it. Therefore, Alignments 26A and 26C are favoured as they are located on slightly lower ground and further from the monument and so are marginally less intrusive in the panoramic views from the monument. Alignments 26A and 26C are also favoured for landscape character as they fit better with the local topography. Commercial forestry loss is also lower for Alignments 26A and 26C. Of these two options, Alignment 26A is marginally favoured for visual as there are marginally fewer direct views onto the alignment at the western end.

5.27.2 Engineering

Overall, from an engineering perspective, Alignment 26A is least constrained.

All alignment options cross the A981, B9170 and B9029. Alignment 26D crosses the lowest number of minor roads (five in total), while Alignment 26A crosses the most (nine in total). From a construction and maintenance perspective, all alignment options are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignment 26A requires four angle tower positions, Alignment 26B requires five angle tower positions, Alignment 26C requires seven angle tower positions and Alignment 26D requires eight angle tower positions. There is one residential property located within 170 m of Alignment 26A, three within 170 m of Alignment 26B, six within 170 m of Alignment 26C and eight within 170 m of Alignment 26D. Alignment 26A is least constrained overall due to the lowest number of angle tower positions and fewest residential receptors within 170 m.



5.27.3 Economic

All alignment options are within 120% of the lowest capital cost option, so all options are considered acceptable from a capital cost perspective.

Alignment 26C is the lowest operational cost option. Alignment 26D is within 120% of the lowest cost option and is therefore acceptable. Alignment 26A is the second highest operational cost option at greater than 120% of Alignment 26C and Alignment 26B has the highest operational cost, more than 140% of the lowest cost option.

5.27.4 Multi-Disciplinary

Alignment 26A has been selected as the Potential Alignment as it is the least constrained option from both an environmental and engineering perspective. All options were considered equally acceptable from a capital cost perspective. Alignment 26A is not favourable from a operational cost perspective however on balance Alignment 26A is considered to be least constrained option.

5.28 Section 27

5.28.1 Environment

Overall, from an environment perspective, Alignment 27G is least constrained.

It is favoured for protected species as it crosses a smaller length of tree and hedge lines, reducing the habitat suitability for red squirrels, pine marten and bat species. Alignment 27G is favoured for ornithology as it has a greater distance of separation from South Ugie Water and Hill of Dens, where a large number of overwintering geese are understood to forage and pass over, based on consultation with local residents. Alignment 27G is not anticipated to impact any cultural heritage designations or assets and is therefore favoured for these categories. For landscape character, Alignments 27F and 27G cross a slightly more uniform landscape character, with less undulations, and are therefore marginally favoured. Visually, Alignments 27F and 27G are located on lower ground along their alignment, to maintain slightly lower visibility and reduce prominence around Hill of Dens. They are also less prominent from the edge of Maud and are therefore favoured in visual terms. Alignment 27G is favoured over Alignment 27F as it has the least forestry loss out of these two options. Planning applications have however been identified in close proximity to Alignment 27G.

Although Alignment 27G (joint with Alignment 27F) is least favoured for habitats and proposals, the benefits described above are thought to outweigh these.

5.28.2 Engineering

Overall, from an engineering perspective, Alignment 27G is least constrained.

All alignment options cross the B9106. Alignment 27C requires the lowest number of minor road crossings (three), compared with between four and seven minor road crossings for the other options. All alignment options also cross two National Grid Transmission gas pipelines and an AC interference study may be required in



these locations. Alignments 27F and 27G cross the pipelines at the best angle compared with the other options. Alignments 27A, 27B and 27E have less than 2% of their length within the 1 in 10 year flood zone. Alignments 27C, 27D, 27F and 27G all have between 2% and 5% of their length within the flood zone. These areas can most likely be spanned across, but may apply some constraints to possible tower positions. Alignments 27A and 27B pass through some sections with intermediate slopes (maximum 21 degrees) compared with the other alignment options (maximum 14 degrees). Alignments 27F and 27G cross a small pocket of Class 1 peatland, but it should be possible to microsite tower locations out of this area.

From a construction and maintenance perspective, all alignment options have an existing network of roads and tracks located within 1 km. However, Alignments 27A and 27G have closer existing access compared to the other options and may therefore require fewer new access roads for construction. Alignment 27C requires one angle tower position, Alignments 27A, 27D and 27E require two angle tower positions, Alignment 27G requires three angle tower positions and Alignments 27B and 27F require four angle tower positions. There are two residential properties located within 170 m of Alignments 27B, three within 170 m of Alignments 27E, 29F and 27G and five within 170 m of Alignment 27A.

Overall, Alignment 27G is considered least constrained due to crossing the gas pipelines at a preferable angle to reduce chance of interference, avoiding the areas of steeper slopes and closer proximity to existing access.

5.28.3 Economic

Alignment 27G is the lowest capital cost option. Alignments 27C, 27D and 27E are within 120% of the lowest cost option and also considered acceptable. Alignments 27A and 27B are greater than 140% of the lowest cost option and are least favoured from this perspective.

Alignment 27G is the lowest operational cost option. All other alignment options are greater than 140% of the lowest cost option and are therefore not favoured.

5.28.4 Multi-Disciplinary

Alignment 27G has been selected as the Potential Alignment as it is the least constrained option from an environmental, engineering and cost perspective.

5.29 Section 28

5.29.1 Environment

Overall, from an environment perspective, Alignment 28G is least constrained.

Alignment 28G is favoured (alongside Alignment 28E) for protected species as they have the least amount of conifer woodland, reducing the habitat suitability for red squirrels, pine marten and bat species. Alignment 28G is favoured for ornithology as it has a greater distance of separation from South Ugie Water and Hill of Dens, where a large number of overwintering geese are understood to forage and pass over, based on consultation with local residents. Alignment 28G is also favoured for cultural heritage designations as there are no anticipated impacts to Designations. For landscape character and visual amenity, Alignment 28G, followed closely by Alignment 28E, is favoured; it is on lower, flatter terrain more in line with the landscape grain, and through a slightly less attractive landscape. It also parallels the



existing 400 kV OHL for the longest distance, helping to reduce the spread of OHL influence across the wider landscape. Visually, it contains OHL infrastructure into the same area and is further from Stuartfield, although it should be noted that properties around Upper Smithy Croft and North Auchtylair would become 'boxed in'.

Although Alignment 28G is one of the least favoured options for forestry and agriculture, and although there is a planning application for a new property in proximity to Alignment 28G, the benefits described above are thought to outweigh these constraints.

5.29.2 Engineering

Overall, from an engineering perspective, there is no clear preference.

All alignment options cross the B9030. Alignments 28A to 28D and 28F each cross two minor roads. Alignments 28E crosses six minor roads and Alignment 28G crosses eight minor roads. All alignment options also cross one National Grid Transmission gas pipeline. Alignment 28E has a shallow crossing angle of approximately 28 degrees and is therefore least favoured, whereas Alignment 28G has the best crossing angle at 56 degrees. An AC interference study may be required where the alignments cross the pipeline. With respect to flooding, Alignments 28C, 28F and 28G all have less than 2% of their length passing through the 1 in 10 year flood zone. Alignments 28B, 28D and 28E all feature between 2% and 5% within the flood zone, however the flood risk areas could likely be spanned out. Alignment 28A has greater than 5% of its alignment being within a high risk flood area, again this may be avoidable through tower placement.

From a construction and maintenance perspective, all alignment options are considered equally accessible, with an existing network of roads and tracks located within 1 km. The majority of alignment options require two angle tower positions. Alignments 28A and 28D require three angle tower positions. There are no residential properties located within 170 m of Alignments 28B, 28D and 28F. There are two residential properties located within 170 m of Alignment 28C, three within 170 m of Alignment 28A, six within 170 m of Alignment 28E and eight within 170 m of Alignments 28A, 28B, 28C, 28D and 28F are in close proximity to the settlement of Stuartfield. There are between one and three existing operational wind turbines located within 300 m of all alignment options. For Alignments 28A to 28D and 28F, the closest turbine is only just three rotor diameters away from the alignment options. Further consideration would be required to ensure these alignment options are not microsited any closer to the turbine location.

5.29.3 Economic

Alignments 28B is the lowest capital cost option and Alignment 28A is also acceptable. The other alignment options are greater than 140% of the lowest cost option, largely due to increased line length.

Alignment 28B has the lowest estimated operational cost. Alignments 28D and 28F have slightly higher costs due to increased length, but are still within 120% of the lowest cost option. All other alignment options are greater than 140% of the lowest cost option, with Alignments 28E and 28G significantly higher in operational costs than Alignments 28A and 28C.



5.29.4 Multi-Disciplinary

Alignment 28G has been selected as the Potential Alignment as it is the least constrained option from an environmental perspective and from an engineering perspective there is no clear preference. Despite the cost factors being unfavourable, it is considered that the environmental benefits outweigh the cost factors, specifically in relation to maintaining a distance from the settlement of Stuartfield and Hill of Dens and seeking to keep new and existing infrastructure together where possible.

5.30 Section 29

5.30.1 Environment

Overall, from an environment perspective, Alignment 29E is least constrained.

This preference is largely driven by landscape character and visual. Alignment 29E contains OHL infrastructure into the existing OHL corridor, and whilst running against the grain of the landscape, particularly across Hill of Ludquharn, it is favoured overall in landscape character terms. Visually, Alignment 29E is prominent locally where it diverges from the existing OHL infrastructure and crosses the locally prominent Hill of Ludquharn. However, it visually contains OHL infrastructure into an existing corridor and is therefore slightly favoured, although it is noted that this alignment results in the 'boxing in' of properties at North Auchtylair. Careful tower placement will be required where the alignment crosses Hill of Ludquharn, along with careful placement of the angle tower opposite Auchtydore.

Additionally, Alignment 29E is favoured for ornithology also based on its close parallel alignment with the existing OHL, and largest distance of separation from the South Ugie Water where large number of overwintering geese are understood to forage based on consultation with local residents. Alignment 29E is however slightly less preferred from a forestry perspective as it passes through a larger area of forestry than the other options, however the difference is marginal.

5.30.2 Engineering

Overall, from an engineering perspective, Alignments 29D and 29E are least constrained.

All alignment options cross the A952 and between four and six minor roads of various categories. Alignments 29B, 29C and 29D cross one National Grid Transmission gas pipeline, Alignment 29E cross two pipelines and Alignment 29A crosses three pipelines. Alignment 29A crosses at the worst angle (10 degrees) and Alignment 29E crosses at the best angle (80 degrees). Alignment 29A has a higher risk of influence on one pipeline, due to paralleling with it for a longer distance (0.8 km).

All of the alignment options in Section 29 terminate to the west of Peterhead. Peterhead is a high risk site for unexploded ordnance and the surrounding area is known to have been targeted by Luftwaffe, therefore additional unexploded ordnance checks should be carried out in this region. From a construction and maintenance perspective, all alignment options are considered equally accessible, with an existing network of roads and tracks located within 1 km. Alignments 29C and 29D require three angle tower positions, Alignment 29A requires four angle tower positions, Alignment 29B requires five angle tower positions and Alignment 29E requires six angle tower positions.



There is one residential property located within 100 m of all of the alignment options, however this property will be acquired as part of the proposed Netherton Hub substation project and is therefore not considered to be a constraint. There is a second residential property located just within 100 m of Alignment 29E, to the south of Clola. It may be possible to microsite the alignment to maintain 100 m from this property. There is one residential property located within 170 m of Alignment 29A and two within 170 m of Alignments 29B, 29C and 29D. Alignment 29A passes closest to the settlements of Stuartfield, Mintlaw and Longside. Alignment 29E stays further from the larger settlement areas.

5.30.3 Economic

Alignment 29C is the lowest capital cost option and Alignments 29A, 29B and 29D are within 120% and considered acceptable. Alignment 29E is greater than 140% of the lowest cost option due to its increased length.

Alignment 29C has the lowest estimated operational cost. All other alignment options are greater than 140% of the lowest cost option, although Alignment 29E has a significantly higher cost than Alignments 29A, 29B and 29D due to the high number of low voltage crossings required.

5.30.4 Multi-Disciplinary

Alignment 29E has been selected as the Potential Alignment as it is the least constrained option from both an environmental and an engineering perspective. Despite the cost factors being unfavourable, it is considered that the environmental benefits outweigh the cost factors, specifically in relation to maintaining a distance from the settlements of Stuartfield, Mintlaw and Longside and seeking to keep new and existing infrastructure together where possible.

6. POTENTIAL ALIGNMENT

Following on from the comparative analysis carried out in Section 5, the Potential Alignment can be seen on **Figure 6.1** and comprises the following alignment options:

- Alignment 1C
- Alignment 2B
- Alignment 3A
- Alignment 4A
- Alignment 5E
- Alignment 6B
- Alignment 7A
- Alignment 8C
- Alignment 9A
- Alignment 10B
- Alignment 11C
- Alignment 12A
- Alignment 13C
- Alignment 14D (with back-up of 14C)
- Alignment 15C (with back-up of 15B)
- Alignment 16A
- Alignment 17B
- Alignment 18A
- Alignment 19C
- Coachford OHL Diversion Alignment A1 in combination with Alignment B1.
- Alignment 20D
- Alignment 21D
- Alignment 22D
- Alignment 23E
- Alignment 24C
- Alignment 25C
- Alignment 26A
- Alignment 27G
- Alignment 28G
- Alignment 29E



CONSULTATION ON THE PROPOSALS

SSEN Transmission places great importance on, and is committed to, consultation and engagement with all parties, or stakeholders, likely to have an interest in proposals for new Projects such as this. Stakeholder consultation and engagement is an essential part of an effective development process.

7.1 Questions for Consideration by Consultees

When providing your comments and feedback, SSEN Transmission would be grateful for your consideration of the questions below:

- Has the approach taken to select the Potential Alignment been clearly explained?
- Are there any factors, or environmental features, that you believe we may not have already considered during the Potential Alignment selection process?
- Do you have any specific concerns in relation to the Potential Alignment? If so, is there anything we could do to mitigate the impact of this?
- Do you feel, on balance, that the Potential Alignment selected is the most appropriate for further consideration at the Environmental Impact Assessment stage?
- SSEN Transmission is currently developing a Community Benefit Fund to support communities in areas with new infrastructure. What suggestions for social or environmental community benefit opportunities do you have that you would like us to consider, or are there any local initiatives you would like us to support?

7.2 Next Steps

The responses received from the consultation events, and those sought from statutory consultees and other key stakeholders, will inform further consideration of the alignments put forward, and the confirmation of the Proposed Alignment to take forward to EIA.

All comments are requested by **Friday 2 August 2024**. A Report on Consultation will be published after the consultation period has ended, which will document the consultation responses received, and the decisions made in light of these responses.

Submission of the Section 37 application is expected to take place in Q4 2024.



APPENDIX A: ALIGNMENT APPRAISAL DETAIL

Topic	Alignment 1A	Alignment 1B	Alignment 1C
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 1A is within 10 km of Moniack Gorge SSSI/SAC, Beauly Firth SSSI, the Inner Moray Firth SPA/Ramsar, Moray Firth SPA, Moray Firth SAC, Loch Battan SSSI, Conon Islands SAC,	Alignment 1B natural heritage designation appraisal is the same as Alignment 1A.	Alignment 1C natural heritage designation appraisal is the same as Alignment 1A and Alignment 1B.
	North Inverness Lochs SPA, Lower River Conon SSSI and Balnagrantach SSSI. There is suitability of habitat within the alignment boundary to support wintering geese and breeding	Protected Species ¹²	Protected Species
	osprey potentially associated with the Inner Moray Firth SPA/Ramsar. Cromarty Firth SPA/Ramsar lies within 20 km.	The habitats and their suitability to support protected species within Alignment 1A are largely reflective of those within Alignment 1B.	The habitats and their suitability to support protected species within Alignment 1C are largely equal to those within Alignment 1A, with the following exceptions:
	Non-statutory designations and nature conservation sites within a 2 km radius include a Butterfly Conservation Scottish Priority Landscape (Great Glen and the Beauly Catchment) within the alignment boundary, and a Buglife Important Invertebrate Area (IIA) (East Inverness-shire) bordering the northern alignment boundary. Protected Species The mature woodland groups and standing trees located within Alignment 1A have the potential to support roosting bats, as well as a small number of commercial and residential buildings. The edges of the wooded areas, as well as the semi-natural habitats and watercourses within the alignment option, have the potential to support commuting and foraging activities for bats. The habitats within Alignment 1A, including agricultural land, are considered suitable to support foraging badger. The woodlands and unmaintained field margin areas have the potential to provide suitable habitats for sett creation. The open, exposed areas within the alignment option are considered sub-optimal for wildcats and the proximity to public roads and footpaths further reduces this suitability. The mature, mixed woodlands have the potential to support red squirrels and pine martens. The River Beauly has the potential to support commuting and foraging otters. Smaller channels, such as the burn northeast of Fanellan Cottages, have the potential to support water voles. The limited areas of standing water and slow-flowing field drains and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles. The River Beauly has the potential to support lamprey species. Alignment 1A occurs within the known distribution range for Freshwater Pear Mussel (FWPM) 9. The varied habitats within Alignment 1A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.	Habitats¹² HABMOS data identifies the same Annex I habitats in Alignment 1B as 1A. The NWSS identified lowland mixed deciduous woodland, upland birchwood and wet woodland within 100 m. Additionally, woodland within 100 m is listed in the AWI but is Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m. BNG¹² Alignment 1B BNG appraisal is the same as Alignment 1A. Ornithology¹² Alignment 1B appraisal for Ornithology is the same as Alignment 1A. Hydrology, Geology and Hydrogeology¹² Alignment 1B hydrology, geology and hydrogeology, geology and hydrogeology is the same as Alignment 1A.	 A smaller area of woodland is present in alignment option 1C, decreasing the habitat's suitability for bat species, red squirrel and pine marten; and Fewer small watercourses are present in alignment option 1C, decreasing the habitat's suitability for water voles. Habitats HABMOS¹³ data identifies the following Annex I habitats (of the Habitats Directive) within 100 m: H91A0 - Old sessile oak woods. The NWSS identified lowland mixed deciduous woodland, upland birchwood and wet woodland within 100 m. Additionally, woodland within 100 m is listed in the AWI but is Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m. BNG Alignment 1C BNG appraisal is the same as Alignment 1A. Ornithology Alignment 1C appraisal for Ornithology is the same as Alignment 1A. Hydrology, Geology and Hydrogeology Alignment 1C hydrology, geology and hydrogeology is the same as Alignment 1A.

⁹ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (Margaritifera margaritifera).

¹² Refer section 3.2.4 for the description of the topics included in the assessment.

¹³ The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

Topic	Alignment 1A	Alignment 1B	Alignment 1C
	<u>Habitats</u>		
	Habitat Map of Scotland (HABMOS) ¹⁰ data identifies the following Annex I habitats (of the Habitats Directive) within 100 m:		
	H91A0 - Old sessile oak woods; and		
	H91E0 - Alluvial forests.		
	The Native Woodland Survey of Scotland (NWSS) identified native pinewood, upland birchwood and wet woodland within 100 m. Additionally, woodland within 100 m is listed in the AWI but is Category 2b Long-established woodlands of plantation origin (LEPO) woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.		
	BNG		
	There is no irreplaceable habitat within 100 m and therefore no Biodiversity Units (BU) were calculated for this option.		
	Ornithology		
	Data collected as part of the desk-study found negligible flight activity by Target Species along the corresponding section of the River Beauly valley.		
	Vantage Point (VP) surveys recorded frequent flight activity by red kites, particularly during the non-breeding season. The majority of these flights have occurred over woodland and agricultural habitats. Flights by pink-footed geese and greylag geese were also recorded along the river valley during the Autumn, Winter and early Spring months however these were infrequent and typically involved comparatively small flocks (<100 birds). Other species of waterfowl and wading birds recorded along the river valley included whooper swan, curlew and oystercatcher but these were infrequent and/or involved small numbers of birds.		
	The scarce breeding bird surveys identified two active osprey nest sites within 2 km of the Section 1 alignment options. A known peregrine breeding territory, located within 2 km of the Section 1 alignment options, was confirmed to be occupied. However, there were very few sightings of either of these species in proximity to the alignment options themselves. Other Target Species recorded in proximity to the River Beauly valley included occasional flights by red kite and sightings of honey buzzard during the breeding season, though no evidence of nesting by these species was identified in close proximity of Section 1.		
	Hydrology, Geology and Hydrogeology		
	Alignment 1A crosses the River Beauly – Beauly Firth to Cannick waterbody. It is underlain by the Lower Old Red Sandstone moderately productive aquifer and locally important multilayered aquifer.		
	Alignment 1A is not located within any SEPA or SW DWPA, and according to The Highland Council Open Map Data ^{11,} there are no Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.		

¹⁰ The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

¹¹ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 1A	Alignment 1B	Alignment 1C
Cultural Heritage	Designations The alignment option crosses Beaufort Castle GDL (GDL00052). Direct physical impacts may be avoided. There exists the potential for direct impacts by changes to the setting of the GDL. There are two Scheduled Monuments within 1 km of the alignment option and they have the potential for direct impacts through changes of setting: • Kiltarlity Old Parish Church (SM5570), located 300 m to the northwest; and • Culburnie, ring cairn & stone circle (SM2425), located 870 m to the south. Withing 100 m, there is a single SMR entry — Fanellan, pits and structure (Canmore ID 345470). Direct physical impacts can be avoided through design. Assets Within 1 km, there is one Category A, seven Category B, and three Category C Listed Buildings. There is the potential for direct impacts within the setting of all the Listed Buildings. However, due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations The cultural heritage designation appraisal for Alignment 1B is the same as Alignment 1A with the exception that Kiltarlity Old Parish Church (SM5570) is located 415 m northwest, and there are two SMR entries within 100 m. Assets¹² The Cultural Heritage Asset appraisal for Alignment 1B is the same as Alignment 1A.	Designations The cultural heritage designation appraisal for Alignment 1C is the same as Alignment 1A with the exception that Kiltarlity Old Parish Church (SM5570) is located 490 m northwest, and there are two SMR entries within 100 m. Assets Within 1 km of Alignment 1C there are 11 Listed Buildings. There is potential for direct impacts within the setting of all the Listed Buildings, however due to distances and intervening topography impacts are not likely to be significant.
Landscape and Visual	Landscape Designations Central Highlands Wild Land Area lies approximately 6 km west of Alignment 1A. Although potentially visible from the Wild Land Areas, the OHL would be in a distinctly different and developed landscape, in the context of existing OHLs, such that there would be no risk of effect on the wild land character. Landscape Character Alignment 1A is located in the Enclosed Farmland Landscape Character Type (LCT 229), with trees identified as a key element throughout the landscape. An OHL in this alignment option would intrude on the local landscape, particularly out of Fanellan, cutting across the grain of the landscape to the floodplain, and affecting the characteristic mature woodland belts. Visual An OHL on Alignment 1A will be closely visible from a small number of residential properties around Fanellan, Black Bridge, and from properties inside the bends of the River Beauly meanders. It will also be closely visible from users of the footpaths through the area, visitors to the church and car park at Black Bridge and users of the river. The crossing of the River Beauly for this alignment option will be locally prominent. The exit from Fanellan on high and exposed ground makes it very visible from the wider area.	Landscape Designations The landscape designation appraisal for Alignment 1B is the same as Alignment 1A. Landscape Character The landscape character appraisal for Alignment 1B is very similar to Alignment 1A, however the alignment heads more eastwards, crossing at the apex of the River Beauly meander at an angle, which is potentially in a more discreet location. Visual The visual appraisal for Alignment 1B is similar to Alignment 1A, however it potentially crosses the River Beauly in a slightly more discreet location. It is also located slightly further from properties around Black Bridge, but closer to those around Cruives.	Landscape Designations The landscape designation appraisal for Alignment 1C is the same as Alignment 1A. Landscape Character The landscape character appraisal for Alignment 1C is the same as Alignment 1B. Visual The visual appraisal for Alignment 1C is similar to 1B, however it avoids the need for an angle tower located adjacent to the River Beauly, which are more visually intrusive than standard towers.
Land Use	Alignment 1A passes through Land Capability for Agriculture (LCA) of Class 3.2, which is land capable of average production though high yields of barley, oats and grass can be obtained. It does not pass through any prime agricultural land. Forestry ¹² Alignment 1A passes through areas of mature commercial forestry and areas of mature native broadleaved woodlands.	Agriculture The agriculture appraisal for Alignment 1B is the same as 1A. Forestry Alignment 1B passes through areas of mature commercial forestry and areas of mixed age native broadleaved woodlands.	Agriculture The agriculture appraisal for Alignment 1C is the same as 1A. Forestry The estimated area of commercial woodland that would be impacted by Alignment 1C is 3.00 ha, comprising 1.32 ha coniferous woodland and 1.68 ha broadleaved woodland.



Topic	Alignment 1A	Alignment 1B	Alignment 1C
	The estimated area of commercial woodland that would be impacted by Alignment 1A is 4.4 ha, comprising 2.23 ha coniferous woodland and 2.17 ha broadleaved woodland. Recreation ¹²	The estimated area of commercial woodland that would be impacted by Alignment 1B is 3.51 ha, comprising 1.61 ha coniferous woodland and 1.9 ha broadleaved woodland.	Recreation Alignment 1C does not pass through core paths or long distance routes. There are no NCN routes within the alignment.
	There are no core paths or long distance routes in the area that Alignment 1A passes through, particularly around Ruttle Wood and the River Beauly. There are no National Cycle Network (NCN) routes within the alignment.	Recreation Alignment 1B does not pass through core paths or long distance routes. There are no NCN routes within the alignment.	The area that Alignment 1C passes closely to the areas known for commercial highland sports such as the River Beauly.
	The area that Alignment 1A passes through may be used in places for commercial highland sports such as fishing, stalking and shooting. The Sections of the River Beauly that Alignment 1A pass closely are known to be used for recreational salmon and trout fishing.	The area that Alignment 1B passes closely to the areas known for commercial highland sports such as the River Beauly. Lower Beauly Fishings and the River Beauly Lodge are within 1.2 km of	Lower Beauly Fishings and the River Beauly Lodge are within 1.2 km of Alignment 1C.
		Alignment 1B.	
Planning	Within 500 m there is one consented planning application:	The planning appraisal for Alignment 1B is the same as Alignment 1A.	The planning appraisal for Alignment 1C is the same as Alignment 1A.
	Erection of agricultural building (20/02801/FUL), approximately 50 m south.		
Engineering	Infrastructure Crossings ¹²	Infrastructure Crossings	Infrastructure Crossings
	Alignment 1A crosses the River Beauly once. The alignment also crosses two minor roads. Environmental Design	Alignment 1B crosses the River Beauly once. The alignment also crosses two minor roads.	Alignment 1C crosses the River Beauly once. The alignment also crosses two minor roads.
	All alignments in Section 1 traverse through the same range of elevations and all remain	Environmental Design	Environmental Design
	below 200 m elevation, which is not considered challenging. All alignments in Section 1 are located within 10 km of the Beauly Firth coastal region. The	elevations and all remain below 200 m elevation, which is not considered challenging. All alignments in Section 1 are located within 10 km of the Beauly Firth coastal region. The overhead line will therefore require 'very heavy'	All alignments in Section 1 traverse through the same range of elevations and all remain below 200 m elevation, which is not considered challenging.
	overhead line will therefore require 'very heavy' pollution insulation levels to offset the salt deposition that builds up over time. This results in slightly more expensive insulators but has minimal impact overall.		All alignments in Section 1 are located within 10 km of the Beauly Firth coastal region. The overhead line will therefore require 'very heavy' pollution insulation levels to offset the salt deposition that builds up over time. This results in slightly
	All alignments in Section 1 pass through an area where unexploded ordnance is a possibility due to the area being recorded as a military training area, but is classified as a low hazard.	pollution insulation levels to offset the salt deposition that builds up over time. This results in slightly more expensive insulators but has minimal impact overall.	more expensive insulators but has minimal impact overall. All alignments in Section 1 pass through an area where unexploded ordnance is
	According to SEPA flood maps, greater than 5% of Alignment 1A is located within the 1 in 10 year flood risk zone (corresponding to a high likelihood of flooding) adjacent to the River	All alignments in Section 1 pass through an area where unexploded ordnance is a possibility due to the area being recorded as a military	a possibility due to the area being recorded as a military training area, but is classified as a low hazard.
	Beauly crossing. Ground Conditions	training area, but is classified as a low hazard.	According to SEPA flood maps, greater than 5% of Alignment 1C is located within the 1 in 10 year flood risk zone adjacent to the River Beauly crossing.
	Alignment 1A contains a short section of greater than 15 degrees slope, adjacent to the River	According to SEPA flood maps, greater than 5% of Alignment 1B is located within the 1 in 10 year flood risk zone adjacent to the River	Ground Conditions
	Beauly crossing.	Beauly crossing.	Alignment 1C contains a steeper section of greater than 25 degrees slope, on
	None of the alignment options pass through known areas of peatland.	Ground Conditions	the west side of the River Beauly crossing. Tower placement should be considered carefully to avoid this area.
	Construction and Maintenance	Alignment 1B contains a short section of greater than 15 degrees slope,	None of the alignment options pass through known areas of peatland.
	There is an existing network of tracks and roads within 1 km of all alignment options.	adjacent to the River Beauly crossing.	Construction and Maintenance
	Alignment 1A requires a total of three angle towers.	None of the alignment options pass through known areas of peatland.	There is an existing network of tracks and roads within 1 km of all alignment
	<u>Proximity</u>	Construction and Maintenance	options.
	There is one residential property located within 170 m of Alignment 1A.	There is an existing network of tracks and roads within 1 km of all alignment options.	Alignment 1C requires a total of two angle towers.
	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Alignment 1B requires a total of three angle towers.	Proximity There is one residential property located within 170 m of Alignment 1C.



Topic	Alignment 1A	Alignment 1B	Alignment 1C
		Proximity There are two residential properties located within 170 m of Alignment 1B. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 1A had the highest estimated capital cost for this section but remains within 120% of the lowest cost option. It has the longest line length and significantly higher tree felling costs. Alignment 1A has the highest estimated operational cost and is greater than 140% of the lowest cost option. This is due to a requirement for an additional low voltage crossing which will require additional inspections.	Alignment 1B is slightly longer than Alignment 1C (lowest cost option), has an additional angle tower and higher costs associated with tree felling. The operational cost of Alignment 1B is estimated to be comparatively low and similar to Alignment 1C.	Alignment 1C has the lowest estimated capital cost. The operational cost of Alignment 1C is estimated to be comparatively low and similar to Alignment 1B.

Topic	Alignment 2A	Alignment 2B	Alignment 2C
Topic Natural Heritage	Designations Alignment 2A is within 10 km of Moniack Gorge SSSI/SAC, Beauly Firth SSSI, Inner Moray Firth SPA/Ramsar, Moray Firth SPA, Moray Firth SAC, Loch Battan SSSI, Conon Islands SAC, Lower River Conon SSSI. There is suitability of habitat within the alignment boundary to support wintering geese and breeding osprey potentially associated with the Inner Moray Firth SPA/Ramsar. Cromarty Firth SPA/Ramsar lies within 20 km. Non-statutory designations and nature conservation sites within a 2 km radius include a Butterfly Conservation Scottish Priority Landscape, a Buglife B-Line and a Buglife IIA (East Inverness-shire). Protected Species Mature woodland groups, standing trees, and a small number of residential and commercial buildings are considered suitable habitat to support roosting bats. The edges of wooded areas, as well as the semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment 2A, including agricultural land, have the potential to support foraging badgers. The woodlands and unmaintained field margin areas have the potential to provide suitable habitats for sett creation. The open and exposed areas within the alignment option are considered sub-optimal for wildcats. The mature, mixed woodlands have the potential to support red squirrels and pine martens. The River Beauly has the potential to support commuting and foraging otters. Smaller channels, such as the burn northeast of Fanellan Cottages, have the potential to support water voles.	Designations Alignment 2B natural heritage designation appraisal is the same as Alignment 2A. Protected Species The habitats and their suitability to support protected species within Alignment 2B are largely equal to those within Alignment 2A. Habitats The habitats appraisal for Alignment 2B is the same as Alignment 2A. BNG The BNG appraisal for Alignment 2B is the same as Alignment 2A. Ornithology The ornithology appraisal for Alignment 2B is the same as Alignment 2A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 2B is the same as Alignment 2B.	Designations Alignment 2C natural heritage designation appraisal is the same as Alignment 2A. Protected Species The habitats and their suitability to support protected species within Alignment 2C are largely equal to those within Alignment 2A, with the following exceptions: • A smaller area of woodland is present in Alignment 1C, decreasing the habitat's suitability for bat species, red squirrel and pine marten; and • Fewer small watercourses are present, decreasing the habitat's suitability for water voles. Habitats The habitats appraisal for Alignment 2C is the same as Alignment 2A. BNG The BNG appraisal for Alignment 2C is the same as Alignment 2A. Ornithology The ornithology appraisal for Alignment 2C is the same as Alignment 2A. Hydrology, Geology and Hydrogeology

Topic	Alignment 2A	Alignment 2B	Alignment 2C
	The River Beauly has the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 1A occurs within the known distribution range for FWPM ¹⁴ .		
	The varied habitats within Alignment 1A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.		
	<u>Habitats</u>		
	HABMOS data identifies the following Annex I habitats within the alignment:		
	H91A0 - Old sessile oak woods;		
	H91C0 - Caledonian forest; and		
	H91EO - Alluvial forests.		
	The NWSS identified lowland mixed deciduous woodland, native pinewood, upland oakwood, upland birchwood and wet woodland within Alignment 2A. Some woodland		
	within 100 m is listed in the AWI as Category 2a ancient woodland of semi-natural origin		
	and considered irreplaceable habitat. The carbon and peatland map of Scotland did not		
	indicate the presence of any irreplaceable peatland habitat within 100 m.		
	<u>BNG</u>		
	Unavoidable irreplaceable habitat is located adjacent to the River Beauly in the form of		
	Category 2a ancient semi-natural woodland. The total BU for this alignment option is		
	29.66 BU.		
	Ornithology		
	Data collected as part of the desk-study found regular flight activity by pink-footed geese		
	has been recorded along the corresponding part of the River Beauly valley, and to a		
	lesser extent by greylag geese during the Winter, Autumn and Spring passage months.		
	Red kite and osprey have also frequently been recorded along Section 2.		
	VP surveys have recorded frequent flight activity by red kites, particularly during the non-		
	breeding season. The majority of these flights have occurred over woodland and		
	agricultural habitats. Flights by pink-footed geese and greylag geese were also recorded		
	along the river valley during the Autumn, Winter and early Spring months however these		
	were infrequent and typically involved comparatively small flocks (<100 birds). Other		
	species of waterfowl and wading birds recorded along the river valley included whooper		
	swan, curlew and oystercatcher but these were infrequent and/or involved small numbers of birds.		
	Scarce breeding bird surveys identified two active osprey nest sites within 2 km of the Section 2 alignment options. A known peregrine breeding territory, located over 3 km		
	from the Section 2 alignment options, was confirmed to be occupied. However, there		
	were very few sightings of either of these species in proximity to the alignment options		
	themselves. A red kite nest was located within 2 km of the alignment options in Section 2.		
	Occasional sightings of honey buzzard were made, however there was no evidence of		
	nesting in close proximity to the alignment option.		

¹⁴ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

Topic	Alignment 2A	Alignment 2B	Alignment 2C
	Hydrology. Geology and Hydrogeology Alignment 2A crosses the River Beauly – Beauly Firth to Cannick waterbody. It is underlain by the Lower Old Red Sandstone moderately productive aquifer and locally important multi-layered aquifer. Alignment 2A is not located within any SEPA or SW DWPA, and according to The Highland Council Open Map Data ^{15,} there are no Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.		
Cultural Heritage	Designations There are two Scheduled Monuments within 1 km: Kiltarlity Old Parish Church (SM5570), located 400 m northwest; and Corff House, fort (SM3195), located 410 m north. There is the potential for direct impacts through changes within the setting of the scheduled monuments listed above. There is a single GDL, Beaufort Castle (GDL00052), approx. 245 m southwest. There is the potential for direct impacts through the setting of this GDL. Within 100 m, there are three SMR entries consisting of pots, a field boundary, and a farmstead. Direct physical impacts can be avoided through design. Assets Within 1 km, there is one Category A, six Category B, and two Category C Listed Buildings. There is the potential for direct impacts within the setting of all the Listed Buildings. However, due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations The cultural heritage designation appraisal for Alignment 2B is largely the same as Alignment 2A with the exception that Kiltarlity Old Parish Church is located 480 m northwest, Beaufort Castle GDL is located approx. 150 m southwest, and there are six SMR entries in 100 m. The SMR entries consist of pits, a house, an enclosure, a well, a field boundary, and a farmstead. Assets The cultural heritage assets appraisal for Alignment 2B is the same as Alignment 2A.	Designations The cultural heritage designations appraisal for Alignment 2C is largely the same as Alignment 2B with the exception that there are three SMR entries in 100 m, consisting of a house, a field boundary, and a farmstead. Assets The cultural heritage assets appraisal for Alignment 2C is the same as Alignment 2A.
Landscape and Visual	Landscape Designations Central Highlands Wild Land Areas lies approximately 6 km west of Alignment 2A. Although potentially visible from the Wild Land Areas, the OHL would be in a distinctly different and developed landscape, in the context of existing OHLs, such that there would be no risk of effect on the wild land character. Landscape Character Alignment 2A is located in the Enclosed Farmland LCT (229), with trees identified as a key element throughout the landscape. An OHL in this alignment option would intrude on the local landscape, affecting the characteristic mature woodland belts, particularly at Balblair. It would also require two angle towers, both in woodland, which is likely to remove comparatively more trees. However, the OHL would be seen in context of existing OHLs and Beauly Substation, so would only partially disrupt the character of the local landscape.	Landscape Designations The Landscape Designations appraisal for Alignment 2B is the same as Alignment 2A. Landscape Character The landscape character appraisal for Alignment 2B is similar to Alignment 2A, with the exception that the alignment option may result in the removal of fewer trees in Balblair Wood, with only one angle tower in the woodland. Visual The visual appraisal for Alignment 2B is similar to that of Alignment 2A, however Alignment 2B is slightly further from properties at Black Bridge, but closer to those around Cruives. Alignment 2B would avoid the use of angle towers adjacent to the river.	Landscape Designations The Landscape Designations appraisal for Alignment 2C is the same as Alignment 2A. Landscape Character The landscape character appraisal for Alignment 2C is similar to Alignment 2A. However, Alignment 2C cuts through smaller areas of woodland with two angle towers located outside of the woodland. However, it would extend the transmission infrastructure away from the existing Beauly Substation. Visual Alignment 2C passes closer than the other alignment options to visual receptors within the meanders of the river bend. It would also require angle towers in closer proximity to those receptors. However, it retains much of the woodland canopy, which is visible from more distant receptors.

¹⁵ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 2A	Alignment 2B	Alignment 2C
	Visual		
	An OHL on Alignment 2A will be closely visible from a small number of residential properties inside the bend of the meanders of the River Beauly, particularly Groam of Annat. It will be closely visible from users of the footpaths through the area and users of the river. The flat nature of the landscape within the river meanders will result in towers rising above the treeline, although the OHL is unlikely to be substantially visible from the wider area. Where it is, it would be seen in the context of existing OHLs and Beauly Substation.		
Land Use	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 2A passes through LCA of Class 3.1 which is land capable of producing	The agriculture appraisal for Alignment 2B is the same as Alignment 2A.	The agriculture appraisal for Alignment 2C is the same as Alignment 2A.
	consistently high yields of a narrow range of crops and / or moderate yields of a wider range. Short grass leys are common. It also passes through LCA of Class 2, which is land	<u>Forestry</u>	Forestry
	capable of producing a wide range of crops. Both these classes are considered prime agricultural land.	Alignment 2B passes through areas of mature commercial forestry and areas of mature native broadleaved woodlands.	Alignment 2C passes through areas of mature native broadleaved woodlands but avoids interaction with areas of commercial coniferous forestry.
	Forestry	The estimated area of commercial woodland that would be impacted by	The estimated area of commercial woodland that would be impacted by
	Alignment 2A passes through areas of mature commercial forestry and areas of mature native broadleaved woodlands.	Alignment 2B is 5.34 ha, comprising 0.20 ha coniferous woodland and 5.14 ha broadleaved woodland.	Alignment 2C is 3.35 ha broadleaved woodland. Recreation
	The estimated area of commercial woodland that would be impacted by Alignment 2A is 6.98 ha, comprising 1.99 ha coniferous woodland and 4.99 ha broadleaved woodland.	Recreation The recreation appraisal for Alignment 2B is the same as Alignment 2A.	The recreation appraisal for Alignment 2C is the same as Alignment 2A, however Alignment 2C is located within 250 m of the Lower Beauly Fishings
	Recreation		and the River Beauly Lodge.
	Alignment 2A passes over core paths north of the River Beauly. The alignment also runs through Balblair Wood, a known walking area.		
	There are no cycle routes or long-distance routes within the alignment option. However, the alignment passes close to areas especially known for commercial highland sports, such as the River Beauly. Lower Beauly Fishings (a fishing syndicate which fish in this area) and the River Beauly Lodge (holiday accommodation) are within 600 m.		
Planning	Within 500 m, lie the following consented planning applications:	The planning appraisal for Alignment 2B is the same as Alignment 2A.	The planning appraisal for Alignment 2C is the same as Alignment 2A.
	Reinforcement and extension of the existing 132 kV Beauly Substation (21/04988/FUL), approximately 350 m north.		
	Visitor accommodation with associated landscaping, access, footpaths, parking and associated amenity buildings (20/01783/PIP), approximately 350 m southeast.		
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 2A crosses the River Beauly once, parallel to the existing 132 kV and 275 kV OHL crossings. The alignment also crosses one restricted access local road.	Alignment 2B crosses the River Beauly once, parallel to the existing 132 kV and 275 kV OHL crossings. The alignment also crosses one restricted access local road.	Alignment 2C crosses the River Beauly once, parallel to the existing 132 kV and 275 kV OHL crossings. The alignment also crosses three restricted access local roads.
	Environmental Design	Environmental Design	Environmental Design
	All alignments in Section 2 traverse through the same range of elevations and all remain below 50 m elevation.	All alignments in Section 2 traverse through the same range of elevations and all remain below 50 m elevation.	All alignments in Section 2 traverse through the same range of elevations and all remain below 50 m elevation.



Topic	Alignment 2A	Alignment 2B	Alignment 2C
	All alignments in Section 2 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	All alignments in Section 2 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	All alignments in Section 2 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.
	All alignments in Section 2 pass through an area where unexploded ordnance is a possibility due to the area being recorded as a military training area, but is classified as a low hazard.	All alignments in Section 2 pass through an area where unexploded ordnance is a possibility due to the area being recorded as a military training area, but is classified as a low hazard.	All alignments in Section 2 pass through an area where unexploded ordnance is a possibility due to the area being recorded as a military training area, but is classified as a low hazard.
	According to SEPA flood maps, greater than 5% of Alignment 2A is located within the 1 in 10 year flood risk zone adjacent to the River Beauly crossing.	According to SEPA flood maps, greater than 5% of Alignment 2B is located within the 1 in 10 year flood risk zone adjacent to the River Beauly crossing.	According to SEPA flood maps, greater than 5% of Alignment 2C is located within the 1 in 10 year flood risk zone adjacent to the River Beauly crossing. A
	Ground Conditions	Ground Conditions	larger proportion of this alignment is located within the flood zone than Alignments 2A and 2B, making Alignment 2C less preferable in terms of flood
	Alignment 2A contains a maximum slope of 18 degrees, but this is for less than a span length so is not a concern.	Alignment 2B contains a maximum slope of 18 degrees, but this is for less	risk.
	None of the alignment options pass through known areas of peatland.	than a span length so is not a concern. None of the alignment options pass through known areas of peatland.	Ground Conditions
	Construction and Maintenance	Construction and Maintenance	Alignment 2C contains a maximum slope of 3 degrees.
	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment	None of the alignment options pass through known areas of peatland.
	Alignment 2A requires a total of two angle towers.	options.	Construction and Maintenance There is an existing a street, of treet, and an edge within 1 larger field all represents
	Proximity	Alignment 2B requires one angle tower.	There is an existing network of tracks and roads within 1 km of all alignment options.
	There is one residential property located within 170 m of Alignment 2A. There are no known wind farms, communication masts, urban areas or metallic pipelines	Proximity	Alignment 2C requires a total of two angle towers.
		There is one residential property located within 170 m of Alignment 1A.	<u>Proximity</u>
	that will impact on the alignment option.	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There is one residential property located within 170 m of Alignment 2C.
		<u>Proximity</u>	There are no known wind farms, communication masts, urban areas or
		There are two residential properties located within 170 m of Alignment 2B.	metallic pipelines that will impact on the alignment option.
		There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	
Economic	Alignment 2A has the highest estimated capital cost. It is similar in length to Alignment 2C	Alignment 2B has the lowest estimated capital cost.	Alignment 2C has lower tree felling costs than Alignment 2B but this cost is
	but with more than double the tree felling cost. This option is less than 10% greater than the lowest cost option so is still considered acceptable.	Operational costs are estimated to be similar for all options, with similar lengths and number of crossings for all options.	balanced by a slightly longer line length and requirement for an additional angle tower.
	Operational costs are estimated to be similar for all options, with similar lengths and number of crossings for all options.		Operational costs are estimated to be similar for all options, with similar lengths and number of crossings for all options.

Topic	Alignment 3A	Alignment 3B
Natural Heritage	<u>Designations</u>	<u>Designations</u>
	Alignment 1A is within 10 km of Moniack Gorge SSSI/SAC, Beauly Firth SSSI, the Inner Moray Firth SPA/Ramsar, Moray Firth SPA, Moray Firth SAC, Loch Battan SSSI, Cromarty Firth SPA/Ramsar, Conon Islands SAC, Lower River Conon SSSI and Monadh Mor	Alignment 3B natural heritage designation appraisal is the same as Alignment 3A.

Topic	Alignment 3A	Alignment 3B
	SAC/SSSI. There is suitability of habitat within the alignment boundary to support wintering geese and breeding osprey potentially associated with the Inner Moray Firth SPA/Ramsar. Non-statutory designations and nature conservation sites within a 2 km radius include a Butterfly Conservation Scottish Priority Landscape (Great Glen and the Beauly Catchment) within the alignment boundary, a Buglife B-Line and a Buglife IIA (East Inverness-shire) bordering the northern alignment boundary.	Protected Species The habitats and their suitability to support protected species within Alignment 3B are largely reflective of those within Alignment 3A. Habitats HABMOS data identifies no Annex I habitats in Alignment 3B.
	Protected Species The mature woodland groups and tree lines located within Alignment 3A have the potential to support roosting bats. The majority of the trees are coniferous with scattered mature broadleaf tree line also present. Coniferous trees present lower potential suitability for supporting roosting bats.	The NWSS identified upland birchwood within 100 m. Additionally, woodland within 100 m is listed in the AWI but is Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.
	The edges of the wooded areas, as well as the semi-natural habitats and watercourses within the alignment option, have the potential to support commuting and foraging activities for bats. The habitats within Alignment 3A, including agricultural land, are considered suitable to support foraging badger. The	BNG Alignment 3B appraisal is the same as Alignment 3A.
	woodlands and unmaintained field margin areas have the potential to provide suitable habitats for sett creation. Signs of badger activity have been identified. The open, exposed areas within the alignment option are considered sub-optimal for wildcats. The mature, mixed woodlands have the potential to support red squirrels and pine martens. The River Beauly has the potential to support commuting and foraging otters. Smaller channels have the potential to support water voles.	Ornithology Alignment 3B appraisal for Ornithology is the same as Alignment 3A. Hydrology, Geology and Hydrogeology
	The limited areas of standing water and slow-flowing field drains and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles.	Alignment 3B hydrology, geology and hydrogeology is the same as Alignment 3A.
	The River Beauly has the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 3A occurs within the known distribution range for FWPM ¹⁶ .	
	The varied habitats within Alignment 3A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern. Habitats	
	HABMOS ¹⁷ data identifies the following Annex I habitats (of the Habitats Directive) within 100 m: • H91EO - Alluvial forests.	
	The NWSS identified upland birchwood and wet woodland within 100 m. Additionally, woodland within 100 m is listed in the AWI but is Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.	
	BNG There is no irreplaceable habitat which spans the entire width of 100 m and therefore no Biodiversity Units (BU) were calculated for this option.	
	Ornithology Data collected as part of the desk-study found regular flight activity by pink-footed geese has been recorded along the corresponding part of the River Beauly valley during the winter, autumn, and spring passage months. Red kite have also been recorded along this section.	
	Nearby VP surveys overlooking the River Beauly valley are considered representative of bird flight activity in Section 3A. These surveys found frequent flight activity by red kites, particularly during the non-breeding season. The majority of these flights	

¹⁶ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora

^{(92/43/}EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

17 The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

Topic	Alignment 3A	Alignment 3B
	have occurred over woodland and agricultural habitats. Flights by pink-footed geese and greylag geese were also recorded along the river valley during the Autumn, Winter and early Spring months however these were infrequent and typically involved comparatively small flocks (<100 birds). Other species of waterfowl and wading birds recorded along the river valley included whooper swan, curlew and oystercatcher but these were infrequent and/or involved small numbers of birds.	
	An active red kite nest was identified within 2 km of Alignment 3A. A known peregrine breeding territory and osprey nest sites are over 3.5 km from the Section 3 alignment options. Other Target Species recorded in this part of the River Beauly valley included occasional flights by red kite and sightings of honey buzzard during the breeding season, though no evidence of nesting by these species was identified in close proximity of Section 3.	
	Hydrology, Geology and Hydrogeology	
	Alignment 3A crosses the River Beauly – Beauly Firth to Cannick waterbody. It is underlain by the Lower Old Red Sandstone moderately productive aquifer and Glenfinnan Group low productive aquifer.	
	Alignment 3A is not located within any SEPA or SW DWPA, and according to The Highland Council Open Map Data ^{18,} there are no Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.	
Cultural	<u>Designations</u>	<u>Designations</u>
Heritage	There are no World Heritage Sites or Inventory Battlefields within 1 km.	There are no World Heritage Sites or Inventory Battlefields within 1 km.
	There is one Scheduled Monuments within 1 km, Corff house, fort (SM3195), located 920 m northwest. There is the potential	There are two SMs within 1 km:
	for direct impacts through the setting of this Scheduled Monuments. Due to distances, these are unlikely to lead to significant effects.	Corff house, fort (SM3195) located 920 m to the northwest; and
	There is a single Inventory GDL, Beaufort Castle (GDL00052), approximately 850 m southwest of the alignment. There is the	Dun Mor, fort (SM2423) located 860 m to the southeast.
	potential for direct impacts through the setting of this GDL.	There is the potential for direct impacts through changes within the setting of all SMs. Due to distances, these are unlikely to lead to significant effects.
	Within 100 m, there is a single SMR entry, Meikle Phoineas, earthwork (Canmore ID 116678). Direct physical impacts can be avoided by micro siting of the alignment option.	There is a single Inventory GDL, Beaufort Castle (GDL00052), located 600 m to the southwest of the alignment. There is the potential for direct impacts through changes within the setting which are likely to lead to significant effects.
	<u>Assets</u>	Assets
	There are no Conservation Areas or Non-Inventory GDL within 1 km of Alignment 3A.	There are no Conservation Areas or Non-inventory GDLs within 1 km of Alignment 3B.
	Within 1 km, there is one Category A, six Category B, and two Category C Listed Buildings. There is the potential for direct	Within 1 km, there is one Category A, three Category B and seven Category C Listed Buildings. There is the potential
	impacts within the setting of all the Listed Buildings. However, due to distances and intervening topography impacts are not likely to lead to significant effects.	for direct impacts within the setting of all the Listed Buildings. However, due to distances and intervening topography impacts are not likely to lead to significant effects.
Landscape and	Landscape Designations	Landscape Designations
Visual	There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. There are no Special	The landscape designation appraisal for Alignment 3B is the same as Alignment 3A.
	Landscape Areas (SLA) within 5 km of the alignment.	Landscape Character
	Landscape Character	Alignment 3B is located in both the Enclosed Farmland LCT (229), where trees are identified as a key element of the
	Alignment 3A is located in the Enclosed Farmland LCT (229), with trees identified as a key element throughout the landscape. An OHL in this alignment option would utilise existing OHL corridors and not further divide Long Wood.	landscape, and also within the Farmed River Plains LCT (342), which is characterised by intensive agriculture and fragmented woodland. An OHL in this alignment does not parallel existing OHL and would result in fragmentation of Long Wood.

¹⁸ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



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Topic	Alignment 3A	Alignment 3B
	Visual	Visual
	An OHL on Alignment 3A would be visible from a short Section of the A862. It will also be closely visible from sensitive receptors around Meikle Phoineas and Cononbank Farm. The alignment parallels the existing OHL for a longer Section than Alignment 3B.	Alignment 3B would be visible for most of its length in from the A862. It would also be closely visible in views from sensitive receptors around Meikle Phoineas, Cononbank Farm and be closer to sensitive receptors at Balchraggan, Cabrich and Ballindoun. The alignment would also require substantial angle towers south of Meikle Phoineas in close visibility from the roads and from properties.
Land Use	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 3A begins in an area of LCA Class 2, then passes through Class 3.2 land for the majority of its length. LCA Class 2 is prime agricultural land.	Alignment 3B begins in an area of LCA Class 2, then passes through Class 3.1 for the majority of its length, all of which is prime agricultural land.
	<u>Forestry</u>	<u>Forestry</u>
	Alignment 3A passes through areas of mixed age commercial forestry and a strip of mature native broadleaved woodland.	Alignment 3B passes through areas of mixed age commercial forestry but avoids interaction with broadleaved
	The estimated area of commercial woodland that would be impacted by Alignment 3A is 3.41 ha, comprising 0.35 ha broadleaved woodland and 3.06 ha coniferous woodland, of which 2.69 ha is currently felled.	woodland. The estimated area of commercial woodland that would be impacted by Alignment 3B is 2.53 ha coniferous
	The alignment runs parallel to an existing 132 kV OHL, reducing the requirement for woodland removal on the north side of	woodland, of which 0.61 ha is currently felled.
	the operational corridor between the new alignment and the existing OHL.	Recreation
	Recreation	The recreation appraisal for Alignment 3B is the same as Alignment 3A.
	No core paths, long distance routes, cycle routes or areas known for commercial highland sports are impacted by Alignment 3A.	
Planning	Within 500 m, lie the following consented planning applications:	Within 500 m, lie the following consented planning applications:
	 visitor accommodation with associated landscaping, access, footpaths, parking and associated amenity buildings (20/01783/PIP); approximately 50 m south. 	• visitor accommodation with associated landscaping, access, footpaths, parking and associated amenity buildings (20/01783/PIP). Alignment 3A passes directly over this planning application.
Engineering	Infrastructure Crossings	<u>Infrastructure Crossings</u>
	Alignment 3A cuts across a long and sweeping 'U' bend in the A862, necessitating two crossings of the road approximately 1.1 km apart. The alignment also crosses one restricted access local road.	Alignment 3B cuts crosses the A833 approximately 200 m to the southwest of the junction with the A862. The alignment also crosses a minor road and a restricted access local road.
	Environmental Design	Environmental Design
	Alignment 3A remains below 100 m in elevation.	Alignment 3B remains below 50 m in elevation.
	Both alignments in Section 3 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	Both alignments in Section 3 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.
	There are no reports of contaminated land within Section 3.	There are no reports of contaminated land within Section 3.
	According to SEPA flood maps, greater than 5% of Alignment 3A is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, greater than 5% of Alignment 3B is located within the 1 in 10 year flood risk zone.
	Ground Conditions	Ground Conditions
	Alignment 3A contains a maximum slope of 11 degrees which is not a concern.	Alignment 3B contains a maximum slope of 6 degrees which is not a concern.
	Neither alignment option passes through known areas of peatland.	Neither alignment option passes through known areas of peatland.
	Construction and Maintenance	Construction and Maintenance
	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.
	Alignment 3A requires no angle towers.	Alignment 3B requires two angle towers with significant angle changes.



Topic	Alignment 3A	Alignment 3B
	Proximity	Proximity
	There are two residential properties located within 170 m of Alignment 3A.	There are no residential properties located within 170 m of Alignment 3B.
	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 3A has the lowest estimated capital cost. Alignment 3A has the lowest estimated operational cost.	Alignment 3B is the highest cost option, between 120% and 140% of the capital cost of Alignment 3A. It is 0.5 km longer than Alignment 3A, resulting in additional costs for conductor, towers and access track provisions. The route also is not as straight as Alignment 3A, requiring two angle towers. There is also roughly 50% higher costs for tree felling.
		Alignment 3B requires one additional low voltage crossing and is over 140% of the lowest cost option.

Topic	Alignment 4A	Alignment 4B
Natural Heritage	<u>Designations</u>	<u>Designations</u>
	Alignment 4A is within 10 km of Moniack Gorge SSSI/SAC, Beauly Firth SSSI, the Inner Moray Firth SPA/Ramsar, Moray Firth SPA, Moray Firth SAC, Loch Ashie SPA/SSSI, Loch Battan SSSI, Cromarty Firth SPA/Ramsar, Conon Islands SAC, Lower River Conon SSSI and Monadh Mor SAC/SSSI.	Alignment 4B natural heritage designation appraisal is the same as Alignment 4A. Protected Species
	There is suitability of habitat within the alignment boundary to support wintering geese and breeding osprey potentially associated with the Inner Moray Firth SPA/Ramsar.	The habitats and their suitability to support protected species within Alignment 4B are the same as those within Alignment 4A. Habitats
	Non-statutory designations and nature conservation sites within a 2 km radius include a Butterfly Conservation Scottish Priority Landscape within the alignment boundary, a Buglife B-Line and a Buglife IIA (East Inverness-shire).	The habitats within Alignment 4B are the same as Alignment 4A.
	Protected Species	BNG Alignment 4B appraisal is the same as Alignment 4A.
	The mature woodland groups, tree lines and farm, commercial and residential structures located within Alignment 4A have the potential to support roosting bats. The majority of the trees are deciduous and limited to mixed broadleaf woodland. Mature broadleaf tree lines are also present. A Conference tree process to the street lines are also present.	<u>Ornithology</u>
		Alignment 4B appraisal for Ornithology is the same as Alignment 4A. Hydrology, Geology and Hydrogeology
	The edges of the wooded areas, as well as the semi-natural habitats and watercourses within the alignment option have the potential to support commuting and foraging activities for bats.	Alignment 4B hydrology, geology and hydrogeology is the same as Alignment 4A.
	The habitats within Alignment 4A, including agricultural land, are considered suitable to support foraging badger. The woodlands and unmaintained field margin areas have the potential to provide suitable habitats for sett creation. Signs of badger activity have been identified. The open, exposed areas within the alignment option are considered sub-optimal for wildcats. The mature, mixed woodlands have the potential to support red squirrels and pine martens. The Newton Burn has the potential to support commuting and foraging otters. Smaller channels have the potential to support water voles.	
	The limited areas of standing water and slow-flowing field drains and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles.	

Topic	Alignment 4A	Alignment 4B
	The Newton Burn has the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 4A occurs within the known distribution range for FWPM ¹⁹ .	
	The varied habitats within Alignment 4A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.	
	<u>Habitats</u>	
	HABMOS ²⁰ data identifies the following Annex I habitats (of the Habitats Directive) within 100 m:	
	H91A0 – Old sessile oak woods.	
	The NWSS identified lowland mixed deciduous woodland, upland birchwood and wet woodland within 100 m. Additionally, woodland within 100 m is listed in the AWI but is C Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.	
	<u>BNG</u>	
	There is no irreplaceable habitat which spans the entire width of 100 m and therefore no BU were calculated for this option.	
	<u>Ornithology</u>	
	Data collected as part of the desk-study found regular flight activity by pint-footed geese recorded along the corresponding part of the River Beauly valley during the winter, autumn and spring passage months. Red kite were also regularly recorded along this section.	
	No bird surveys as part of this project were conducted in Section 4, due to the anticipated low importance of its associated agricultural and coniferous woodland habitats for Target Species.	
	An active red kite nest was identified within 2 km.	
	Hydrology, Geology and Hydrogeology	
	Alignment 4A crosses the Moniack Burn – Kirkhill Waste Water Treatment Plant (WWTP) to source. It is underlain by Glenfinnan Group low productive aquifer.	
	Alignment 4A is not located within any SEPA or SW DWPA. According to The Highland Council Open Map Data ^{21,} there are Private Water Supplies within 1 km of alignment 4A. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.	
Cultural	<u>Designations</u>	<u>Designations</u>
Heritage	There are no World Heritage Sites, Inventory GDL or Inventory Battlefields within 1 km.	The cultural heritage designations appraisal for Alignment 4B is the same as Alignment 4A.
	There is one Scheduled Monument within 1 km, Balblair Stone, symbol stone (SM932) within the outer study, circa 780 m to the south. Alignment 4A is unlikely to have any significant effects on the Scheduled Monument.	Assets The cultural haritage accets apprecial for Alignment 4D is the come as Alignment 4A
	Within 100 m, there are two SMR entries, a cottage and an enclosure. Direct physical impacts can be avoided by micro siting of the alignment option.	The cultural heritage assets appraisal for Alignment 4B is the same as Alignment 4A.
	<u>Assets</u>	
	There are no Conservation Area or Non-inventory GDLs within 1 km of 4A.	

 $^{^{\}rm 19}$ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora

^{(92/43/}EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (Margaritifera margaritifera).

The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

²¹ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 4A	Alignment 4B
	Within 1 km, there are five Category B and two Category C Listed Buildings. There is the potential for direct impacts within the setting of all the Listed Buildings. However, due to distances and intervening topography impacts are not likely to lead to significant effects.	
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. Loch Ness and Duntelchaig SLA is 5.5 km west of the alignment. Landscape Character The majority of alignment 4A is located within the Farmed River Plains LCT, which is characterised by intense agriculture and more fragmented woodland with low tree cover. The eastern extent falls within the Rolling Farmland and Woodland LCT, which is characterised by a balance of open agricultural land and woodland, with scattered linear/vertical man-made structures. An OHL in this alignment would intensify OHL infrastructure in the valley and increase the number of man-made structures within the landscape. Visual An OHL on Alignment 4A would be visible from Sections of the A862, particularly at the crossing of Moniack Burn. It also crosses close to sensitive visual receptors at Drumreach and Wester Craggach. Due to the flat landscape, the alignment would be visible from Easter Moniack and Reelig, with limited screening provided when crossing through the lower slopes of The Aird. This alignment would result in 'boxing in' Cononbank Farm and properties between Achnagairn and Easter Moniack.	Landscape Designations The landscape designation appraisal for Alignment 4B is the same as Alignment 4A. Landscape Character The landscape character appraisal for Alignment 4B would be similar to Alignment 4A. Though the alignment follows a varied alignment, it would similarly to 4A, intensify OHL infrastructure in the valley and increase the landscape of man-made structures. Visual The visual appraisal for Alignment 4B would be similar to Alignment 4A, however it passes slightly closer to sensitive visual receptors at Easter Moniack and Reelig. Due to the flat landscape, the alignment would be clearly visible from Drumreach and Wester Craggach. An angle tower in this alignment option would be close to properties at Easter Moniack and adjacent to the A862.
Land Use	An angle tower in this alignment option would be in a more open location at Easter Moniack. Agriculture Alignment 4A passes through LCA Class 3.1, which is prime agricultural land. Forestry Alignment 4A passes through areas of young commercial forestry and strips of broadleaved woodlands along field margins. The estimated area of commercial woodland that would be impacted by Alignment 4A is 2.45 ha, comprising 1.18 ha coniferous woodland and 1.27 ha broadleaved woodland. Recreation Alignment 4A passes over core paths at Easter Moniack. No long-distance routes, cycle routes or areas known for commercial highland sports are impacted by Alignment 4A.	Agriculture Alignment 4B passes through LCA Class 3.1, which is prime agricultural land. Forestry Alignment 4B passes through areas of mixed age commercial forestry and strips of broadleaved woodlands along field margins. The estimated area of commercial woodland that would be impacted by Alignment 4B is 2.57 ha, comprising 2.00 ha coniferous woodland and 0.57 ha broadleaved woodland. Recreation The recreation appraisal for Alignment 4B is the same as Alignment 4A.
Planning Engineering	 Within 500 m, lie the following consented planning applications: Formation of stables, reception, outdoor manege, indoor riding school and associated facilities (19/03205/FUL), approximate Erection of a replacement house (22/00521/FUL), approximately 450 m west. Conversion of steading to house, cottage to office, demolition of cottage, installation of solar PV on agricultural shed (20/04/Infrastructure Crossings) Alignment 4A crosses two minor roads. 	



Topic	Alignment 4A	Alignment 4B
	Environmental Design	Environmental Design
	Alignment 4A remains below 200 m in elevation.	Alignment 4B remains below 200 m in elevation.
	Both alignments in Section 4 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	Both alignments in Section 4 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.
	There are no reports of contaminated land within Section 4.	There are no reports of contaminated land within Section 4.
	According to SEPA flood maps, greater than 5% of Alignment 4A is located within the 1 in 10 year flood risk zone. This flood risk area is unavoidable and towers will be required within the flood zone.	According to SEPA flood maps, greater than 5% of Alignment 4B is located within the 1 in 10 year flood risk zone. This flood risk area is unavoidable and towers will be required within the flood zone.
	Ground Conditions	Ground Conditions
	Alignment 4A contains a maximum slope of 19 degrees. The alignment crosses flat to rolling land initially and the gradient increases as it turns southeast.	Alignment 4B contains a maximum slope of 19 degrees. The alignment crosses flat to rolling land initially and the gradient increases as it turns southeast.
	Neither alignment option passes through known areas of peatland.	Neither alignment option passes through known areas of peatland.
	Construction and Maintenance	Construction and Maintenance
	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.
	Alignment 4A requires two angle towers.	Alignment 4B requires two angle towers.
	Proximity	<u>Proximity</u>
	There are six residential properties located within 170 m of Alignment 4A.	There are five residential properties located within 170 m of Alignment 4B.
	There are no known wind farms, communication masts, or metallic pipelines that will impact on the alignment option. The alignment passes in close proximity to the settlements of Easter Moniack and Newtonhill.	There are no known wind farms, communication masts, or metallic pipelines that will impact on the alignment option. The alignment passes in close proximity to the settlements of Easter Moniack and Newtonhill.
Economic	There is negligible difference in capital cost between the options in Section 4, with only 1% difference between the options. Alignment 4A has the lowest estimated operational cost.	Alignment 4B has the lowest estimated capital cost. Alignment 4B requires one additional low voltage crossing and is greater 140% of the lowest operational cost option.

Topic	Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 5A is within 10 km of Moniack Gorge SSSI/SAC, Beauly Firth SSSI, the Inner Moray Firth SPA/Ramsar, Moray Firth SPA, Moray Firth SAC, Loch Ashie SPA/SSSI, Loch Battan SSSI, Longman and Castle	Alignment 5B natural heritage designation appraisal is the same as Alignment 5A. Protected Species	Alignment 5C natural heritage designation appraisal is the same as Alignment 5A.	Alignment 5D natural heritage designation appraisal is the same as Alignment 5A.	Alignment 5E natural heritage designation appraisal is the same as Alignment 5A.	Alignment 5F natural heritage designation appraisal is the same as Alignment 5A.	Alignment 5G natural heritage designation appraisal is the same as Alignment 5A.
	Stuart Bays SSSI, Cromarty Firth SPA/Ramsar and Monadh Mor SAC/SSSI. There is suitability of habitat within the alignment boundary to support wintering geese and breeding osprey potentially associated with the Inner Moray Firth SPA/Ramsar.	The habitats and their suitability to support protected species within Alignment 5B are the same as those within Alignment 5A.	Protected Species The habitats and their suitability to support protected species within Alignment 5C are the same as those within Alignment 5B.	Protected Species The habitats and their suitability to support protected species within Alignment 5D are the same as those within	Protected Species The habitats and their suitability to support protected species within Alignment 5E are the same as those within Alignment 5D.	Protected Species The habitats and their suitability to support protected species within Alignment 5F are the same as those within Alignment 5D.	Protected Species The habitats and their suitability to support protected species within Alignment 5G are the same as those within Alignment 5B.



Topic Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
sites within a 2 km radius include a Butterfly Conservation Scottish Priority Landscape within the, a Buglife B-Line and a Buglife IIA (East Inverness-shire). Protected Species The conifer plantation woodlands and buildings located within Alignment 5A have the potential to support roosting bats. Coniferous trees present lower potential suitability for supporting roosting bats. The edges of the wooded areas, as well as the semi- natural habitats and watercourses within the alignment option have the potential to support commuting and foraging activities for bats. The habitats within Alignment 5A, including agricultural land, are considered suitable to support foraging badger. The woodlands and unmaintained field margin areas have the potential to provide suitable habitats for sett creation. The mature conifer woodland areas have the potential to support wildcats, red squirrels and pine martens. The areas of the Allt na Ceardaich and Bunchrew Burn have the potential to support commuting and foraging otters. Smaller channels have the potential to support water voles. The limited areas of standing water and slow-flowing field drains and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles. The watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species.	Habitats The habitats within Alignment 5B are similar to Alignment 5A, with the following exception - HABMOS ²⁵ data identifies no Annex I habitats (of the Habitats Directive) within 100 m. BNG There is unavoidable, irreplaceable habitat spanning the full width of Alignment 5B, and therefore 55.53 BU were calculated for this option. Ornithology Data collected as part of the desk study found negligible flight activity by Target Species over the extensive forested parts of The Aird. Occasional flight activity by red kites was observed through VP surveys, but no evidence of breeding was observed. A single curlew flight, and a single merlin sighting were recorded over the breeding season via the VP surveys, however no evidence of breeding was observed. Curlew, golden plover and lapwing were also identified over 1 km from Alignment 5B with the potential for breeding. Hydrology, Geology and Hydrology, geology and hydrogeology is the same as Alignment 5A.	Habitats The habitats within Alignment 5C are the same as Alignment 5A, with the following exception: Category 1a ancient woodland of semi- natural origin does not span the width of 100 m. BNG There is no irreplaceable habitat which spans the entire width of 100 m and therefore no BU were calculated for this option. Ornithology Alignment 5C appraisal for ornithology is the same as Alignment 5B. Hydrology, Geology and Hydrogeology Alignment 5C hydrology, geology and hydrogeology is the same as Alignment 5A.	Alignment 5B, with the following exception: • A slightly smaller area of woodland is present in alignment option 5D, decreasing the habitat's suitability for bat species, red squirrel, wildcat and pine marten. Habitats The habitats within Alignment 5D are the same as Alignment 5C. BNG Alignment 5D appraisal is the same as Alignment 5D appraisal for ornithology is the same as Alignment 5B. Hydrology, Geology and Hydrogeology Alignment 5D hydrology, geology and hydrogeology is the same as Alignment 5A.	Habitats The habitats within Alignment 5E are the same as Alignment 5B. BNG There is unavoidable, irreplaceable habitat spanning the full width of Alignment 5E at the eastern end, and therefore 55.53 BU were calculated for this option. Ornithology Alignment 5E appraisal for ornithology is the same as Alignment 5B. Hydrology, Geology and Hydrogeology Alignment 5E hydrology, geology and hydrogeology is the same as Alignment 5A.	Habitats The habitats within Alignment 5F are the same as Alignment 5A, with the following exception: • Woodland listed in the AWI is only Category 2b. BNG Alignment 5F appraisal is the same as Alignment 5C. Ornithology Alignment 5F appraisal for ornithology is the same as Alignment 5B. Hydrology, Geology and Hydrogeology Alignment 5F hydrology, geology and hydrogeology is the same as Alignment 5A.	Habitats The habitats within Alignment 5G are the same as Alignment 5A. BNG Alignment 5G appraisal is the same as Alignment 5C. Ornithology Alignment 5G appraisal for ornithology is the same as Alignment 5B. Hydrology, Geology and Hydrogeology Alignment 5G hydrology, geology and hydrogeology is the same as Alignment 5A.

 $^{^{22}}$ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

25 The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.



Alignment 5A. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA

<u>Habitats</u>		
HABMOS ²³ data identifies the following Annex I habitat within 100 m: H91A0 – Old sessile oak woods.		
There is woodland listed in the AWI within 100 m, including Category 1a ancient woodland of seminatural origin spanning the width of 100 m. The remaining is Category 2b LEPO woodland and not considered irreplaceable habitat.		
The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.		
BNG		
There is unavoidable, irreplaceable habitat spanning the full width of Alignment 5A at the eastern end, and therefore 50.60 BU were calculated for this option.		
Ornithology		
Alignment 5A appraisal for ornithology is mostly the same as Alignment 5B, with the following exception:		
Flights by pink-footed geese and greylag geese were also recorded along the valley of the River Ness, although these were infrequent and typically involved small flocks (<100 birds). This alignment has the potential to represent a collision hotspot for geese.		
Species of waterfowl and wading birds recorded along the River Ness valley include mallard, wigeon, and oystercatcher (all infrequent sightings, or involved a small number of birds).		
Hydrology, Geology and Hydrogeology		
Alignment 5A crosses unclassified watercourses (under the Scotland Water Framework Directive) and is located 100 m north of River Ness – Inverness Firth to Loch Ness (ID: 23394) and Caledonian Canal – Tomnahurich Bridge to Loch Ness (ID: 20248). It is underlain by Glenfinnan Group, a low productive aquifer, and Middle Old Red Sandstone, a medium productive aquifer.		
Alignment 5A passes through the Torvean Geological Conservation Review (GCR) site.		
Alignment 5A is not located within any SEPA or SW DWPA. According to The Highland Council Open Map Data ²⁴ , there are Private Water Supplies within 1 km of		



Topic	Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
	abstraction data, there are potential water abstractions within 1 km.						
Cultural Heritage	 Designations There are no World Heritage Sites, GDLs, or Inventory Battlefields within 1 km. There are two Scheduled Monuments within the outer study area. These are: Borlum, ring ditch (SM5142), circa 950 m south; and Caledonian Canal, Dochgarroch Lock – Muirtown Locks (SM6499) circa 100 m southeast. Within the inner study area, there are three SMR entries, a wood, a cairn, and a medieval tower. Direct physical impacts can be avoided by micro siting of the alignment option. Assets There are no Conservation Areas or Non-inventory GDLs within 1 km of Alignment 5A. Within 1 km, there are, four Category B Listed Buildings. There is the potential for direct impacts within the setting of all the Listed Buildings. However, due to distances and intervening topography impacts are not likely to lead to significant effects. 	 Designations There are no World Heritage Sites or Inventory Battlefields within 1 km. There are four Scheduled Monuments within 1 km: Borlum Ring ditch (SM1542) circa 750 m south; Caledonian Canal, Loch Ness – Dochgarroch Lock (SM6498) circa 930 m southeast; Caledonian Canal, Dochgarroch Lock (SM5417) circa 920 m to the southeast; and Caledonian Canal, Dochgarroch Lock – Muirtown Locks (SM6499) circa 920 m southeast. Alignment 5B is unlikely to have any significant effects on the SMs. There is a single Inventory GDL within 1 km, Dochfour (GDL00137), circa 700 m to the south. The alignment is unlikely to have significant effects due to distance and intervening vegetation and buildings. Within 100 m, there are three SMR entries, a woodland, two cairns and a marker stone. Direct physical impacts can be avoided by micro siting of the alignment option. Assets The cultural heritage assets appraisal for Alignment 5B is the same as Alignment 5A. 	Designations The cultural heritage designations appraisal for Alignment 5C is the same as Alignment 5B. Assets The cultural heritage assets appraisal for Alignment 5C is the same as Alignment 5A.	Designations The cultural heritage designations appraisal for Alignment 5D is the same as Alignment 5B, with the following exception: There are seven SMR entries, a group of three cairns, a farmstead, a cairnfield, a marker stone, a track, and a ditch. Assets The cultural heritage assets appraisal for Alignment 5D is the same as Alignment 5A.	Designations The Cultural Heritage appraisal for Alignment 5E is the same as Alignment 5B, with the following exceptions: Dochfour GDL is circa 830 m to the south; and there are six SMR entries, two cairns, a farmstead, a lime kiln, a clearance cairn, and a hut circle. Assets The cultural heritage assets appraisal for Alignment 5E is the same as Alignment 5A.	Designations The cultural heritage designations appraisal for Alignment 5F is the same as Alignment 5B, with the following exception: There are two SMR entries, a cairn and a farmstead. Assets The cultural heritage assets appraisal for Alignment 5F is the same as Alignment 5A.	Designations The cultural heritage designations appraisal for Alignment 5G is the same as Alignment 5B, with the following exceptions: Dochfour GDL is circa 615 m to the south; and there are six SMR entries, two cairns, a farmstead, a lime kiln, a clearance cairn, and a hut circle. Assets The cultural heritage assets appraisal for Alignment 5G is the same as Alignment 5A.

²³ The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

²⁴ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



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Topic	Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. Loch Ness and Duntelchaig SLA is 4 km southwest of the alignment. Landscape Character The landscape character appraisal for Alignment 5A is mostly the same as Alignment 5B. However, Alignment 5A is located on slightly lower ground than other options and utilises the existing topography of the hillside, following the landscape grain much more closely. There are more angle towers, however the angles are less steep than other alignments and does not require one in the open ground dropping into the Great Glen. Visual The visual appraisal for Alignment 5A is mostly the same as Alignment 5B, however Alignment 5A crosses The Aird at a lower elevation, limiting visibility from the lower Beauly valley. There are few residential properties across The Aird itself, although there are small concentrations just to the north at Allt Na Ceardaich and West Allt Na Ceardaich, south of Newtonhill. Numerous properties are also concentrated at the eastern end around Dochgarroch and Dunain. The alignment would also pass in relative proximity to properties to the north at Englishton Muir, potentially being skylined where it rises above 250 m. The alignment would also be seen from the Great Glen Way and the A82 but visibility would be somewhat limited by forestry.	Landscape Designations The landscape designation appraisal for Alignment 5B is the same as Alignment 5A. Landscape Character Alignment 5B is located in the Rocky Moorland Plateau - Inverness LCT 222, which is characterised by extensive conifer forests contrasting with open moorland. This alignment crosses the undulating high ground of The Aird with three angle towers before dropping down the flank of The Aird and Craig Leach at right angles to the grain of the landscape and with a very sharp angle out into the Great Glen. Visual Alignment 5B crosses numerous small summits. However, visibility from the lower Beauly valley may be limited by forestry and the rising summits of Mam a Chatha, An Leacainn, Croc na Moine and Craig Leach. There are few residential properties across the alignment, although there is a small concentration just to the north at Allt Na Ceardaich, south of Newtonhill. Numerous properties are also concentrated at the eastern end around Dochgarroch. The alignment would also be seen from the Great Glen Way and the A82, particularly where it would pass overhead. However, wider visibility would be somewhat limited by forestry.	Landscape Designations The landscape designation appraisal for Alignment 5C is the same as Alignment 5A. Landscape Character The landscape character appraisal for Alignment 5C is mostly the same as Alignment 5B but crosses slightly higher ground across The Aird, still against the grain of the landscape but with a less severe angle into the Great Glen. Visual The visual appraisal for Alignment 5C is mostly the same as Alignment 5B, however Alignment 5C crosses the summit of Craigh Leach, making it slightly more visible than Alignment 5B crossing in to Dochgarroch, as well as its straighter alignment down to the Great Glen.	Landscape Designations The landscape designation appraisal for Alignment 5D is the same as Alignment 5A. Landscape Character The landscape character appraisal for Alignment 5D is mostly the same as Alignment 5B but follows the grain of the landscape slightly more closely across The Aird, due to inclusion of angle towers to follow the topography. It crosses at a less severe angle out into the Great Glen than Alignment 5B or 5C. Visual The visual appraisal for Alignment 5D is mostly the same as Alignment 5B, however Alignment 5D is located slightly further from sensitive receptors at West Allt Na Ceardaich but still crosses local high points across The Aird. The alignment may also have increased visibility for sensitive receptors at Dochgarroch and the A82.	Landscape Designations The landscape designation appraisal for Alignment 5E is the same as Alignment 5A. Landscape Character The landscape character appraisal for Alignment 5E is mostly the same as Alignment 5F to the top of The Aird and the Great Glen Way. It then takes a slight diversion northwards to pass north of Lagnalean and across the A82. It descends off The Aird at a more oblique angle than Alignment 5F but doesn't utilise the notch on the hillside. Visual The visual appraisal for Alignment 5E is mostly the same as Alignment 5D and 5F, however it is located slightly further from sensitive receptors at West Allt Na Ceardich and stays on higher ground for longer than Alignment 5D. Alignment 5E has a more oblique angle into the Great Glen than Alignment 5F.	Landscape Designations The landscape designation appraisal for Alignment 5F is the same as Alignment 5A. Landscape Character The landscape character appraisal for Alignment 5F is mostly the same as Alignment 5D but takes a much straighter, more direct, albeit slightly higher, course across the plateau. Alignment 5F requires fewer angle towers and sits slightly more naturally into the landscape. Visual The visual appraisal for Alignment 5F is mostly the same as Alignment 5D, however Alignment 5F is located slightly further from sensitive receptors at West Allt Na Ceardaich but stays on higher ground for longer than Alignment 5D. The alignment may also have increased visibility for sensitive receptors at Dochgarroch and the A85.	Landscape Designations The landscape designation appraisal for Alignment 5G is the same as Alignment 5A, with the following exception: • Loch Ness and Duntelchair SLA is 3.5 km southwest of the alignment. Landscape Character The landscape character appraisal for Alignment 5G is mostly the same as Alignment 5B but takes a straighter, most southerly route across the plateau, but also the highest. It descends off The Aird at a less severe angle into the Great Glen than Alignment 5B or 5C and in a slight notch formed by the watercourse of Dochgarroch Burn. Alignment 5G also requires fewer angle towers. Visual The visual appraisal for Alignment 5G is mostly the same as Alignment 5G, risks being widely visible from the lower Beauly valley. It would also be seen from the Great Glen Way and A85 as well as Balliemore, but visibility may be limited by forestry. It crosses down into the Great Glen at a more oblique angle than some of the other options,



Topic	Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
							making it less intrusive in the landscape.
Land Use	Agriculture Alignment 5A does not pass through any prime agricultural land, however it does pass through some areas of Class 3.2 land. Forestry Alignment 5A passes through significant areas of mixed age commercial forestry and a small area of mature broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 5A is 55.37 ha, comprising 1.97 ha broadleaved woodland and 53.40 ha coniferous woodland and. Of this, 4.78 ha	Agriculture The agriculture appraisal for Alignment 5B is the same as Alignment 5A. Forestry Alignment 5B passes through significant areas of mixed age commercial forestry and passes the edge of a small area of mature broadleaved woodland. The estimated area of commercial woodland that would be impacted	Agriculture The agriculture appraisal for Alignment 5C is the same as Alignment 5A. Forestry Alignment 5C passes through significant areas of mixed age commercial forestry but avoids interaction with broadleaved woodland. The estimated area of	Agriculture The agriculture appraisal for Alignment 5D is the same as Alignment 5A. Forestry Alignment 5D passes through significant areas of mixed age commercial forestry but avoids interaction with broadleaved woodland. The estimated area of	Agriculture The agriculture appraisal for Alignment 5E is the same as Alignment 5A. Forestry Alignment 5E passes through significant areas of mixed age commercial forestry and a small area of mature broadleaved woodland. The estimated area of	Agriculture The agriculture appraisal for Alignment 5F is the same as Alignment 5A. Forestry Alignment 5F passes through significant areas of mixed age commercial forestry but avoids interaction with broadleaved woodland. The estimated area of	Agriculture The agriculture appraisal for Alignment 5G is the same as Alignment 5A. Forestry Alignment 5G passes through significant areas of mixed age commercial forestry but avoids interaction with broadleaved woodland. The estimated area of
	comprises restock of young trees and 9.34 ha is felled. Alignment 5A passes through an area of unavoidable Category 1a ancient woodland of semi-natural origin at Dunain in favourable condition with mixed broadleaves and numerous healthy veteran trees throughout. Recreation Alignment 5A passes over two core paths in The Aird woods, as well as the Loch Ness 360 long distance walking route and The Great Glen Way. The Aird is also	by Alignment 5B is 52.45 ha, comprising 1.06 ha broadleaved woodland and 51.39 ha coniferous woodland. Of this, 11.51 ha comprises restock of young trees and 10.5 ha is currently felled. Alignment 5B crosses the A82 into an area of undesignated woodland that contains a favourable mix of broadleaved woodland and veteran	commercial woodland that would be impacted by Alignment 5C is 49.64 ha, comprising 1.00 ha broadleaved woodland and 48.64 ha coniferous woodland. Of this, 9.62 ha comprises restock of young trees and 10.84 ha is currently felled.	commercial woodland that would be impacted by Alignment 5D is 45.49 ha, comprising 1.00 ha broadleaved woodland and 44.49 ha coniferous woodland. Of this, 8.39 ha comprises restock of young trees and 9.43 ha is currently felled.	commercial woodland that would be impacted by Alignment 5E is 44.38 ha, comprising 0.53 ha broadleaved woodland and 43.86 ha coniferous woodland. Of this, 1.36 ha comprises restock of young trees and 9.91 ha is felled.	commercial woodland that would be impacted by Alignment 5F is 42.82 ha, comprising 1.00 ha broadleaved woodland and 41.82 ha coniferous woodland. Of this, 0.17 ha comprises restock of young trees and 12.53 ha is currently felled.	commercial woodland that would be impacted by Alignment 5G is 48.21 ha, comprising 1.00 ha broadleaved woodland and 47.21 ha coniferous woodland. Of this, 0.04 ha comprises restock of young trees and 13.47 ha is felled.
	popular for recreation activities, include walking, mountain biking and horse riding. No cycle routes are impacted by alignments in this Section. Alignment 5A also passes through a pond draining into Alt na Ceardich burn which is popular with paddle boarders. Although there have been no specific services identified, stalking activities may take place in areas close to alignment options in this Section.	that contains a favourable mix of broadleaved woodland and veteran trees. Further eastwards, towards the Caledonian Canal, the alignment crosses a strip of unavoidable ancient Caledonian pine trees. Recreation The recreation appraisal for 5B is the same as 5A.	Alignment 5C crosses the A82 into an area of undesignated woodland that contains a favourable mix of broadleaved woodland and veteran trees. Further eastwards, towards the Caledonian Canal, the alignment crosses a strip of unavoidable ancient Caledonian pine trees. Recreation The recreation appraisal for 5C is the same as 5A.	Alignment 5D crosses the A82 into an area of undesignated woodland that contains a favourable mix of broadleaved woodland and veteran trees. Further eastwards, towards the Caledonian Canal, the alignment crosses a strip of unavoidable ancient Caledonian pine trees. Recreation The recreation appraisal for 5D is the same as 5A.	Alignment 5E passes through a small area of Category 1a ancient woodland of semi-natural origin, however this is currently a commercial woodland and young restock plantation. Alignment 5E also follows the gaps between the trees leading across the A82 into a much smaller strip of veteran broadleaves and avoiding ancient Caledonian pine trees, greatly reducing the impact to native woodland, ancient woodland and ancient/veteran trees that	Alignment 5F crosses the A82 into an area of undesignated woodland that contains a favourable mix of broadleaved woodland and veteran trees. Further eastwards, towards the Caledonian Canal, the alignment crosses a strip of unavoidable ancient Caledonian pine trees. Recreation The recreation appraisal for 5F is the same as 5A.	Alignment 5G crosses the A82 into an area of undesignated woodland that contains a favourable mix of broadleaved woodland and veteran trees. Further eastwards, towards the Caledonian Canal, the alignment crosses a strip of unavoidable ancient Caledonian pine trees. Recreation The recreation appraisal for 5G is the same as 5A.



Topic	Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
					Recreation The recreation appraisal for 5E is the same as 5A.		
Planning	 Within 500 m lie the following consented planning applications: erection of a house garage, agricultural building, two polytunnels and alterations to agricultural building (19/02375/FUL). Approximately 100 m north. Conversion of steading to house, cottage to office, demolition of cottage, installation of solar PV on agricultural shed (20/04165/FUL). Approximately 150 m west. Erection of farm shop, access, parking, picnic area (20/02183/FUL). Approximately 100 m northeast. Erection of house (amended design 17/04595/FUL). 22/02279/FUL. Approximately 100 m east. Change of use from stables to a house, and erection of garage (22/02646/FUL). Approximately 100 m east. 	 Within 500 m lie the following consented planning applications: erection of a house garage, agricultural building, two polytunnels and alterations to agricultural building (19/02375/FUL). Approximately. 100 m north. Conversion of steading to house, cottage to office, demolition of cottage, installation of solar PV on agricultural shed (20/04165/FUL). Approximately 150 m west. Erection of house and garage (22/06166/FUL). Approximately 250 m northeast. Erection of a house and garage (21/00228/FUL). Approximately 450 m north. Change of use of upper floor of agricultural building to residential (22/02156/FUL). Approximately 100 m north. 	The planning appraisal for Alignment 5C is the same as Alignment 5B.	The planning appraisal for Alignment 5D is similar to Alignment 5B and 5C, with the following exceptions: • (19/02375/FUL) is approximately 100 m north. • (22/06166/FUL) is approximately 300 m north. • (21/00228/FUL) is approximately 500 m north. • (22/02156/FUL) is approximately 100 m north.	The planning appraisal for Alignment 5E is the same as Alignment 5D.	The planning appraisal for Alignment 5F is the same as Alignment 5D.	The planning appraisal for Alignment 5G is the same as Alignment 5D.
Engineering	Infrastructure Crossings Alignment 5A crosses the A82 trunk road, one minor road and four restricted local access roads. Environmental Design All alignment options include more than 25% of their length at elevations over 200 m. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. All alignments in Section 5 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	Infrastructure Crossings Alignment 5B crosses the A82 trunk road, two minor roads and six restricted local access roads. Environmental Design All alignment options include more than 25% of their length at elevations over 200 m. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still within the design envelope for the proposed tower suite so is unlikely to cause a significant issue.	Infrastructure Crossings Alignment 5C crosses the A82 trunk road, two minor roads and six restricted local access roads. Environmental Design All alignment options include more than 25% of their length at elevations over 200 m. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still	Infrastructure Crossings Alignment 5D crosses the A82 trunk road, two minor roads and four restricted local access roads. Environmental Design All alignment options include more than 25% of their length at elevations over 200 m. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still	Infrastructure Crossings Alignment 5E crosses the A82 trunk road, two minor roads and four restricted local access roads. Environmental Design All alignment options include more than 25% of their length at elevations over 200 m. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still	Infrastructure Crossings Alignment 5F crosses the A82 trunk road, two minor roads and five restricted local access roads. Environmental Design All alignment options include more than 25% of their length at elevations over 200 m. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still	Infrastructure Crossings Alignment 5G crosses the A82 trunk road, two minor roads and three restricted local access roads. Environmental Design All alignment options include more than 25% of their length at elevations over 200 m. Although this altitude typically has challenges associated with increased climatic loadings and limited access, it is still



Topic Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
There are no reports of contaminated land within Section 5. According to SEPA flood maps, less than 5% of Alignment 5A is located within the 1 in 10 year flood risk zone. All alignment options cross the Allt Dionach watercourse. Ground Conditions Alignment 5A contains a maximum slope of 33 degrees. The alignment includes a sharp drop in elevation at the eastern end, towards the A82 and Caledonian Canal. None of the alignment options pass through known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 5A requires four angle towers. Proximity There are two residential properties located within 170 m of Alignment 5A. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	All alignments in Section 5 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. There are no reports of contaminated land within Section 5. According to SEPA flood maps, less than 5% of Alignment 5B is located within the 1 in 10 year flood risk zone. All alignment options cross the Allt Dionach watercourse. Ground Conditions Alignment 5B contains a maximum slope of 31 degrees. The alignment includes a sharp drop in elevation at the eastern end, towards the A82 and Caledonian Canal. None of the alignment options pass through known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 5B requires four angle towers. Proximity There are two residential properties located within 170 m of Alignment 5B. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option	within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. All alignments in Section 5 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. There are no reports of contaminated land within Section 5. According to SEPA flood maps, greater than 5% of Alignment 5C is located within the 1 in 10 year flood risk zone. All alignment options cross the Allt Dionach watercourse. Ground Conditions Alignment 5C contains a maximum slope of 37 degrees. The alignment includes a sharp drop in elevation at the eastern end, towards the A82 and Caledonian Canal. As the maximum gradient of this option is greater than 35 degrees, it could pose challenges for tower placement. However, there is good existing access throughout the area of steep slopes which may make the alignment constructable. None of the alignment options pass through known areas of peatland.	within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. All alignments in Section 5 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. There are no reports of contaminated land within Section 5. According to SEPA flood maps, greater than 5% of Alignment 5D is located within the 1 in 10 year flood risk zone. All alignment options cross the Allt Dionach watercourse. Ground Conditions Alignment 5D contains a maximum slope of 32 degrees. The alignment includes a sharp drop in elevation at the eastern end, towards the A82 and Caledonian Canal. None of the alignment options pass through known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 5D requires six angle towers.	within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. All alignments in Section 5 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. There are no reports of contaminated land within Section 5. According to SEPA flood maps, less than 5% of Alignment 5E is located within the 1 in 10 year flood risk zone. It may be possible to avoid placing a tower within the flood zone areas. Ground Conditions Alignment 5E contains a maximum slope of 37 degrees. The alignment includes a sharp drop in elevation at the eastern end, towards the A82 and Caledonian Canal. As the maximum gradient of this option is greater than 35 degrees, it could pose challenges for tower placement. However, there is good existing access throughout the area of steep slopes which may make the alignment constructable. None of the alignment options pass through known areas of peatland.	within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. All alignments in Section 5 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. There are no reports of contaminated land within Section 5. According to SEPA flood maps, less than 5% of Alignment 5F is located within the 1 in 10 year flood risk zone. All alignment options cross the Allt Dionach watercourse. Ground Conditions Alignment 5F contains a maximum slope of 24 degrees. The alignment includes a sharp drop in elevation at the eastern end, towards the A82 and Caledonian Canal. None of the alignment options pass through known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 5F requires two angle towers.	within the design envelope for the proposed tower suite so is unlikely to cause a significant issue. All alignments in Section 5 are located within 10 km of the Beauly Firth coastal region and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. There are no reports of contaminated land within Section 5. According to SEPA flood maps, greater than 5% of Alignment 5G is located within the 1 in 10 year flood risk zone. All alignment options cross the Allt Dionach watercourse. Ground Conditions Alignment 5G contains a maximum slope of 22 degrees. The alignment includes a sharp drop in elevation at the eastern end, towards the A82 and Caledonian Canal. None of the alignment options pass through known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 5G requires three angle towers.



Topic	Alignment 5A	Alignment 5B	Alignment 5C	Alignment 5D	Alignment 5E	Alignment 5F	Alignment 5G
			Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 5C requires three angle towers. Proximity There are two residential properties located within 170 m of Alignment 5C. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There are no residential properties located within 170 m of Alignment 5D. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 5E requires three angle towers. Proximity There are three residential properties located within 170 m of Alignment 5E. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There are no residential properties located within 170 m of Alignment 5F. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There are no residential properties located within 170 m of Alignment 5G. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 5A has an additional 1 km length in comparison to the average length of alternate options, increasing costs associated with towers, conductors and access tracks. It also has the highest cost associated with tree felling. Alignment 5A is over 120% of the lowest cost option. The operational costs are estimated to be similar for all alignment options.	Capital cost for Alignment 5B is roughly 15% greater than the lowest cost option. It has the longest length and second highest tree felling costs in comparison with other options. The operational costs are estimated to be similar for all alignment options.	Alignment 5C has the median capital cost of the options and is within 120% of the lowest cost option. The operational costs are estimated to be similar for all alignment options.	Alignment 5D has the highest number of angle towers needed along the alignment option, triple the number on the lowest cost option (5F) which is a straighter route, increasing capital cost. Despite this it remains within 120% of the lowest cost option. The operational costs are estimated to be similar for all alignment options.	Alignment 5E is slightly longer than the lowest cost option but has significantly higher costs associated with tree felling. It remains within 120% of the lowest cost option. The operational costs are estimated to be similar for all alignment options.	Alignment 5F has the lowest estimated capital cost. The operational costs are estimated to be similar for all alignment options.	Alignment 5G is only slightly longer than Alignment 5F but has significantly higher costs associated with tree felling. It remains within 120% of the lowest cost option. The operational costs are estimated to be similar for all alignment options.

Topic	Alignment 6A	Alignment 6B	Alignment 6C
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 6A is within 10 km of Moniack Gorge SSSI/SAC, Beauly Firth SSSI, Inner Moray Firth SPA/Ramsar, Moray Firth SPA, Moray Firth SAC, Loch Ashie SSSI, Loch Ashie SPA, Loch Battan SSSI, Longman and Castle Stuart Bays SSSI and Cromarty Firth SPA.	Alignment 6B natural heritage designation appraisal is the same as Alignment 6A.	Alignment 6C natural heritage designation appraisal is the same as Alignment 6A.

Topic Alignment 6A	Alignment 6B	Alignment 6C
The habitat in the alignment has the potential to support foraging wintering geese and breeding osprey potentially associated with the Inner Moray Firth SPA/Ramsar. Non-statutory designations and nature conservation sites within a 2 km radius include a Butterfly Conservation Scottish Priority Landscape, a Buglife B-Line and a Buglife IIA (East Inverness-shire). Protected Species The mature woodland groups, tree lines and standing trees as well as a small number of residential and farm buildings are located within Alignment 6A and have the potential to support roosting bats. Both coniferous and broadleaf woodland groups are present. The coniferous areas present lower potential suitability to support roosting bats than the mature broadleaf areas. The edges of the wooded areas, as well as the semi-natural habitats and watercourses within the alignment option have the potential to support commuting and foraging activities for bats. The habitats within Alignment 6A, including woodland, grassland, cropland and scrub area considered suitable to support foraging badger. The woodlands and scrub areas have the potential to provide suitable habitats for sett creation. The large coniferous woodland at Cullaird wood has the potential to support red squirrels, however, is considered suboptimal for pine martins. The farmland, grasslands and small woodland groups within Alignment 6A are considered too exposed and sub-optimal for wildcats, with a few suitable areas located in the areas of larger mixed woodland. The River Ness and large burns have the potential to support commuting and foraging otters, with otter spraint observed at the river. Smaller channels have the potential to support breeding amphibian populations. A network of waterbodies in the alignment have been identified that could support great crested newts. Large areas of scrub and tussocky grassland may provide habitat for reptiles. The River Ness has the potential to support Imprey species. Alignment 6A occurs within the known distribution range for FWPM	Protected Species The habitats and their suitability to support protected species within Alignment 6B are largely reflective of those within Alignment 6A, with the following exceptions: • A smaller area of mature broadleaf woodland is present in Alignment 6B, decreasing the habitat's roosting suitability for bat species; and • a smaller area of mature coniferous woodland is present in Alignment 6B, decreasing the habitat's suitability for red squirrels and pine martens. Habitats Alignment 6B habitat appraisal is the same as Alignment 6A. BNG Alignment 6B BNG appraisal is the same as Alignment 6A. Ornithology Alignment 6B appraisal for ornithology is the same as Alignment 6A. Hydrology, Geology and Hydrogeology Alignment 6B hydrology, geology and hydrogeology is the same as Alignment 6A.	Protected Species The habitats and their suitability to support protected species within Alignment 6C are largely reflective of those within Alignment 6B, with the following exceptions: • A larger area of mature broadleaf woodland is present in Alignment 6C, compared to both 6B and 6A, increasing the habitat's roosting suitability for bat species; and • a smaller area of mature coniferous woodland is present in Alignment 6C, decreasing the habitat's suitability for red squirrels and pine martens. Habitats Alignment 6C habitat appraisal is the same as Alignment 6A, with the following exception: • There is only one area of AWI irreplaceable woodland in the alignment. BNG Alignment 6C BNG appraisal is the same as Alignment 6A. Omithology Alignment 6C appraisal for ornithology is the same as Alignment 6A. Hydrology, Geology and Hydrogeology Alignment 6C hydrology, geology and hydrogeology is the same as Alignment 6A, with the following exception: • There are no SW abstractions within 1 km of Alignment 6C.

 $^{^{\}rm 26}$ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora

^{(92/43/}EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

27 The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.



Topic	Alignment 6A	Alignment 6B	Alignment 6C
	The NWSS identified upland oakwood, lowland mixed deciduous woodland, upland birchwood and unidentified native woodlands within 100 m. Additionally, two areas of woodland within 100 m are listed in the AWI as Category 1a and 2a, ancient woodland of semi-natural origin, considered irreplaceable habitat. The rest is Category 2b LEPO woodland and not considered irreplaceable habitat.		
	The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.		
	BNG		
	There is no unavoidable irreplaceable habitat in 100 m of Alignment 6A and therefore no BU were calculated for this option.		
	Ornithology		
	Data collected as part of the desk-study identified regular flight activity by red kite along the River Ness valley and the agricultural land and forested areas west of Drummossie Muir throughout the year, and by Osprey in the breeding season. Regular flight activity by pink-footed geese and greylag geese was also recorded along the River Ness valley during the winter, autumn and spring passage months.		
	VP surveys overlooking the River Ness valley recorded regular flight activity by red kites throughout the year, usually involving individual birds, with the majority of flights occurring over the woodland and agricultural habitats on the western side of the river. Infrequent flights by pink-footed geese and greylag geese were recorded along the river valley during the autumn, winter and early spring months, and typically involved comparatively small flocks (<100 birds), however this could still represent a collision hotspot for geese. Other species of waterfowl and wading birds recorded along the river valley included mallard, wigeon, and oystercatcher, but these were infrequent and / or involved small numbers of birds.		
	VP surveys overlooking the moorland of Drummossie Muir recorded regular flight activity by red kites and ospreys during the breeding season. The majority of these flights were by birds associated with breeding territories identified during the scarce breeding raptor surveys. A red kite nest was recorded within 2 km of Section 6 (although this was later found to have failed). Two osprey nests were found within 2 km of Section 6. A third man-made osprey nest was found within 2 km of Section 6, however this was not observed as active. A black grouse lek was heard in open moorland to the south of Drummossie Muir. Curlew were also frequently recorded over the moorland during the spring and summer months, with flight activity estimated to be associated with at least two breeding pairs.		
	Other Target Species recorded over the moorland included occasional flights by merlin, lapwing and small numbers of pink-footed geese flying over during the spring.		
	Hydrology, Geology and Hydrogeology		
	Alignment 6A crosses the River Ness – Inverness Firth to Loch Ness (ID: 23394), Caledonian Canal – Tomnahurich Bridge to Loch Ness (ID: 20248), Big Burn – Ness confluence to Loch Ashie (ID: 20260) and Alt na Skiah (23370). It is underlain by the Middle Old Red Sandstone, a moderately productive aquifer.		
	Torvean GCR site is located within a very small part of Alignment 6A in the west.		
	Alignment 6A is not located within any SEPA or SW DWPA.		

Topic	Alignment 6A	Alignment 6B	Alignment 6C
	According to The Highland Council Open Map Data ²⁸ , there are Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.		
Cultural Heritage	Designations There are no World Heritage Sites or Inventory Battlefields within 1 km of the alignment. The alignment option bisects Caledonian Canal, Dochgarroch Lock – Muirtown Locks (SM6499). Direct physical impacts may be avoided through micro siting of towers. There are two Scheduled Monuments within 1 km. Torbreck, stone circle (SM3098), circa 250 m north east; Borlum, ring ditch (SM5142), circa 900 m south; There is the potential for direct impacts through the setting of these Scheduled Monuments, with the potential for significant effects. Within 100 m, there is a single SMR entry, Balrobert flint scatter. Significant effects are unlikely due to distance and intervening vegetation and buildings. Assets There are no CA or Non-Inventory GDL within 1 km of 6A. Within 1 km, there is one Category B Listed Building. There is limited potential for direct impacts through changes within the setting, due to distance and intervening vegetation.	 Designations The Designation appraisal for Alignment 6B is the same as Alignment 6A, with the following exception: Torbreck, stone circle (SM3098) is located 560 m north. Within 100 m, there are four SMR entries consisting of a flint scatter, Pictish symbol stone, and two enclosures. Assets The Assets appraisal for Alignment 6B is the same as Alignment 6A. 	 Designations The Designation appraisal for Alignment 6C is the same as Alignment 6A, with the following exceptions: There are four Scheduled Monuments within 1 km of the alignment: Carn Glas, chambered cairns (SM2392), circa 990 m south; Crow Wood Cottage, chambered cairn and standing stones (SM11546), circa 970 m south; Achvraid, hut circles (SM11786), circa 570 m south; Borlum, ring ditch (SM5142), circa 380 m west; There are seven SMR entries, including a cairnfield and prehistoric field system. Assets The Assets appraisal for Alignment 6C is the same as Alignment 6B.
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. Loch Ness and Duntelchaig SLA is within 4 km southwest of the alignment. The alignment is unlikely to influence the key characteristics of the SLA. Landscape Character Alignment 6A runs through woodland, to the west of the Caledonian Canal, against the grain of the landscape. There is a risk of 'wirescaping' in the flatter, open river flood plain. Visual Users of the Caledonian Canal travelling north would find Alignment 6A would have a reasonable degree of screening, primarily from coniferous woodland. Users of the Caledonian Canal travelling south would find Alignment 6A more visible due to its location at the end of the river bend. Alignment 6A would also cut through coniferous woodland north of Cullaird that forms a backdrop to properties at Cullaird. These properties have longer views southwards, across open fields to a rural, quiet landscape. Properties along the B862 at Scaniport are likely to be better screened by vegetation and landform from Alignment 6A than other alignment options in this section. This alignment would result in the 'boxing in' of a number of properties, particularly those between the Stone Circle and the River Ness. Whilst woodland provides a degree of screening, properties higher up the hillside (off Torbreck Road) have more open, elevated views.	Landscape Designations The landscape designation appraisal for Alignment 6B is the same as Alignment 6A. Landscape Character The landscape character appraisal for Alignment 6B is mostly the same as Alignment 6A, however Alignment 6B cuts through fewer blocks of woodland and runs up the hillside slightly more with the grain of the landscape than alignment 6A. The alignment also diverts away from Alignment 6A to pass south of Cullaird, slightly extending the area of influence of OHL infrastructure in the local landscape. Visual The visual appraisal for 6B is mostly the same as Alignment 6A, however 6B is likely to be slightly more visible than Alignment 6A from Dochgarroch. Conversely, it is likely to be less prominent for tourists and other users of the Caledonian Canal. Additionally, an angle tower would be required in front of properties at Cullaird, which would be highly prominent and substantially change the character of the existing views.	Landscape Designations The landscape designation appraisal for Alignment 6C is the same as Alignment 6A. Landscape Character Alignment 6C sits on the lower slopes of Durmashie Moor, however it is located on higher ground than Alignments 6A and 6B, making it more prominent in the landscape. The woodland to the west of the Caledonian Canal, and the meanders of the River Ness provide a degree of screening in the wider landscape, but there is risk of 'wirescaping' in the flatter, open river flood plain, as well as extension of influence further to the southwest. Visual Alignment 6C would have mid-range views from Dochgarroch and by tourists on the Caledonian Canal. Properties around Scaniport would overlook the proposed alignment which would disrupt existing mid-range agricultural views. This alignment is more prominent for cycle tourists where they are located off the B862 south of Scaniport.

²⁸ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 6A	Alignment 6B	Alignment 6C
	Properties at the top of the plateau (including Essich and Balrobert) are more nestled into the landscape with local variations in topography helping to screen the landscape further south. Properties at Balvonie of Leys and Balvonie Cottage, however, are slightly less contained.	This alignment would also result in the 'boxing in' of a number of properties at the top of the plateau.	This option would result in less obvious 'boxing in' of properties. However, the alignment runs at a higher elevation, making it more prominent in the wider landscape. It would also sit directly in front of Achvraid Farm and Achvraid House at the top of the plateau, which already has disrupted views with OHL infrastructure.
Land Use	Alignment 6A runs over a short stretch of unavoidable LCA Class 3.2 land. It does not pass through any prime agricultural land. Forestry Alignment 6A passes through areas of mature commercial forestry and mature broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 6A is 9.97 ha, comprising 3.36 ha broadleaved woodland and 6.62 ha coniferous woodland. The alignment passes parallel alongside an existing forest road and turning point, potentially impacting future forestry operations, such as roadside stacking. Alignment 6A passes through AWI Category 2b Long Established Woodland of Plantation Origin in favourable condition, with numerous veteran broadleaved trees present throughout which would be difficult to avoid. Recreation Alignment 6A crosses a number of core paths on either side of the River Ness. The alignment crosses National Cycle Route (NCR) 78, The Loch Ness 360 and the Caledonian Way long distance paths. The alignment passes over the Caledonian Canal, which is known for recreational fishing spots.	Agriculture The agriculture appraisal for 6B is the same as Alignment 6A. Forestry Alignment 6B crosses the edge of mature commercial forestry and through a small strip of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 6B is 5.29 ha, comprising 3.04 ha broadleaved woodland and 2.25 ha coniferous woodland. Alignment 6B interacts with areas of broadleaved AWI Category 2b Long Established Woodland of Plantation Origin, however there are opportunities to avoid or reduce impacts to native broadleaved woodland and veteran trees through micrositing of tower positions. Recreation The recreation appraisal for Alignment 6B is the same as Alignment 6A.	Agriculture The agriculture appraisal for 6C is the same as Alignment 6A. Forestry Alignment 6C passes through areas of mixed age commercial forestry and mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 6C is 6.30 ha, comprising 2.47 ha broadleaved woodland and 3.83 ha coniferous woodland, of which 3.83 ha is felled. Alignment 6C interacts with AWI Category passes through a significant area of undesignated broadleaved woodlands with numerous veteran trees throughout, making it difficult to avoid or reduce impacts on native woodland and veteran trees. Recreation The recreation appraisal for Alignment 6C is the same as Alignment 6A, with the following exception: • Alignment 6C also passes through the Drumashie Plantation, which is a popular walking area.
Planning	 Within 500 m lie the following consented planning applications: Erection of a Holiday Lodge (22/01514/FUL). Approximately 500 m northeast. Erection of a Lodge (21/04938/FUL). Approximately500 m northeast. The following applications are known to the planning system, but are not yet consented: Knocknagel Substation Extension Screening Opinion (Ref: 23/01490/SCRE) approximately 150 m south. Construction and operation of a proposed Battery Energy Storage System (BESS) (over 50MW) with associated infrastructure, access and ancillary works (24/01399/SCRE). 	 Within 500 m lie the following planning applications: Erection of a house (20/02632/PIP). Approximatelym southwest. Erection of a house (22/02372/PIP). Approximately 300 m southwest. Erection of five houses (17/02446/PIP) (22/05527/S42). Approximately 350 m west. The following applications are known to the planning system, but are not yet consented: Knocknagel Substation Extension Screening Opinion (Ref: 23/01490/SCRE) approximately 150 m south. Construction and operation of a proposed Battery Energy Storage System (BESS) (over 50MW) with associated infrastructure, access and ancillary works (24/01399/SCRE). Approximately 150 south. Erection of a house and garage (24/00644/FUL). Approximately 350 m west. 	 Within 500 m lie the following planning applications: Erection of five houses (17/02446/PIP) (22/05527/S42). Approximately 200 m northeast. Erection of a house (20/02632/PIP). Approximately 250 m northeast. Erection of a house (22/02372/PIP). Approximately 200 m east. The following applications are known to the planning system, but are not yet consented: Knocknagel Substation Extension Screening Opinion (Ref: 23/01490/SCRE). Within LOD. Decided as EIA required 23/06/23. Construction and operation of a proposed Battery Energy Storage System (BESS) (over 50MW) with associated infrastructure, access and ancillary works (24/01399/SCRE). Under Consideration. Within LOD. Erection of a house and garage (24/00644/FUL). Within LOD.



Topic	Alignment 6A	Alignment 6B	Alignment 6C
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 6A crosses the Caledonian Canal and River Ness, as well as the B862. The alignment also crosses two restricted local access roads and one minor road.	Alignment 6B crosses the Caledonian Canal and River Ness, as well as the B862. The alignment also crosses one minor road.	Alignment 6C crosses the Caledonian Canal and River Ness, as well as the B862. The alignment also crosses one restricted local access road
	The alignment crosses two 132 kV underground cables, one 275 kV underground cable and one 275 kV OHL.	The alignment crosses two 132 kV underground cables, one 275 kV underground cable and one 275 kV OHL.	and three minor roads. The alignment crosses one 275 kV underground cable and one 275 kV
	Environmental Design	Environmental Design	OHL. Alignment 6C also passes very close to the existing Knocknagael substation site.
	Less than 25% of Alignment 6A is at elevations over 200 m. However the maximum elevation is 219 m and is unlikely to cause a significant issue.	Less than 25% of Alignment 6B is at elevations over 200 m. However the maximum elevation is 219 m and is unlikely to cause a significant issue.	Environmental Design
	All alignments in Section 6 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	All alignments in Section 6 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt	Over 25% of Alignment 6C is at elevations over 200 m. However the maximum elevation is 219 m and is unlikely to cause a significant issue.
	There are no reports of contaminated land within Section CB1.	deposition that builds up over time.	All alignments in Section 6 are located within 10 km of the coast and will
	According to SEPA flood maps, greater than 5% of each alignment option is located within the	There are no reports of contaminated land within Section CB1.	therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.
	1 in 10 year flood risk zone. Ground Conditions	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.	There are no reports of contaminated land within Section CB1.
	Alignment 6A contains a maximum slope of 34 degrees. However this is for less than a single	Ground Conditions	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.
	span length so is not a significant issue. None of the alignment options pass through known areas of peatland.	Alignment 6B contains a maximum slope of 25 degrees. This occurs where it crosses the canal on the southeast bank and is not a significant	Ground Conditions
	Construction and Maintenance	issue.	Alignment 6C contains a maximum slope of 22 degrees. This occurs where it crosses the canal on the southeast bank and is not a significant
	There is an existing network of tracks and roads within 1 km of all alignment options.	None of the alignment options pass through known areas of peatland. <u>Construction and Maintenance</u>	issue.
	Alignment 6A requires three angle towers.	There is an existing network of tracks and roads within 1 km of all	None of the alignment options pass through known areas of peatland.
	<u>Proximity</u>	alignment options.	Construction and Maintenance
	There is one residential property located within 170 m of Alignment 6A.	Alignment 6B requires two angle towers.	There is an existing network of tracks and roads within 1 km of all alignment options.
	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity	Alignment 6C requires two angle towers.
		There are no residential properties located within 170 m of Alignment 6B.	<u>Proximity</u>
		There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are three residential properties located within 170 m of Alignment 6C.
			There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Although slightly shorter in length than the lowest capital cost option (Alignment 6B),	Alignment 6B has the lowest estimated capital cost.	Alignment 6C is the highest capital cost option, with greater capital costs
	Alignment 6A is higher in cost due to comparatively high estimated costs for forestry works required.	The estimated operation cost of Alignment 6B is similar to Alignment 6A.	associated with additional conductor length, tower costs and access tracks.
	The estimated operational cost of Alignment 6A is higher due to the requirement for an additional low voltage crossing.		Alignment 6C has the lowest estimated operational cost.



Topic	Alignment 7A	Alignment 7B
Natural Heritage	<u>Designations</u>	<u>Designations</u>
	Alignment 7A is within 10 km of Beauly Firth SSSI, the Inner Moray Firth SPA/Ramsar, Moray Firth SPA, Moray Firth SAC, Loch Ashie SSSI, Loch	Alignment 7B natural heritage designation appraisal is the same as Alignment 7A.
	Ashie SPA and Longman and Castle Stuart Bays SSSI. The habitat is unlikely to be used for foraging by wintering geese and breeding osprey potentially associated with the Inner Moray Firth SPA/Ramsar, due to the availability of more accessible habitats further west.	Protected Species
	Non-statutory designations and nature conservation sites within a 2 km radius include a Butterfly Conservation Scottish Priority Landscape (Great Glen and the Beauly Catchment) within the alignment boundary, a Buglife B-Line and a Buglife IIA (East Inverness-shire) bordering the	The habitats and their suitability to support protected species within Alignment 7B are largely reflective of those within Alignment 7A. Key differences include the following observed within 50 m of 100 m:
	northern alignment boundary.	A badger paw print; and
	Protected Species	potential pine marten scat.
·		There are reduced waterbodies present in alignment 7B, reducing suitability for the great crested newts.
	and have the potential to support roosting bats.	<u>Habitats</u>
	The majority of the trees are coniferous plantation, with mixed mature broadleaf woodland also present. Coniferous trees present lower	Alignment 7B habitat appraisal is the same as Alignment 7A.
	potential suitability for supporting roosting bats.	BNG
	The edges of the wooded areas, as well as the semi-natural habitats and watercourses within the alignment option, have the potential to	Alignment 7B BNG appraisal is the same as Alignment 7A.
	support commuting and foraging activities for bats.	Ornithology
	The habitats within Alignment 7A, including woodland, grassland, cropland and scrub, are considered suitable to support foraging badger. The woodlands and scrub areas have the potential to provide suitable habitats for sett creation. Badger dung and snuffle holes were observed along the alignment. The mature and undisturbed large woodland areas have the potential to support wildcats, pine marten and red squirrels. The River Nairn has the potential to support commuting and foraging otters, with otter spraint observed at the river. Smaller channels the potential to support water voles.	Alignment 7B appraisal for ornithology is the same as Alignment 7A.
		Hydrology, Geology and Hydrogeology
		Alignment 7B hydrology, geology and hydrogeology is the same as Alignment 7A.
	The limited areas of standing water and slow-flowing field drains and natural channels have the potential to support breeding amphibian populations. A network of waterbodies in the alignment have been identified that could support great crested newts. Large areas of scrub and tussocky grassland, as well as woodlands, may provide habitat for reptiles.	
	The River Nairn has the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 7A occurs within the known distribution range for FWPM ²⁹ .	
	The varied habitats within Alignment 7A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.	
	<u>Habitats</u>	
	HABMOS ³⁰ data identifies the following Annex I habitats (of the Habitats Directive) within 100 m:	
	 H9180 – Tilio-Acerion forests; and H91C0 – Caledonian forest. 	
	The NWSS identified native pinewood, upland mixed ashwoods and upland birchwoods within 100 m. Additionally, a single area of woodland within 100 m is listed in the AWI as Category 1a, woodland of semi-natural origin and is considered irreplaceable habitat. The rest is Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.	

 $^{^{29}\,\}textsc{European}$ Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

There is unavoidable irreplaceable habitat which spans 100 m of Alignment 7A and therefore 23.41 BU were calculated for this option. Ornithology Data collected as part of the desk-study identified regular flight activity by red kites along the River Nairn valley throughout the year, and occasional flight activity by osprey during the breeding season. Regular flight activity by pink-footed geese and greylag geese was also recorded along the River Nairn valley, during the winter, autumn and spring passage months. There is also a notable recorded presence of honey buzzard in Section 7A. VP surveys overlooking the moorland of Drummossie Muli recorded regular flight activity by red kites and osprey during the breeding season, with the majority of these flights by birds associated with breeding territories identified during scarce breeding raptor surveys. An active red kite nest, osprey nest and occupied owl box was identified within 2 km of Alignment 7A. Another osprey nest was located over 2 km from the alignment. Curlew were frequently recorded over the moorland during the spring and summer months, with at least one breeding pair recorded. Other Target Species recorded over the moorland included occasional flights by white-tailed eagle, peregrine and lapwing. Hydrology. Geology and Hydrogeology Alignment 7A crosses the River Nairn – Moray Firth to River Farnack confluence (ID: 20305) and one tributary of the river Alt na Skiah (23370). It is underlain by the Middle Old Red Sandstone moderately productive aquifer and Moine Group low productive aquifer. Alignment 7A is not located within any SEPA or SW DWPA.	
Ornithology Data collected as part of the desk-study identified regular flight activity by red kites along the River Nairn valley throughout the year, and occasional flight activity by osprey during the breeding season. Regular flight activity by pink-footed geese and greylag geese was also recorded along the River Nairn valley, during the winter, autumn and spring passage months. There is also a notable recorded presence of honey buzzard in Section 7A. VP surveys overlooking the moorland of Drummossie Muir recorded regular flight activity by red kites and osprey during the breeding season, with the majority of these flights by birds associated with breeding territories identified during scarce breeding raptor surveys. An active red kite nest, osprey nest and occupied owl box was identified within 2 km of Alignment 7A. Another osprey nest was located over 2 km from the alignment. Curlew were frequently recorded over the moorland during the spring and summer months, with at least one breeding pair recorded. Other Target Species recorded over the moorland included occasional flights by white-tailed eagle, peregrine and lapwing. Hydrology. Geology and Hydrogeology Alignment 7A crosses the River Nairn – Moray Firth to River Farnack confluence (ID: 20305) and one tributary of the river Alt na Skiah (23370). It is underlain by the Middle Old Red Sandstone moderately productive aquifer and Moine Group low productive aquifer. Alignment 7A is not located within any SEPA or SW DWPA.	
Data collected as part of the desk-study identified regular flight activity by red kites along the River Nairn valley throughout the year, and occasional flight activity by osprey during the breeding season. Regular flight activity by pink-footed geese and greylag geese was also recorded along the River Nairn valley, during the winter, autumn and spring passage months. There is also a notable recorded presence of honey buzzard in Section 7A. VP surveys overlooking the moorland of Drummossie Muir recorded regular flight activity by red kites and osprey during the breeding season, with the majority of these flights by birds associated with breeding territories identified during scarce breeding raptor surveys. An active red kite nest, osprey nest and occupied owl box was identified within 2 km of Alignment 7A. Another osprey nest was located over 2 km from the alignment. Curlew were frequently recorded over the moorland during the spring and summer months, with at least one breeding pair recorded. Other Target Species recorded over the moorland included occasional flights by white-tailed eagle, peregrine and lapwing. Hydrology, Geology and Hydrogeology Alignment 7A crosses the River Nairn – Moray Firth to River Farnack confluence (ID: 20305) and one tributary of the river Alt na Skiah (23370). It is underlain by the Middle Old Red Sandstone moderately productive aquifer and Moine Group low productive aquifer. Alignment 7A is not located within any SEPA or SW DWPA.	
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season, with the majority of these flights by birds associated with breeding territories identified during scarce breeding raptor surveys. An active red kite nest, osprey nest and occupied owl box was identified within 2 km of Alignment 7A. Another osprey nest was located over 2 km from the alignment. Curlew were frequently recorded over the moorland during the spring and summer months, with at least one breeding pair recorded. Other Target Species recorded over the moorland included occasional flights by white-tailed eagle, peregrine and lapwing. Hydrology. Geology and Hydrogeology Alignment 7A crosses the River Nairn — Moray Firth to River Farnack confluence (ID: 20305) and one tributary of the river Alt na Skiah (23370). It is underlain by the Middle Old Red Sandstone moderately productive aquifer and Moine Group low productive aquifer. Alignment 7A is not located within any SEPA or SW DWPA.	
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Alignment 7A crosses the River Nairn – Moray Firth to River Farnack confluence (ID: 20305) and one tributary of the river Alt na Skiah (23370). It is underlain by the Middle Old Red Sandstone moderately productive aquifer and Moine Group low productive aquifer. Alignment 7A is not located within any SEPA or SW DWPA.	
It is underlain by the Middle Old Red Sandstone moderately productive aquifer and Moine Group low productive aquifer. Alignment 7A is not located within any SEPA or SW DWPA.	
A	
According to The Highland Council Open Map Data ³¹ , there are Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.	
Cultural <u>Designations</u> <u>Designations</u>	
Heritage There are no World Heritage Sites, GDL or Inventory Battlefields within 1 km of the alignment. The Designation appraisal for Alignment 7B is the same as Alignment.	it 7A.
There are four Scheduled Monuments within 1 km. Assets	
Daviot Castle (SM5486), located 360 m to the south; There are no Conservation Areas or Non-inventory GDLs within 1 km.	n of 7B.
Daltullich House, enclosure (SM11533); located 470 m to the northwest; Within 1 km, there are three Category B Listed Buildings. two of which	ch are within 510 m of the
 Mains of Daviot Farm, ring cairn and stone circle (SM3085); located 100 m to the north; and Bogbain Wood, hut circle and field system (SM4698); located 850 m to the north. 	y of all the Listed Buildings, with
• Bogbain Wood, hut circle and field system (SM4698); located 850 m to the north. There is the potential for direct impacts through the setting of this Scheduled Monuments. Due to the proximity for SMs within 500 m of the alignment, these is potential for significant effects.	
Within 100 m, there is a single SMR entry, Cantray, socketed axehead (Canmore ID 14156). Direct physical impacts are unlikely as it is a findspot.	
<u>Assets</u>	
There are no Conservation Areas or Non-Inventory GDL within 1 km of 7A.	
Within 1 km, there are four Category B Listed Buildings, two of which are within 500 m of the alignment. There is the potential for direct impacts within the setting of all the Listed Buildings, with potential significant effects on the two closest Listed Buildings.	

³¹ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 7A	Alignment 7B
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. Drynachan, Lochindorb and Dave Moors SLA are approximately 1 km of the alignment. It follows the line of the existing OHL, and therefore is unlikely to compromise key characteristics of the nearby SLA. Landscape Character The landscape is defined as rolling upland. Alignment 7A would utilise existing OHL corridors and is therefore unlikely to compromise the key characteristics of this landscape. Visual An OHL on Alignment 7A would visually 'box in' Balvonie of Leys, which already has OHL on two sides. Visibility could be managed with careful placement of angle towers in this area. There is likely to be visibility from the southern edge of Inverness, for local users of the Daviot Woods and residential properties east of the A9.	Landscape Designations The landscape designation appraisal for Alignment 7B is the same as Alignment 7A. Landscape Character The landscape character appraisal for Alignment 7B is mostly the same as Alignment 7A, with 7B being more visible in the wider landscape due to its increased elevation. This is unlikely to significantly compromise key characteristics of the landscape. Visual The visual appraisal for Alignment 7B is mostly the same as Alignment 7A, with 7B having more distance from key visual receptors at Balvonie of Leys. However, the alignment deviates more from the existing OHL path.
Land Use	Alignment 7A runs over a short stretch of unavoidable LCA Class 3.2 land. It does not pass over any prime agricultural land. Forestry Alignment 7A passes through a significant area of mixed age commercial forestry and a small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 7A is 28.28 ha, comprising 1.88 ha broadleaved woodland and 26.40 ha coniferous woodland. Of this, 3.31 ha comprises restock of young trees and 5.87 ha is currently felled. Alignment 7A runs parallel with an existing 275 kV OHL, which affords the opportunity to run parallel and reduce woodland removal on the north side of the operational corridor. Recreation Alignment 7A passes over core paths in Daviot and Bogbain Woods. The alignments pass over NCR Seven. The alignments pass over the River Nairn, known for recreational fishing spots.	Agriculture The agriculture appraisal for 7B is the same as Alignment 7A. Forestry Alignment 7B passes through a significant area of mixed age commercial forestry and a small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 7B is 27.94 ha, comprising 1.80 ha broadleaved woodland and 26.14 ha coniferous woodland. Of this, 3.31 ha comprises restock of young trees and 5.87 ha is currently felled. Alignment 7B runs parallel with an existing 275 kV OHL for a short section, which affords the opportunity to run parallel and reduce woodland removal on the north side of the operational corridor. Recreation The recreation appraisal for Alignment 7B is the same as Alignment 7A.
Planning	Within 500 m lie the following consented planning applications: Demolition of a steading and erection of a dwellinghouse (19/03821/FUL). Approximately 300 m north.	The planning appraisal for Alignment 7B is the same as Alignment 7A.
Engineering	Infrastructure Crossings Alignment 7A crosses the A9 dual carriageway and the main Perth to Inverness railway line. Scaffolding would be required during conductor stringing across the road and railway to prevent any interruption to road users. The alignment also crosses the B861, B851, one minor road and two restricted local access roads. Environmental Design More than 25% of Alignment 7A is at elevations over 200 m. However, the maximum elevation is 231 m and is unlikely to cause a significant issue. Both alignments in Section 7 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. Both alignment options pass through an area recorded as a military training area so have a moderate risk for presence of unexploded ordnance.	Infrastructure Crossings Alignment 7B crosses the A9 dual carriageway and the main Perth to Inverness railway line. Scaffolding would be required during conductor stringing across the road and railway to prevent any interruption to road users. The alignment also crosses the B861, B851, one minor road and two restricted local access roads. Environmental Design More than 25% of Alignment 7B is at elevations over 200 m. However, the maximum elevation is 232 m and is unlikely to cause a significant issue. Both alignments in Section 7 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. Both alignment options pass through an area recorded as a military training area so have a moderate risk for presence of unexploded ordnance.



Topic	Alignment 7A	Alignment 7B
	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, around the River Nairn crossing.	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, around the River Nairn crossing.
	Ground Conditions	Ground Conditions
	Alignment 7A contains a maximum slope of 24 degrees. However this is for less than a single span length so is not a significant issue. Neither of the alignment options pass through known areas of peatland.	Alignment 7B contains a maximum slope of 24 degrees. However this is for less than a single span length so is not a significant issue. Neither of the alignment options pass through known areas of peatland.
	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options.	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options.
	Alignment 7A requires three angle towers. Proximity There are no residential properties legeted within 170 m of Alignment 7A	Alignment 7B requires three angle towers. Proximity
There are no residential properties located within 170 m of Alignment 7A. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no residential properties located within 170 m of Alignment 7B. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	
Economic	Alignment 7A has the highest capital cost for Section 7, with an additional 0.7 km line length, increasing cost of conductor, towers and associated access tracks. This increase in cost is still within 120% of the lowest cost option. Operational costs are estimated to be similar for both options.	Alignment 7B has the lowest estimated capital cost. Operational costs are estimated to be similar for both options.

Topic	Alignment 8A	Alignment 8B	Alignment 8C
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 8A is within 10 km of Cairn nan Tri-tighearnan SAC/SSSI, Inner Moray Firth SPA/Ramsar, Longman and Castle Stuart Bays SSSI, Moray Firth SAC, Moray Firth SPA, Cawdor Wood SAC/SSSI, Loch	Alignment 8B natural heritage designation appraisal is the same as Alignment 8A.	Alignment 8C natural heritage designation is mostly the same as Alignment 8A. However, Alignment 8C only has one nature
	Flemington SPA and Kildrummie Kames SSSI. Non-statutory designations and nature conservation sites within a 2 km radius include a Red Squirrel	Protected Species	conservation sites within a 2 km radius, the Red Squirrel Stronghold (Daviot Loch Moy).
	Stronghold (Daviot Loch Moy) within the alignment boundary and a Buglife B-Line which intersects through the alignment boundary.	The habitats and their suitability to support protected species within Alignment 8B are the same of those within Alignment 8A.	Protected Species
	Given the wide availability of suitability of surrounding habitat for wintering geese, it is unlikely the	Habitats Alignment 8B habitats appraisal is the same as Alignment 8A.	The habitats and their suitability to support protected species within Alignment 8C are the same of those within Alignment 8A. However, alignment 8C has a smaller area of mature coniferous woodland
	impacts of this alignment will affect geese associated with the SPAs. Protected Species	BNG	and therefore is less suitable for red squirrels and pine martens.
	The mature woodland groups and standing trees located within Alignment 8A have the potential to support roosting bats.	There is irreplaceable blanket bog in the form of Class 1 and 2 peatlands present and therefore 481.34 BU were calculated for this	Habitats Alignment 8C habitats appraisal is the same as Alignment 8A.
	The majority of the trees are coniferous with commercial plantations in the western end of the alignment. Coniferous trees present lower potential suitability for supporting roosting bats.	option. Ornithology	BNG There is irreplaceable blanket bog in the form of Class 1 and 2
	The edges of the wooded areas, as well as the semi-natural habitats and watercourses within the alignment option have the potential to support commuting and foraging activities for bats.	Alignment 8B appraisal for ornithology is the same as Alignment 8A.	peatlands present and therefore 527.66 BU were calculated for this option.

Topic Alignment 8A	Alignment 8B	Alignment 8C
The habitats within Alignment 8A, including scrub, dry heath, and grassland, are considered suitable to support foraging badger. The scrub areas also have the potential to provide suitable habitats for sett creation. The open undisturbed heath, scrub and riparian habitats also have the potential to support	Alignment 8B Hydrology, Geology and Hydrogeology Alignment 8B hydrology, geology and hydrogeology is the same as Alignment 8A.	Alignment 8C Ornithology Alignment 8C appraisal for ornithology is the same as Alignment 8A. Hydrology, Geology and Hydrogeology Alignment 8C hydrology, geology and hydrogeology is the same as Alignment 8A.

 $^{^{32}}$ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

33 The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

Topic Alignment 8A Alignment 8B Alignment 8C Hydrology, Geology and Hydrogeology Alignment 8A crosses three tributaries of the River Nairn – Moray Firth to River Farnack confluence (ID: 20305) and a tributary of the Cawdor Burn (ID: 20309). It is underlain by the Middle Old Red Sandstone moderately productive aquifer and Moine Group and unnamed igneous intrusion, low productive aquifers. There is one GCR site, Clava GCR, located within 1 km of the alignment option. Alignment 8A is not located within any SEPA or DWPA, and according to The Highland Council Open Map Data³⁴, there are Private Water Supplies within 1 km of the alignment option. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km. Cultural **Designations** Designations **Designations** Heritage There are no World Heritage Sites, GDLs or Inventory Battlefields within 1 km of the alignment. The Designation appraisal for Alignment 8B is the same as The Designation appraisal for Alignment 8C is the same as The Battle of Culloden battlefield (BTL6) is located 1.6 km to the north of the alignment option. No Alignment 8A. Alignment 8A. significant effects through changes in setting of the battlefield are anticipated due to the distance from **Assets** the southern edge, the close paralleling to the existing OHL, and the intervening topography and <u>Assets</u> vegetation between the alignment option and the battlefield. The Asset appraisal for Alignment 8B is the same as Alignment 8A. The Asset appraisal for Alignment 8B is the same as Alignment 8A. There are two Scheduled Monuments within 1 km: Culdoich, chambered cairn and standing stone (SM11851), located 490 m to the north; and Daltullich House, enclosure (SM11533); located 470 m to the north. There is the potential for direct impacts through changes to the setting of this Scheduled Monuments, however due to distances and intervening topography, these are unlikely to lead to significant effects. There is one Conservation Area partially within 1 km of the alignment, Culloden Muir Conservation Area. No direct impacts on the Conservation Area are anticipated. <u>Assets</u> There are no Non-inventory GDLs within 1 km of Alignment 8A. Within 1 km, there is one Category B Listed Building. There is the potential for direct impacts within the setting of all the Listed Buildinga, however, due to distances and intervening topography impacts are not likely to lead to significant effects. Landscape and Landscape Designations Landscape Designations **Landscape Designations** Visual There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. The landscape designation appraisal for Alignment 8B is the same The landscape designation appraisal for Alignment 8C is the same Drynachan, Lochindorb and Dava Moors SLA is 1 km south of the alignment. It follows the line of the as Alignment 8A. as Alignment 8A. existing OHL, and therefore is unlikely to compromise key characteristics of the nearby SLA. Landscape Character Landscape Character Landscape Character The landscape character appraisal for Alignment 8B is mostly the Alignment 8C has the potential to be skylined in certain areas of the The landscape is defined as rolling upland. Alignment 8A would parallel the existing OHL corridor, albeit same as Alignment 8A, with 8B on slightly higher ground making it alignment, however the lower portion of towers are likely to be on slightly higher ground making it slightly more visible in the wider landscape. It is unlikely to more visible in the wider landscape. screened out behind ridgelines. compromise the key characteristics of this landscape. Visual The visual appraisal for Alignment 8B is mostly the same as Alignment 8A, with 8B being slightly more visible for residential

³⁴ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 8A	Alignment 8B	Alignment 8C
	Visual An OHL on Alignment 8A would parallel the existing OHL and therefore not have a significant impact on the area. In Sections of the alignment, towers may be skylined. There is likely to be visibility from residential and visitor receptors in Culloden and Clava. The alignment will parallel the existing OHL, however towers may be visible from certain visual receptors.	receptors in the Culloden and Clava areas due to sitting higher in the landscape.	
Land Use	Agriculture Alignment 8A runs over a short stretch of unavoidable LCA Class 3.2 land. It does not pass through any prime agricultural land. Forestry	Agriculture The agriculture appraisal for 8B is the same as Alignment 8A. Forestry Alignment 8B passes through a significant area of commercial	Agriculture The agriculture appraisal for 8C is the same as Alignment 8A. Forestry Alignment 8C passes through a significant area of commercial
	Alignment 8A passes through a significant area of commercial forestry and through regeneration areas of mixed broadleaves and native pinewoods. The estimated area of commercial woodland that would be impacted by Alignment 8A is 55.18 ha, comprising 11.42 ha broadleaved woodland and 43.76 ha coniferous woodland. Of this, 26.77 ha comprises restock of young trees and 8.81 ha is currently felled.	forestry and passes to the east through regeneration areas of mixed broadleaves and native pinewoods. The estimated area of commercial woodland that would be impacted by Alignment 8B is 54.96 ha, comprising 14.41 ha broadleaved woodland and 40.55 ha coniferous woodland. Of this,	forestry and passes to the east through regeneration areas of mixed broadleaves and native pinewoods. The estimated area of commercial woodland that would be impacted by Alignment 8C is 39.51 ha, comprising 10.22 ha broadleaved woodland and 29.29 ha coniferous woodland. Of this,
	Alignment 8A runs parallel with an existing 275 kV OHL, which affords the opportunity to reduce woodland removal on the north side of the operational corridor. Recreation Alignment 8A does not pass over any core paths, long distance routes or cycle routes. The alignment passes over Creagan Glas, Beinn Uan and Saddle Hill which are areas with public footpaths and	27.02 ha comprises restock of young trees and 6.35 ha is currently felled. Alignment 8B runs parallel with an existing 275 kV OHL for a short section, which affords the opportunity to reduce woodland removal on the north side of the operational corridor.	15.76 ha comprises restock of young trees and 6.35 ha is currently felled. Recreation The recreation appraisal for 8C is the same as Alignment 8A.
Planning	undesignated walking routes. There are no consented planning applications within 500 m of any of the alignments in Section 8.	Recreation The recreation appraisal for 8B is the same as Alignment 8A.	
Engineering	Infrastructure Crossings There are no road or other infrastructure crossings within Alignment 8A.	Infrastructure Crossings There are no road or other infrastructure crossings within	Infrastructure Crossings There are no road or other infrastructure crossings within
	Environmental Design 100% of all alignment options in Section 8 are at elevations over 200 m. The maximum elevation within	Alignment 8B. <u>Environmental Design</u>	Alignment 8B. Environmental Design
	Alignment 8A is 318 m where it traverses to the north of Saddle Hill. All alignment options in Section 8 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	100% of all alignment options in Section 8 are at elevations over 200 m. The maximum elevation within Alignment 8B is 318 m where it traverses to the north of Saddle Hill.	100% of all alignment options in Section 8 are at elevations over 200 m. The maximum elevation within Alignment 8C is 322 m where it traverses to the south of Saddle Hill. Alignment 8C has a slightly higher proportion of its length above 300 m elevation than
	All alignment options pass through an area recorded as a military training area so have a moderate risk for presence of unexploded ordnance. According to SEPA flood maps, less than 2% of each alignment option is located within the 1 in 10 year	All alignment options in Section 8 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	the other options, however it does have good access in close proximity so the elevation is not a significant issue.
	flood risk zone. Ground Conditions	All alignment options pass through an area recorded as a military training area so have a moderate risk for presence of unexploded ordnance.	All alignment options in Section 8 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.
	Alignment 8A contains a maximum slope of 30 degrees, with a total length of 705 m within slopes greater than 20 degrees.	According to SEPA flood maps, less than 2% of each alignment option is located within the 1 in 10 year flood risk zone.	All alignment options pass through an area recorded as a military training area so have a moderate risk for presence of unexploded ordnance.



Topic	Alignment 8A	Alignment 8B	Alignment 8C
	All alignments within Section 8 pass through pockets of peatland. Alignment 8A has a total distance of 390 m through estimated peat depths of 0.5 to 1.0 m. It may be possible to avoid the areas of deepest peat through micrositing of tower locations. Construction and Maintenance Alignment 8A has an existing network of tracks and roads within 1 km. Alignment 8A requires two angle towers. Proximity There are no residential properties located within 170 m of Alignment 8A. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Ground Conditions Alignment 8B contains a maximum slope of 34 degrees, with a total length of 1185 m within slopes greater than 20 degrees. All alignments within Section 8 pass through pockets of peatland. Alignment 8B has a total distance of 540 m through estimated peat depths of 0.5 to 1.0 m. It may be possible to avoid the areas of deepest peat through micrositing of tower locations. Construction and Maintenance Alignment 8B has some Sections located more than 1 km from existing access tracks. Alignment 8B requires two angle towers. Proximity There are no residential properties located within 170 m of Alignment 8B. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	According to SEPA flood maps, less than 2% of each alignment option is located within the 1 in 10 year flood risk zone. Ground Conditions Alignment 8C contains a maximum slope of 24 degrees, with a total length of 435 m within slopes greater than 20 degrees. All alignments within Section 8 pass through pockets of peatland. Alignment 8C has a total distance of 1740 m through estimated peat depths of 0.5 to 1.0 m and 120 m through estimated peat depths of 1.0 to 1.5 m. It may be possible to avoid the areas of deepest peat through micrositing of tower locations. Construction and Maintenance Alignment 8C has an existing network of tracks and roads within 1 km. Alignment 8C requires two angle towers. Proximity There are no residential properties located within 170 m of Alignment 8C. There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Capital Costs for Alignment 8A are close to the lowest capital cost option, with an increase in felling costs the key difference. Operational costs are estimated to be similar for all options.	The difference in costs between options in this section is predominantly driven by tree felling costs. Alignment 8B is the highest cost option, with forestry costs over 50% greater than the lowest cost option (8C). There is little difference between the other capital cost elements considered, with the same number of angle towers required and only an additional 0.2 km line length. The difference in total costs is less than 10 and is therefore not a significant constraint. Operational costs are estimated to be similar for all options.	Alignment 8C has the lowest estimated capital cost. Operational costs are estimated to be similar for all options.

Section 9

Topic	Alignment 9A
Natural Heritage	<u>Designations</u>
	Alignment 9A is within 10 km of Cairn nan Tri-tighearnan SAC/SSSI, Inner Moray Firth SPA/Ramsar, Longman and Castle Stuart Bays SSSI, Moray Firth SPA, Cawdor Wood SAC/SSSI, Loch Flemington SPA and Kildrummie Kames SSSI.
	Non-statutory designations and nature conservation sites within a 2 km radius include a Red Squirrel Stronghold (Daviot Loch Moy) within the alignment boundary.
	Given the wide availability and suitability of surrounding habitat for wintering geese, it is unlikely the impacts of this alignment will affect geese species associated with the SPAs.



Topic	Alignment 9A
	Protected Species
	Small woodland groups and scattered individual trees located within Alignment 9A have the potential to support roosting bats. The majority of the trees are coniferous, which present lower potential suitability for supporting roosting bats.
	The scrub, dry heath and grassland habitats have the potential to support foraging badgers. The scrub areas have the potential to provide suitable habitat for sett creation.
	The conifer woodland areas in Alignment 9A are small in size and lack good connectivity to woodlands in the wider area. These are therefore considered sub-optimal for red squirrels and pine martens. The remaining open habitat are considered sub-optimal to support wildcats. Where mature and undisturbed, the plantations have potential to support pine martin, red squirrel and wild cats. The Allt Dearg watercourse has the potential to support commuting and foraging otters. Smaller channels have the potential to support water voles.
	The limited areas of standing water and slow-flowing field drains and natural channels have the potential to support breeding amphibian populations. Large areas of scrub and heathland may provide habitat for reptiles.
	The Allt Dearg watercourse has the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 4A occurs within the known distribution range for FWPM35.
	The varied habitats within Alignment 9A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.
	<u>Habitats</u>
	HABMOS ³⁶ data identifies the following Annex I habitats (of the Habitats Directive) within 100 m:
	H91A0 – Old sessile oak woods
	The NWSS identified lowland mixed deciduous woodland, upland birchwood and wet woodland. Additionally, woodland within 100 m is listed in the AWI but is Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland indicates the presence of Class 1 and Class 2 peat, including blanket bog, irreplaceable peatland.
	<u>BNG</u>
There is irreplaceable blanket bog in the form of Class 1 and 2 peatlands present and therefore 361.98 BU were calculated for this option.	
	Ornithology
	The desk-study found limited data on Target Species recorded along Section 9.
	VP surveys recorded occasional flight activity by red kites throughout the year, usually involving individual birds, over the moorland and forest edge habitats. Merlin were also frequently recorded, including a nest site identified within 2 km of the alignment. Golden eagle, white-tailed eagle, osprey and goshawk were also sighted on rare occasion. It is considered possible that a white-tailed eagle roost may be located 2 km from the alignment and that goshawk may be breeding in nearby woodlands, however no evidence was found.
Two red-throated divers were observed on Clunas Reservoir at the beginning of the breeding season, however there was no evidence of breeding. A possible breeding colony of common gull was recorded within 2 k were frequently recorded in spring and summer months, with flight activity assumed to be associated with at least two breeding pairs, over 500 m from the alignment.	
	Other Target Species recorded over the moorland include golden plover and lapwing, with breeding pairs likely to be present in the wider area as well as a possible breeding goldeneye on Clunas Reservoir. There were occasional flights by pink-footed geese flocks and greylag geese during the autumn, winter and early spring months.
	No large aggregations of waterbirds were recorded via VP surveys on Clunas Reservoir during the non-breeding season.
	Hydrology, Geology and Hydrogeology
	Alignment 9A crosses Cawdor Burn (ID: 20309). It is underlain by Moine Group, a low productive aquifer.
	It is not located within any SEPA or SW DWPA, and according to The Highland Council Open Map Data ³⁷ there are Private Water Supplies within 1 km of the alignment option. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are no water abstractions within 1 km.
Cultural	<u>Designations</u>
Heritage	There are no World Heritage Sites, GDLs or Inventory Battlefields within 1 km of the alignment.
	There are two Scheduled Monuments within 1 km:

 $^{^{35}}$ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora

^{(92/43/}EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: \$1029 - Freshwater pearl mussel (Margaritifera margaritifera).

The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

³⁷ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 9A			
	Easter Rattich, depopulated settlement (SM11876), located 90 m to the northwest; and			
	Rehiran Farm House, cairn (SM11797), located 460 m to the south.			
	There is the potential for direct impacts through changes within the setting of the SMs. For Rehiran Farm House, this may be reduced with screening from topography and vegetation. For Easter Rattich, there is potential for significant effects.			
	Within 100 m, there are four SMR entries, post-medieval building, likely related to Easter Rattich Scheduled Monument, post-medieval cultivation remains, a prehistoric cairnfield, and a bridge. Direct physical impacts for these SMRs are likely to be avoided through micro sitting of the alignment option.			
	<u>Assets</u>			
	There are no Non-inventory GDLs within 1 km of 9A.			
Landscape and	Landscape Designations			
Visual	There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. Drynachan, Lochindorb and Dava Moors SLA is 1 km south of the alignment. It follows the line of the existing OHL, and therefore is unlikely to compromise key characteristics of the nearby SLA.			
	Landscape Character			
	Alignment 9A would parallel the existing OHL corridor across open moorland and is therefore unlikely to compromise the key characteristics of this landscape.			
	<u>Visual</u>			
	An OHL on Alignment 9A would parallel the existing OHL, located on higher ground than the scattered properties along the alignment and therefore is unlikely to have significant visual impact in the area.			
Land Use	<u>Agriculture</u>			
	Alignment 9A avoids prime agricultural and Class 3.2 land.			
	<u>Forestry</u>			
	Alignment 9A passes through areas of commercial forestry and through significant areas of native woodland creation, not recorded on NWSS of NFI.			
	The estimated area of commercial woodland that would be impacted by Alignment 9A is 21.18 ha, comprising 17.03 ha broadleaved woodland and 4.15 ha coniferous woodland. Of this, 2.05 ha comprises restock of young trees.			
	Recreation			
	Alignment 9A does not pass over core paths, long distance routes or cycle routes. The alignment runs close to Clunas Reservoir which is a known fishing spot, however impacts are not expected to be significant.			
Planning	Within 500 m lies the following consented planning application:			
	Erection of 40 m telecommunications mast, equipment cabins, fence (21/05021/FUL). Approximately 150 m south.			
Engineering	Infrastructure Crossings			
	Alignment 9A crosses five restricted access roads.			
	Environmental Design			
	The majority of Alignment 9A is at elevations over 200 m. The maximum elevation within Alignment 8A is 274 m.			
	Alignment 9A is located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.			
	Alignment 9A is located within a historical military training area so has a moderate risk for presence of unexploded ordnance.			
	According to SEPA flood maps, less than 2% of Alignment 9A is located within the 1 in 10 year flood risk zone.			
	Ground Conditions			
	Alignment 9A contains a maximum slope of 23 degrees.			
	Alignment 9A passes through approximately 1.5 km of Class 1 peatland and 0.5 km of Class 2 peatland, with estimated peat depths mainly between 0.5 to 1.0 m. The peat is mainly located at the western end of the alignment and it may be possible to avoid the areas of deepest peat through micrositing of tower locations.			



Topic	Alignment 9A
	Construction and Maintenance
	Alignment 9A has an existing network of tracks and roads within 1 km.
	Alignment 9A requires one angle tower.
	<u>Proximity</u>
	There are no residential properties located within 170 m of Alignment 9A.
	There is one MBNL/Telefonica communications mast located within 300 m of Alignment 9A. Further investigation may be required with the operators to confirm if any interference could occur or if mitigation is required.
	There are no known wind farms, urban areas or metallic pipelines that will impact on the alignment option.

Section 10

Economic

As there is only one alignment option, no cost comparison is required.

Topic	Alignment 10A	Alignment 10B	Alignment 10C
Topic Natural Heritage	Designations Alignment 10A is within 10 km of Cawdor Wood SSSI/SAC, Carn nan Tritighearnan SAC/SSSI, Lower Findhorn Woods SSSI/SAC, Darnaway and Lethen Forest SPA, Loch Flemington SPA, Kildrummie Kames SSSI and Moray Firth SAC. Inner Moray Firth SPA/Ramsar and Moray and Nairn Coast SPA/Ramsar are just over 10 km away from the alignment, however, the alignment provides potential habitat for geese and osprey. No significant impacts are expected. Non-statutory designations and nature conservation sites within a 2 km radius include a Buglife B-Line which intersects through the alignment boundary and a Buglife IIA (Findhorn Cubin) within the option. Protected Species The mature woodland groups and standing trees, as well as a residential and farm buildings located within Alignment 10A, have the potential to support roosting bats. The majority of the trees are coniferous with commercial plantations in the	Alignment 10B Designations Alignment 10B natural heritage designation appraisal is the same as Alignment 10A. Protected Species The habitats and their suitability to support protected species within Alignment 10B are the same of those within Alignment 10A. Habitats Alignment 10B habitats appraisal is the same as Alignment 10A, with the following exception: Class 1 peat overlaps the alignment in one section. BNG The BNG Appraisal for 10B is the same as 10A. Ornithology Alignment 10B appraisal for ornithology is the same as Alignment 10A. Hydrology, Geology and Hydrogeology	Designations Alignment 10C natural heritage designation appraisal is the same as Alignment 10A. Protected Species The habitats and their suitability to support protected species within Alignment 10C are mostly the same as those within Alignment 10A. However, 10C has a smaller area of broadleaf woodland, decreasing the alignment's suitability for bat species. Habitats Alignment 10C habitats appraisal is the same as Alignment 10A, with the following exceptions: NWSS also identified upland oakwood within 100 m; and Class 1 peat overlaps the alignment in one Section. BNG The BNG Appraisal for 10C is the same as 10A. Ornithology
	The majority of the trees are coniferous with commercial plantations in the central portion of the alignment. Coniferous trees present lower potential suitability for supporting roosting bats. There is an area of deciduous woodland present in the western area of the alignment. The edges of the wooded areas, as well as the semi-natural habitats and		Ornithology Alignment 10C appraisal for ornithology is the same as Alignment 10A. Hydrology, Geology and Hydrogeology Alignment 10C hydrology, geology and hydrogeology is the same as Alignment 10A.
	watercourses within the alignment option have the potential to support commuting and foraging activities for bats. The habitats within Alignment 10A, including scrub, cropland, and grassland have potential to support foraging badger. The scrub and woodland areas also have the potential to provide suitable habitats for sett		

Topic	Alignment 10A	Alignment 10B	Alignment 10C
	creation. Where mature and undisturbed, the large conifer plantations in the west have the potential to support wildcat, pine marten and red squirrel. The open, undisturbed broadleaf woodland, scrub and riparian habitats also have the potential to support wildcats.		
	The Muckle Burn watercourse has the potential to support commuting and foraging otters. Smaller channels have the potential to support water voles.		
	The limited areas of standing water and slow-flowing field drains and natural channels have the potential to support breeding amphibian populations. Large areas of scrub may provide habitat for reptiles.		
	The Muckle Burn watercourse has the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 10A occurs within the known distribution range for FWPM ³⁸ .		
	The varied habitats within Alignment 10A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.		
	<u>Habitats</u>		
	HAMBOS ³⁹ data identifies the following Annex I habitats (of the Habitats Directive) within 100 m:		
	H91A0 – Old sessile oak woods;		
	H91E0 – Alluvial forests; and		
	H91C0 – Caledonian forest.		
	The NWSS identified upland birchwood and native pinewood within 100 m. Woodland listed in the AWI is within 100 m and is Category 1b and 2b LEPO woodland and not considered irreplaceable habitat.		
	The carbon and peatland map of Scotland identified the presence of two Sections of Class 1 peat, an irreplaceable habitat, overlapping the alignment.		
	BNG		
	There is no irreplaceable habitat that spans the entire width of the alignment, and therefore no BU were calculated for this option.		
	<u>Ornithology</u>		
	Data collected as part of the desk-study identified regular flight activity from red kites and greylag geese throughout the year, and osprey during the breeding season, particularly around Loch of Boath. Regular flight activity by pink-footed geese was also recorded over this section during the winter and autumn and spring passage months. Goshawk have been recorded in this section on occasion.		

 $^{^{\}rm 38}$ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

39 The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

Topic	Alignment 10A	Alignment 10B	Alignment 10C
	VP surveys recorded occasional flight activity by red kites throughout the year, usually involving individual birds over forest habitats, as well as osprey, white-tailed eagle and rarely goshawk. A potential white-tailed eagle roost site was identified over 2 km from the alignment.		
	A possible black grouse lek was recorded within 2 km of the alignment.		
	Curlew were recorded during spring and summer, with at least one breeding pair 2 km from the alignment. Up to two pairs of breeding golden plover were also recorded within 2 km of the alignment.		
	Other Target Species recorded include occasional flights by small numbers of pink-footed geese, greylag geese, and whooper swans during the winter and early spring months. Also of note was a single whimbrel observed flying over during the spring, but there was no indication of breeding.		
	Capercaillie surveys undertaken in the surrounding woodlands during the spring recorded no sightings of Capercaillie or evidence of their presence near Section 10.		
	Hydrology. Geology and Hydrogeology		
	Alignment 10A crosses the Black Burn (Clunas) (ID: 20321) and the Muckle Burn – Speedie Burn confluence to source (ID: 20318). It is underlain by Moine Group, a low productive aquifer.		
	Alignment 10A is not located within a SEPA or SW DWPA for surface water.		
	According to The Highland Council Open Map Data ^{40,} there are Private Water Supplies within 1 km of the alignment option.		
	According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are no water abstractions within 1 km.		
Cultural	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
Heritage	There are no World Heritage Sites, GDL or Inventory Battlefields within 1 km of the alignment.	The Designation appraisal for Alignment 10B is the same as Alignment 10A, with the following exception:	The Designation appraisal for Alignment 10C is the same as Alignment 10A, with the following exception:
	There are four SMRs within 100 m consisting of a prehistoric findspot, a	There are three SMR entries, a farmstead, a township, and an axehead findspot.	There is a single SMR entry, an iron working site.
	bridge, and two post-medieval farmsteads. There is the potential for impacts to these entries, however this can be avoided through micro siting	<u>Assets</u>	<u>Assets</u>
	of the alignment option.	The Asset appraisal for Alignment 10B is the same as Alignment 10A.	The Asset appraisal for Alignment 10C is the same as Alignment 10A, with the
	<u>Assets</u>		following exception:
	There are no Conservation Areas or Non-inventory GDLs within 1 km of 10A.		Impacts to the setting of the Listed Buildings may lead to significant effects which may be able to be reduced with intervening vegetation.
	Within 1 km, there are three Category B Listed Buildings. There is the potential for direct impacts on the setting of all the Listed Buildings, however, these may be reduced with intervening vegetation and is therefore unlikely to lead to significant effects.		

⁴⁰ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 10A	Alignment 10B	Alignment 10C
Landscape and	Landscape Designations	Landscape Designations	Landscape Designations
Visual	There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment.	The landscape designation appraisal for Alignment 10B is the same as Alignment 10A.	The landscape designation appraisal for Alignment 10C is the same as Alignment 10A.
	Drynachan, Lochindorb and Dava Moors SLA is 1 km south of the alignment. It follows the line of the existing OHL, and therefore is unlikely to compromise key characteristics of the nearby SLA. Landscape Character The majority of the alignment passes through Upland Moorland and Forestry and Rolling Farmland and Forests – Moray & Nairn LCT. It is	Landscape Character	Landscape Character
		The landscape character appraisal for Alignment 10B is the same as Alignment 10A.	The landscape character appraisal for Alignment 10C is the same as Alignment 10A.
		<u>Visual</u>	<u>Visual</u>
		The visual appraisal for Alignment 10B is mostly the same as Alignment 10A, with the following exceptions:	The visual appraisal for Alignment 10C is mostly the same as Alignment 10A, with the following exceptions:
	unlikely to compromise the key characteristics of this landscape. Visual	OHL infrastructure would be closer to properties around Mains of Clunas, Burnside Cottage and Bruachmary, although further away than Alignment 10C.	Alignment 10C is closer to properties around Mains of Clunas, Burnside Cottage and Bruachmary, although there is more vegetation to screen the
	Alignment 10A would result in the 'boxing in' of a residential property south of Newlands of Clunas and bring it in close proximity to Cluaisnahadig. 'Boxing in' would also occur around Meikleburn Farm. There is also a risk of a confusing appearance due to lack of close parallel to the existing OHL as well as tree removal for the existing and new wayleaves. Otherwise, there are few visual receptors in this area.	Alignment 10B is further from Meikleburn Farm, however would still 'box in' the property. However, the location of the OHL in woodland currently enables a reasonable degree of screening and the alignment runs slightly further from the property to the south of Meikleburn Farm.	 'boxed in' properties. Alignment 10C is further from Meikleburn Farm, however would still 'box in' the property. The property to the south of the Farm also fronts the road, looking along the proposed alignment rather than across it, with local topography also providing a degree of screening.
Land Use	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 10A avoids prime agricultural land or LCA Class 3.2 land.	The agriculture appraisal for 10B is the same as Alignment 10A.	The agriculture appraisal for 10C is the same as Alignment 10A.
	<u>Forestry</u>	<u>Forestry</u>	<u>Forestry</u>
	Alignment 10A passes through a significant area of commercial forestry and areas of broadleaved woodland.	Alignment 10B passes through a significant area of commercial forestry and areas of broadleaved woodland.	Alignment 10C passes through a significant area of commercial forestry and areas of broadleaved woodland.
	The estimated area of commercial woodland that would be impacted by Alignment 10A is 35.56 ha, comprising 7.97 ha broadleaved woodland and 27.59 ha coniferous woodland. Of this, 0.90 ha comprises restock of	The estimated area of commercial woodland that would be impacted by Alignment 10B is 35.23 ha, comprising 7.27 ha broadleaved woodland and 27.96 ha coniferous woodland. Of this, 12.66 ha is currently felled.	The estimated area of commercial woodland that would be impacted by Alignment 10C is 34.20 ha, comprising 4.27 ha broadleaved woodland and 29.93 ha coniferous woodland. Of this, 6.14 ha is currently felled.
	young trees and 15.49 ha is currently felled.	Recreation	Recreation
	Recreation Alignment 10A do not pass over core paths, long distance routes or cycle	The recreation appraisal for 10B is the same as Alignment 10A.	The recreation appraisal for 10C is the same as Alignment 10A.
	routes. There are no known areas that are used for commercial highland sports.		
Planning	There are no consented planning applications within 500 m.	The planning appraisal for Alignment 10B is the same as Alignment 10A.	The planning appraisal for Alignment 10C is the same as Alignment 10A.
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 10A crosses two minor roads, one local road and two restricted local access roads.	Alignment 10B crosses two minor roads, one local road and two restricted local access roads.	Alignment 10C crosses two minor roads, one local road and three restricted local access roads.
	Environmental Design	Environmental Design	Environmental Design
	Less than 10% of Alignment 10A is at elevations over 200 m. The maximum elevation within Alignment 10A is 207 m.	Less than 10% of Alignment 10B is at elevations over 200 m. The maximum elevation within Alignment 10B is 206 m.	Between 10% and 25% of Alignment 10C is at elevations over 200 m. The maximum elevation within Alignment 10C is 208 m.



Topic	Alignment 10A	Alignment 10B	Alignment 10C
	All alignment options in Section 10 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	All alignment options in Section 10 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	All alignment options in Section 10 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.
	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.
	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone. Ground Conditions	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone. Ground Conditions
	Ground Conditions Alignment 10A contains a maximum slope of 27 degrees, with a total	Alignment 10B contains a maximum slope of 30 degrees, with a total length of 240 m within slopes greater than 20 degrees.	Alignment 10C contains a maximum slope of 24 degrees, with a total length of 90 m within slopes greater than 20 degrees.
	length of 420 m within slopes greater than 20 degrees. All alignments within Section 10 pass through a small pocket of Class 1 peatland east of Meikleburn Farm, however it may be possible to avoid the	All alignments within Section 10 pass through a small pocket of Class 1 peatland east of Meikleburn Farm, however it may be possible to avoid the areas of peat through micrositing of tower locations.	All alignments within Section 10 pass through a small pocket of Class 1 peatland east of Meikleburn Farm, however it may be possible to avoid the areas of peat through micrositing of tower locations.
	areas of peat through micrositing of tower locations. Construction and Maintenance	Construction and Maintenance Alignment 10B has an existing network of tracks and roads within 1 km.	Construction and Maintenance Alignment 10C has an existing network of tracks and roads within 1 km.
	Alignment 10A has an existing network of tracks and roads within 1 km.	Alignment 10B requires one angle tower.	Alignment 10C requires one angle tower.
	Alignment 10A requires two angle towers. Proximity	Proximity There is one residential property located within 170 m of Alignment 10B.	Proximity There is one residential property located within 170 m of Alignment 10C.
	There are two residential properties located within 170 m of Alignment 10A.	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.		
Economic	There is very little capital cost variation between the alignment options in Section 10. Alignment 10A has higher costs associated with the additional line length and access tracks but this is balanced by lower costs associated with forestry.	Similar to Alignment 10A, there is negligible difference in costs for this section. A slight increase in capital cost for line length is balanced by a slight increase in costs associated with forestry.	Alignment 10C has the lowest estimated capital cost. Alignments 10B and 10C are estimated to have similar operational costs.
	The estimated operation cost for Alignment 10A is greater than 140% of the lowest cost option, due to the requirement for one additional low voltage crossing.	Alignments 10B and 10C are estimated to have similar operational costs.	

Section 11

Topic	Alignment 11A	Alignment 11B	Alignment 11C
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 11A is within 10 km of Cawdor Wood SSSI/SAC, Carn nan Tritighearnan SAC/SSSI, Lower Findhorn Woods SSSI/SAC, Darnaway and Lethen Forest SPA, Kildrummie Kames SSSI and Moidach More SSSI/SAC.	The natural heritage designation appraisal for Alignment 11B is the same as 11A.	Alignment 11C natural heritage designation appraisal is the same as Alignment 11A.



Topic	Alignment 11A	Alignment 11B	Alignment 11C
	Inner Moray Firth SPA/Ramsar and Moray and Nairn Coast SPA/Ramsar are	Protected Species	Protected Species
	just over 10 km away from the alignment and provide potential habitat for geese and osprey.	The habitats and their suitability to support protected species within Alignment 11B are the same of those within Alignment 11A, with the following exception:	The habitats and their suitability to support protected species within Alignment 11C are the same of those within Alignment 11B.
	The alignment crosses Findhorn upstream of the Lower Findhorn Woods SSSI/SAC. Potential adverse effects may arrive from pollution from construction and clearance of sloped land.	A slightly larger area of broadleaf woodland is present in Alignment 11B, increasing the habitat's suitability for bat species. Habitats	Habitats Alignment 11C habitats appraisal is the same as Alignment 11A.
	The option is also in a relatively wooded area and within 5 km of Darnaway and Lethen Forest SPA which is designated for capercaillie.	Alignment 11B habitats appraisal is the same as Alignment 11A.	BNG Due to irreplaceable habitat in the alignment, 391.02 BU were calculated for
	Non-statutory designations and nature conservation sites within a 2 km radius include a Buglife B-Line which intersects through the alignment boundary and a Buglife IIA (Findhorn Cubin) within the option.	BNG Due to irreplaceable habitat in the alignment, 450.26 BU were calculated for this option.	this option. Ornithology Alignment 11C appraisal for arrithology is the same as Alignment 11A
	Protected Species	Ornithology	Alignment 11C appraisal for ornithology is the same as Alignment 11A.
	The mature woodland groups and standing trees located within Alignment	Alignment 11B appraisal for ornithology is the same as Alignment 11A.	Hydrology, Geology and Hydrogeology Alignment 11C hydrology, geology and hydrogeology is the same as
	11A have the potential to support roosting bats.	Hydrology, Geology and Hydrogeology	Alignment 11A.
	The majority of the trees are coniferous with mixed-broadleaf areas present. Coniferous trees present lower potential suitability for supporting roosting bats.	Alignment 11B hydrology, geology and hydrogeology is the same as Alignment 11A.	
	The edges of the wooded areas, as well as the semi-natural habitats and watercourses within the alignment option, have the potential to support commuting and foraging activities for bats.		
	The habitats within Alignment 11A, including scrub, cropland, and grassland have potential to support foraging badger. The scrub and woodland areas also have the potential to provide suitable habitats for sett creation. Where mature and undisturbed, the large conifer plantations in the west have the potential to support wildcat, pine marten and red squirrel. The open, undisturbed broadleaf woodland, scrub and riparian habitats also have the potential to support wildcats.		
	The River Findhorn and Tomnarroch Burn have the potential to support commuting and foraging otters. Smaller channels have the potential to support water voles.		
	The limited areas of standing water and slow-flowing field drains, and natural channels have the potential to support breeding amphibian populations, include the great crested newt. Large areas of scrub and heath may provide habitat for reptiles.		
	The River Findhorn and Tomnarroch Burn have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 5B occurs within the known distribution range for FWPM ⁴¹ .		

⁴¹ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

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Topic	Alignment 11A	Alignment 11B	Alignment 11C
	The varied habitats within Alignment 11A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.		
	<u>Habitats</u>		
	HABMOS ⁴² data identifies the following Annex I habitats (of the Habitats Directive) within 100 m:		
	H9180 – Tilio-Acerion forests; and		
	H91C0 – Caledonian forest.		
	The NWSS identified wet woodland, upland birchwood and native pinewood within 100 m. Woodland listed in the AWI that is within 100 m is Category 2b LEPO woodland and not considered irreplaceable habitat.		
	The carbon and peatland map of Scotland identified the presence of Class 1 and Class 2 peat, an irreplaceable habitat, overlapping the alignment.		
	BNG		
	Due to irreplaceable habitat in the alignment, 384.63 BU were calculated for this option.		
	Ornithology		
	Data collected as part of the desk-study identified frequent flight activity by red kites was recorded throughout the year. Activity from osprey was identified over and around the fishery ponds at Achagour during the breeding season. Black grouse have been recorded in woodlands around Section 11. Regular flight activity by pink-footed geese was also recorded over this section during the winter, autumn and spring passage months. Goshawk have been recorded on occasion in the woodlands around Section 11.		
	VP surveys from the VP overlooking the woodland to the north of Dulsie Wood recorded occasional flight activity by red kites throughout the year, with rare sightings of osprey, white-tailed eagle and goshawk. Other Target Species recorded over the woodland included occasional flights by small numbers of pink-footed geese, greylag geese, and whooper swans, and a whimbrel during the winter / early spring.		
	VP surveys from the VP overlooking the moorland and forest edge below Cairn Duhie recorded frequent flight activity by red kites. Goshawk and osprey were also recorded, but rarely, as were peregrine and merlin during the scarce breeding bird surveys.		
	Two black grouse leks involving single male birds were identified in close proximity to the alignment.		
	Curlew were frequently recorded, with two breeding pairs in close proximity to the alignment.		
	Other Target Species recorded include occasional flights by peregrine, merlin, and small numbers of pink-footed geese and greylag geese during		

42 The Habitat Map of Scotland (HabMoS) is the national repository for habitat and land use data. The map adopts internationally recognised data and habitat classification standards.

Topic	Alignment 11A	Alignment 11B	Alignment 11C
	the early spring. Lapwing and snipe were also recorded during the early spring months. Additionally, crossbill species and crested tit were recorded in the woodland associated with this section.		
	The capercaillie surveys undertaken in the woodland along this section during the spring recorded no sightings of the species, or evidence of their presence in the vicinity. However the RSPB have reported having observed a female bird adjacent to Dulsie Wood.		
	Hydrology, Geology and Hydrogeology		
	Alignment 11A crosses the River Findhorn – Tomatin to Dorback Burn (ID: 23004) and Tomlachlan Burn (ID: 23005). It is underlain by Moine Group and an Unnamed Igneous Intrusion, low productive aquifers.		
	Alignment 11A is not located within a SEPA or SW DWPA for surface water.		
	According to The Highland Council Open Map Data ^{43,} there are Private Water Supplies within 1 km of the alignment option.		
	According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.		
Cultural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	There are no World Heritage Sites, GDLs or Inventory Battlefields within 1 km of the alignment.	The Designation appraisal for Alignment 11B is the same as Alignment 11A, with the following exception:	The Designation appraisal for Alignment 11C is the same as Alignment 11A with the following exception:
	There is one Scheduled Monument within 1 km: • Levrattich House, cairn (SM11738).	Two SMR entries are recorded, consisting of a post-medieval enclosure and a building.	Three SMR entries are recorded, largely consisting of post-medieval farmsteads and associated buildings.
	There is the potential for direct impacts through changes to the setting of this Scheduled Monument, however these can be avoided through micro siting of the alignment.	Assets The Asset appraisal for Alignment 11B is the same as Alignment 11A, with the following	Assets The Asset appraisal for Alignment 11C is the same as Alignment 11A.
	There are five SMR entries in the alignment option, largely consisting of post-medieval farmsteads and associated buildings. Direct physical impacts can be avoided by micro siting of the alignment option.	 exception: 12 Listed Buildings, with one Category A, nine Category B and two Category C. 	
	Assets There are no Conservation Areas or Non-inventory GDLs within 1 km of Alignment 11A.		
	Within 1 km, there are 13 Listed Buildings, including one Category A, 10 Category B, and two Category C Listed Buildings. There is the potential for direct impacts on the setting of all the Listed Buildings, however, due to distances and intervening topography, only the impacts on Listed Buildings (Ardclach Bell Tower (LB551)) have the potential to lead to significant effects.		
Landscape and	Landscape Designations	Landscape Designations	Landscape Designations
Visual	There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment.	The landscape designation appraisal for Alignment 11B is the same as Alignment 11A.	The landscape designation appraisal for Alignment 11C is the same as Alignment 11A.

⁴³ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 11A	Alignment 11B	Alignment 11C
	Drynachan, Lochindorb and Dava Moors SLA is 3 km south-east of the alignment. It follows the line of the existing OHL, and therefore is unlikely to compromise key characteristics of the nearby SLA. Landscape Character The alignment passes through Upland Moorland and Forestry to Narrow Wooded Valley — Moray & Nairn and Open Rolling Upland LCT. Alignment 11A would slightly extendi the area of influence and intensify the impact of existing OHLs on the landscape, it would not compromise the special characteristics of majority of the LCTs in the alignment. It may cause disruption to Narrow Wooded Valley — Moray & Nairn LCT. Visual Alignment 11A runs closer to existing properties at Achagour, Ardclach and west of the B9007 at Tomnarroch, resulting in 'boxing' in of properties. The surrounding woodland provides a degree of screening but the crossing of the A939 and B9007 would be visible. The crossing of the river Findhorn also risks being clearly visible from Ardclach Bell Tower.	Landscape Character The landscape character appraisal for Alignment 11B is mostly the same as Alignment 11A. Visual The visual appraisal for Alignment 11B is mostly the same as Alignment 10A, with the following exceptions: The alignment is located further away from properties at Achagour, Ardclach and around Tomnarroch, resulting in less tight 'boxing' in of properties.	Landscape Character The landscape designation appraisal for Alignment 11C is mostly the same as Alignment 11A. Visual Alignment 11C parallels the existing OHL past the bell tower and Ardclach and across the River Findhorn. This would result in woodland loss, but the alignment may be more closely read with the existing OHL rather than spreading visual influence wider. The crossing of the A939 and B9007 would remain visible, along with the crossing of the River Findhorn, which risks being visible from Ardclach Bell Tower.
Land Use	Alignment 11A runs over a short stretch of potentially avoidable LCA Class 3.2 land. It does not pass through any prime agricultural land. Forestry Alignment 11A passes through and close to areas of commercial forestry. The estimated area of commercial woodland that would be impacted by Alignment 11A is 21.80 ha, comprising 5.49 ha broadleaved woodland and 16.31 ha coniferous woodland. Of this, 2.83 ha comprises restock of young trees and 2.94 ha is currently felled. Recreation Alignment 11A does not pass over core paths, long distance routes or cycle routes. The alignment passes over Ferness Forest, which is a notable hiking area. The alignment also passes near to Achagour Fishery and over the River Findhorn, a known fishing river. There are likely to be temporary impacts to this area during the construction phase.	Agriculture Alignment 11B does not pass through any prime agricultural land or Class 3.2 land. Forestry Alignment 11B passes through areas of commercial forestry. The estimated area of commercial woodland that would be impacted by Alignment 11B is 25.43 ha, comprising 5.36 ha broadleaved woodland and 20.07 ha coniferous woodland. Of this, 2.08 ha comprises restock of young trees and 3.02 ha is currently felled. Recreation The recreation appraisal for 11B is the same as 11A.	Agriculture The agriculture appraisal for Alignment 11C is the same as Alignment 11A. Forestry Alignment 11C passes through areas of commercial forestry. The estimated area of commercial woodland that would be impacted by Alignment 11C is 21.45 ha, comprising 5.34 ha broadleaved woodland and 16.10 ha coniferous woodland. Of this, 4.11 ha comprises restock of young trees and 1.75 ha is currently felled. Recreation The recreation appraisal for 11C is the same as 11A.
Planning	 Within 500 m lies the following consented planning application: Cairn Duhie Wind Farm (ECU Ref: ECU00003225). Alignment 11A passes through the red line boundary for the wind farm, and conflicts with the proposed location for the control building and substation compound. However Alignment 11A avoids the wind turbines, and the areas shown in the Habitat Management Plan. 	The planning appraisal for Alignment 11B is the same as Alignment 11A.	The planning appraisal for Alignment 11C is the same as Alignment 11A.
Engineering	Infrastructure Crossings Alignment 11A passes within 30 m of Achagour fishing ponds and crosses the River Findhorn. Whilst the river itself is relatively narrow, there are steep banks	Infrastructure Crossings Alignment 11B crosses the River Findhorn. Whilst the river itself is relatively narrow, there are steep banks on each side which may necessitate a long span between	Infrastructure Crossings Alignment 11C crosses the River Findhorn. Whilst the river itself is relatively narrow, there are steep banks on each side which may necessitate a long



Topic	Alignment 11A	Alignment 11B	Alignment 11C
	on each side which may necessitate a long span between suitable tower locations. The alignment also crosses the A939, B9007, one minor road and	suitable tower locations. The alignment also crosses the A939, B9007 and one minor road.	span between suitable tower locations. The alignment also crosses the A939, B9007, one minor road and one restricted local access road.
	two restricted local access roads. The eastern end of all of the alignment options follows the alignment of the existing 275 kV OHL, necessitating the realignment of approximately 2 km of the existing OHL. This is required in order to avoid interaction with the	The eastern end of all of the alignment options follows the alignment of the existing 275 kV OHL, necessitating the realignment of approximately 2 km of the existing OHL. This is required in order to avoid interaction with the consented Cairn Duhie Wind Farm turbine locations.	The eastern end of all of the alignment options follows the alignment of the existing 275 kV OHL, necessitating the realignment of approximately 2 km of the existing OHL. This is required in order to avoid interaction with the consented Cairn Duhie Wind Farm turbine locations.
	consented Cairn Duhie Wind Farm turbine locations.	Environmental Design	Environmental Design
	Over 25% of Alignment 11A is at elevations over 200 m. The maximum	Over 25% of Alignment 11B is at elevations over 200 m. The maximum elevation is 233 m and is unlikely to cause a significant issue.	Over 25% of Alignment 11C is at elevations over 200 m. The maximum elevation is 233 m and is unlikely to cause a significant issue.
	elevation is 233 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.
	pollution is not a concern. All alignment options pass through an area recorded as a historical military	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.
	training area so have a moderate risk for presence of unexploded ordnance. According to SEPA flood maps, greater than 5% of each alignment option is	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.
	located within the 1 in 10 year flood risk zone	Ground Conditions	Ground Conditions
	Ground Conditions Alignment 11A contains a maximum slope of 34 degrees. However this is for	Alignment 11B contains a maximum slope of 31 degrees. However this is for less than a single span length so is not a significant issue.	Alignment 11C contains a maximum slope of 27 degrees. However this is for less than a single span length so is not a significant issue.
	less than a single span length so is not a significant issue.	Alignment 11B passes through areas of Class 1 and Class 2 peatland, with estimated peat depths mainly between 0.5 to 1.0 m.	Alignment 11C passes through areas of Class 1 and Class 2 peatland, with estimated peat depths mainly between 0.5 to 1.0 m.
	Alignment 11A passes through areas of Class 1 and Class 2 peatland, with estimated peat depths mainly between 0.5 to 1.0 m.	Construction and Maintenance	Construction and Maintenance
	Construction and Maintenance	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment
	There is an existing network of tracks and roads within 1 km of all alignment options.	Alignment 11B requires two angle towers.	options. Alignment 11C requires five angle towers
	Alignment 11A requires three angle towers.	<u>Proximity</u>	Alignment 11C requires five angle towers. Proximity
	<u>Proximity</u>	There are no residential properties located within 170 m of Alignment 11B.	There are no residential properties located within 170 m of Alignment 11C.
	There is one residential property located within 170 m of Alignment 11A.	All alignment options in Section 11 are in close proximity to the consented Cairn Duhie wind farm development (ECU00003255). In order to maintain 3 x rotor diameter	All alignment options in Section 11 are in close proximity to the consented
	All alignment options in Section 11 are in close proximity to the consented Cairn Duhie wind farm development (ECU00003255). In order to maintain 3 x rotor diameter separation from the wind turbine locations, it is necessary to take the alignment of the existing 275 kV OHL and realign the existing OHL	separation from the wind turbine locations, it is necessary to take the alignment of the existing 275 kV OHL and realign the existing OHL slightly further north. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Cairn Duhie wind farm development (ECU00003255). In order to maintain 3 x rotor diameter separation from the wind turbine locations, it is necessary to take the alignment of the existing 275 kV OHL and realign the existing OHL slightly further north.
			There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 11A has the lowest estimated capital cost. Operational costs are estimated to be similar for all options.	There is negligible cost differential between the alignment options, with less than 1% difference. Higher forestry costs for Alignment 11B are balanced by the slightly longer line length of Alignment 11A.	Alignment 11C is the highest cost option for Section 11. Although the same length as Alignment 11A, it requires additional angle towers. The total capital cost differential is estimated to be minimal at roughly 3%.
		Operational costs are estimated to be similar for all options.	Operational costs are estimated to be similar for all options.



Section 12

Topic	Alignment 12A	Alignment 12B	Alignment 12C	Alignment 12D
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 12A is within 10 km Moidach More SAC/SSSI, Lower Findhorn Woods SSSI/SAC, Darnaway and Lethen Forest SPA and River Spey SAC.	Alignment 12B natural heritage designation appraisal is the same as Alignment 12A.	Alignment 12C natural heritage designation appraisal is the same as Alignment 12A.	Alignment 12D natural heritage designation appraisal is the same as Alignment 12A.
	Inner Moray Firth SPA/Ramsar and Moray and Nairn Coast	Protected Species	Protected Species	Protected Species
	SPA/Ramsar are within 20 km of the alignment and have the potential to support wintering geese and breeding osprey, though there are likely more suitability of habitat	The habitats and their suitability to support protected species within Alignment 12B are largely the same as to those within Alignment 12A. However, 12B has greater suitability to support red squirrels, pine marten and, to a lesser degree, bat species,	The habitats and their suitability to support protected species within Alignment 12C are largely the same as to those within Alignment 12A. However, 12C has greater suitability to support red squirrels due to larger area of conifer woodland.	The habitats and their suitability to support protected species within Alignment 12D are largely the same as to those within Alignment 12A.
	in the surrounding region. Non-statutory designations and nature conservation sites	due to larger area of conifer-dominated woodland.	<u>Habitats</u>	Habitats The habitats appraisal for Alignment 12D is mostly
	within a 2 km radius include Buglife B-Line.	<u>Habitats</u>	The habitats appraisal for Alignment 12C is mostly the same as	the same as Alignment 12A.
	Protected Species	The habitats appraisal for Alignment 12B is mostly the same as Alignment 12A. However, the NWSS identified wet woodland,	Alignment 12A. However, HABMOS data identifies the additional Annex I habitats within the alignment:	However, HABMOS data identifies the additional Annex I habitats within the alignment:
	Wooded areas within the alignment are mostly broadleaf tress within riparian zones of the watercourses; Dorback	upland birchwood and native pinewood within 100 m. The only woodland listed within the AWI in 100 m is Category 2b LEPO	H91E0 – Alluvial forests.	H91E0 – Alluvial forests.
	Burn, River Divie and Berry Burn. These have the potential to support roosting bats. The semi-natural habitats and watercourses also have the potential to support	and not considered irreplaceable habitat. BNG	The NWSS also identified wet woodland, upland birchwood and native pinewood. BNG	The NWSS also identified wet woodland, upland birchwood and native pinewood. The only woodland listed within the AWI within 100 m is
	commuting and foraging activities for bats. The habitats within Alignment 12A, including scrub, dry	Unavoidable irreplaceable habitat is present in 100 m. Therefore, the total BU for this alignment option is 906.19 BU.	Unavoidable irreplaceable habitat is present in 100 m. Therefore, the total for this alignment option is 901.55 BU.	Category 2b LEPO and not considered irreplaceable habitat.
	heath, cropland and grassland, have the potential to support foraging badgers. The scrub and dry wooded	<u>Ornithology</u>	Ornithology	BNG
	areas have the potential to provide suitable habitats for sett creation.	The ornithology appraisal for Alignment 12B is mostly the same as Alignment 12A, with the following exceptions: • the secondary barn owl roost is located slightly closer;	The ornithology appraisal for Alignment 12C is mostly the same as Alignment 12A, with the following exceptions:	Unavoidable irreplaceable habitat is present in 100 m. Therefore, the total BU for this alignment option is 953.09 BU.
	The conifer woodland areas in the alignment are relatively small and lack good connectivity. These are therefore	the black grouse lek is located further from the alignment;	 the hen harrier nest is located closer to the alignment, which may pose a collision risk for this species; 	Ornithology
	considered sub-optimal for red squirrels and pine martens. The remaining open habitats are considered	one of the estimated curlew territories is closer to the alignment; and	 the black grouse lek is located closer to the alignment; and 	The ornithology appraisal for Alignment 12D is mostly the same as Alignment 12C, with the
	sub-optimal for wildcats.	the lapwing territory is closer to the alignment. Hydrology, Geology and Hydrogeology	one of the estimated curlew territories is located closer to	following exceptions:
	Dorback Burn, Burn of Aulthaunnachan, River Divie and Berry Burn have the potential to support commuting and	The hydrology, geology and hydrogeology appraisal for	the alignment.	Both barn owl nests are located closer to the alignment;
	foraging otters. These watercourses and other smaller channels have the potential to support water voles.	Alignment 12B is the same as Alignment 12A.	Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 12C is the same as Alignment 12A.	one of the black grouse lek is further from the alignment, but the other lek is closer; and
th	Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations.			the lapwing territory is closer to the alignment.
	Scrub and heathland may provide habitat for reptiles.			Hydrology, Geology and Hydrogeology
	The burns in the alignment have the potential to support migratory salmonids. The smaller freshwater burns have			The hydrology, geology and hydrogeology appraisal for Alignment 12D is the same as Alignment 12A.

Topic	Alignment 12A	Alignment 12B	Alignment 12C	Alignment 12D
	the potential to support lamprey species. Alignment 12A occurs within the known distribution range for FWPM ⁴⁴ .			
	The varied habitats within Alignment 12A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.			
	<u>Habitats</u>			
	HABMOS data identifies the following Annex I habitats within the alignment:			
	H91C0 – Caledonian forest.			
	The NWSS identified upland birchwood and native pinewood within 100 m. Some woodland within 100 m is listed in the AWI as Category 2a ancient woodland of semi-natural origin and considered irreplaceable habitat. The remaining woodland in the AWI is Category 2b LEPO woodland and not considered irreplaceable.			
	The carbon and peatland map of Scotland identified Class 1 and Class 2 peatland within 100 m, including the presence of irreplaceable blanket bog.			
	BNG			
	Unavoidable irreplaceable habitat is present in 100 m. Therefore, the total BU for this alignment option is 667.92 BU.			
	Ornithology			
	Data collected as part of the desk-study identified frequent flight activity by hen harrier over Cairn Eney moorland throughout the year, and osprey over Auchlochan waterbodies during the breeding season. Regular flight activity by pink-footed geese and greylag geese were also recorded over winter and autumn passage months. Goshawk were occasionally recorded.			
	VP surveys from a VP overlooking the moorland and forest edge habitats below Cairn Eney recorded occasional flight activity by red kites. Flights by hen harrier were also recorded in small numbers, however an active nest site was located on the open moorland over 2 km from the alignment.			
	Golden eagle, goshawk and osprey were recorded over Section 12, but sightings of these species were rare, with no evidence of breeding. Merlin were occasionally			

⁴⁴ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

Topic	Alignment 12A	Alignment 12B	Alignment 12C	Alignment 12D
	recorded, and have the potential to be breeding over 2 km from the alignment.			
	A barn owl roost and potential nest site was recorded within 2 km of the alignment. An additional roost was identified over 2 km away.			
	Two black grouse leks were identified within 2 km of the alignment.			
	Curlew were frequently recorded, with up to two breeding pairs observed, however these are unlikely to be within 500 m of the alignment. Possible lapwing territory was observed over 1 km from the alignment.			
	Other Target Species recorded include occasional flight activity by small numbers of pink-footed geese and greylag geese in early spring, as well as golden plover and lapwing during the breeding season (although there was no indication of breeding). A pair of red-throated divers, goldeneye and garganey were observed on Lochan Dubh and associated lochans to the south of Cairn Eney at the beginning of the breeding season. Follow up inspections have found no evidence of breeding.			
	Capercaillie surveys undertaken in the woodlands along Section 12 recorded no sightings of the species, or evidence of their presence in the vicinity.			
	Hydrology, Geology and Hydrogeology			
	Alignment 12A crosses Dorback Burn / River Divie (ID: 23002) and four tributaries of the river. It is underlain by Grampian Group low productive aquifer.			
	Alignment 12A is not located within any SEPA or surface water DWPA. 12A is not located within a Scotland Water Drinking Water Protected Areas (SW DWPA).			
	According to The Highland Council Open Map Data ^{45,} there are Private Water Supplies within 1 km.			
	According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.			
Cultural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	There are no World Heritage Sites, inventory GDLs, Scheduled Monuments or Inventory Battlefields within 1 km.	The Designation Appraisal for Alignment 12B is mostly the same as Alignment 12A. However, there are six SMR entries, comprising of post-medieval farmsteads and structures.	The Designation Appraisal for Alignment 12C is mostly the same as Alignment 12A. However, there are nine SMR entries, comprising of post-medieval farmsteads and structures and a possible prehistoric cairnfield. Two additional features were	The Designation Appraisal for Alignment 12D is mostly the same as Alignment 12A. However, there is one SMR entry, Feakirk building (Canmore ID 155993).

⁴⁵ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 12A	Alignment 12B	Alignment 12C	Alignment 12D
	Within 100 m, there are 10 SMR entries consisting of possible prehistoric cairnfields, and medieval and postmedieval huts and structures. Direct physical impacts can be avoided through micro sitting of the alignment option. Assets There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are two Category C Listed Buildings within 1 km of the alignment. There is the potential for direct impacts on the setting of Listed Buildings. However, due to the current setting of the Listed Buildings, impacts are not likely to lead to significant effects.	Assets The cultural heritage assets appraisal for Alignment 12B is the same as Alignment 12A.	identified during a walkover survey, a turf and stone boundary bank and a rectangular stone structure. Assets The cultural heritage assets appraisal for Alignment 12C is mostly the same as Alignment 12A. However, there is only one Category C Listed Building within 1 km of the alignment.	Assets The cultural heritage assets appraisal for Alignment 12D is mostly the same as Alignment 12A. However, there are no Listed Buildings within 1 km of the alignment.
Landscape and Visual	Landscape Designations There are no National Scenic Areas or Wild Land Areas within 10 km of the alignment. The Cairngorns National Park is located within 10 km southeast of the alignment. General topography, intervening vegetation and close paralleling of the existing OHL are likely to limit the effects on the National Park. Drynachan, Lochindorb and Dava Moors SLA is within 10 km of the alignment. Findhorn Valley and the Wooded Estates SLA is located approximately 400 m south. Landscape Character Alignment 12A is located in Open Rolling Upland and Upland Moorland and Forestry LCT. Due to the presence of scattered properties, close paralleling with the existing OHL is not achievable. An OHL in this alignment would be skylined in key areas, including the crossing of Cairn Eney and would pass through intimate and attractive landscapes east of the Dava Way. An OHL in this alignment through the landscape would be particularly intrusive. Visual An OHL on Alignment 12A will be visible from Sections of the A940 and scattered residential properties along the alignment, however this would be in the context of the existing OHL. Properties at Tomdow, Woodside, Bantrach, Dallasbraughty, Tomcork and Johnstripe would be most impacted, with half of these properties becoming 'boxed in'.	Landscape Designations The Landscape Designations appraisal for Alignment 12B is the same as Alignment 12A. Landscape Character The landscape character appraisal for Alignment 12B is mostly the same as Alignment 12A. However, skylining near Cairn Eney is likely to be extended due to higher ground elevation. However the more intimate landscape northwest of Lurg would be avoided, making it less intrusive on the landscape. Visual The visual appraisal for Alignment 12B is mostly the same as Alignment 12A. However, fewer properties around Feakirk, Lurg, Tomcork and Johnstripe would be affected with less obvious 'boxing in'.	Landscape Designations The Landscape Designations appraisal for Alignment 12C is mostly the same as Alignment 12A. However, Findhorn Valley and Wooded Estates SLA is located 1 km from the alignment. Landscape Character The landscape character appraisal for Alignment 12C is mostly the same as Alignment 12A. However, Alignment 12C is particularly exposed near Cairn Eney and more remote landscape to the south. Visual The visual appraisal for Alignment 12C is mostly the same as Alignment 12A. However, though the alignment will run on higher ground, it will still be visible from Sections of the A94O. It has a similar impact as Alignment 12A, 'boxing in' properties at Bantrach, Dallasbraughty and Johnstripe.	Landscape Designations The Landscape Designations appraisal for Alignment 12D is mostly the same as Alignment 12A. However, Findhorn Valley and Wooded Estates SLA is located 1.5 km from the alignment. Landscape Character The landscape character appraisal for Alignment 12D is mostly the same as Alignment 12A. However, Alignment 12D is particularly exposed near Cairn Eney and more remote landscape to the south. The more intimate landscape northwest of Lurg would be avoided, making it less intrusive on this local landscape. Visual The visual appraisal for Alignment 12D is mostly the same as Alignment 12C. However, Alignment 12D would result in less obvious 'boxing in' of properties.



Topic	Alignment 12A	Alignment 12B	Alignment 12C	Alignment 12D
	The potential to screen is limited due to landscape character and elevation.			
Land Use	Agriculture Alignment 12A passes through an area of unavoidable	Agriculture The agriculture appraisal for Alignment 12B is the same as	Agriculture The agriculture appraisal for Alignment 12C is the same as	Agriculture Alignment 12D avoids prime agricultural and Class
	agricultural land. Forestry Alignment 12A passes through a small area of mature commercial forestry and a small area of upland birchwood. The estimated area of commercial woodland that would be impacted by Alignment 12A is 3.99 ha, comprising 1.61 ha broadleaved woodland and 2.38 ha coniferous woodland. Of this, 0.40 ha comprises restock of young trees. Eorestry Alignment 12 The estimate impacted by broadleaved this, 13.52 has a coniferous woodland. Of this, 0.40 ha comprises restock of young The recreation	Alignment 12A. Forestry Alignment 12B passes through a significant area of mixed age commercial forestry and a small area of upland birchwood. The estimated area of commercial woodland that would be impacted by Alignment 12B is 16.98 ha, comprising 1.98 ha broadleaved woodland and 15.00 ha coniferous woodland. Of	Alignment 12A. Forestry Alignment 12C passes through and close to significant areas of mixed age commercial forestry and small areas of mixed broadleaves. The estimated area of commercial woodland that would be impacted by Alignment 12C is 7.15 ha, comprising 1.03 ha	3.2 land. Forestry Alignment 12D passes through significant areas of mixed age commercial forestry and small areas of mixed broadleaves. The estimated area of commercial woodland that would be impacted by Alignment 12D is 20.83 ha,
		this, 13.52 ha is currently felled. Recreation The recreation appraisal for Alignment 12B is the same as	broadleaved woodland and 6.12 ha coniferous woodland. Of this, 0.40 ha comprises restock of young trees. Recreation	comprising 1.40 ha broadleaved woodland and 19.43 ha coniferous woodland. Of this, 13.52 ha is currently felled. Recreation
		Alignment 12A.	The recreation appraisal for Alignment 12C is the same as Alignment 12A.	The recreation appraisal for Alignment 12D is the same as Alignment 12A.
Planning	 Within 500 m lie the following consented planning applications: Cairn Duhie Wind Farm (ECU Ref: ECU00003225). Alignment 12A passes through the red line boundary for the wind farm but avoids any infrastructure. Despite this, it would pass through Unit A of the Habitat Management Plan, which is proposed for Blanket Bog maintenance, restoration and enhancement. Clash Gour Wind Farm (ECU Ref: ECU00000738). Alignment 12A passes through the red line boundary for the wind farm, and may conflict with the substation infrastructure, however it will avoid the proposed turbine locations. Alignment 12A will pass through the compensatory planting area but will avoid the Habitat Management Areas. Berry Burn Wind Farm Extension (ECU Ref: ECU00000718). Alignment 12A lies immediately west of the red line boundary of the wind farm. The alignment does not pass within close proximity to the turbines, or any Habitat Management Areas. 	The planning appraisal for Alignment 12B is the same as Alignment 12A.	The planning appraisal for Alignment 12C is the same as Alignment 12A.	The planning appraisal for Alignment 12D is the same as Alignment 12A.



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Topic	Alignment 12A	Alignment 12B	Alignment 12C	Alignment 12D
	 The following application is known to the planning system, but not yet consented: Clash Gour 275 kV Overhead Line Diversion (ECU Ref: ECU00003366). All alignment options pass within approx. 300 m east. 			
Engineering		Infrastructure Crossings All alignment options in Section 12 cross the A940. Scaffolding would be required during conductor stringing across the road to prevent any interruption to road users. Alignment 12B also crosses four restricted local access roads. All alignment options cross the Dava Way long distance walking route. Environmental Design Over 25% of Alignment 12B is at elevations over 200 m. The maximum elevation is 290 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance. According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, associated with the Droback Burn, Burn of Aulthaunachan, River Divie and Berry Burn. Ground Conditions Alignment 12B contains a maximum slope of 22 degrees. However this is for less than a single span length so is not a significant issue. The steepest slopes occur at the crossing of the Dorback Burn and River Divie. Alignment 12B passes through areas of Class 1 and Class 2	Infrastructure Crossings All alignment options in Section 12 cross the A940. Scaffolding would be required during conductor stringing across the road to prevent any interruption to road users. Alignment 12C also crosses four restricted local access roads. All alignment options cross the Dava Way long distance walking route. Environmental Design Over 25% of Alignment 12C is at elevations over 200 m. The maximum elevation is 290 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance. According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, associated with the Droback Burn, Burn of Aulthaunachan, River Divie and Berry Burn. Ground Conditions Alignment 12C contains a maximum slope of 23 degrees. However this is for less than a single span length so is not a significant issue. The steepest slopes occur at the crossing of the Dorback Burn and River Divie. Alignment 12C passes through areas of Class 1 and Class 2	Infrastructure Crossings All alignment options in Section 12 cross the A940. Scaffolding would be required during conductor stringing across the road to prevent any interruption to road users. Alignment 12D also crosses five restricted local access roads. All alignment options cross the Dava Way long distance walking route. Environmental Design Over 25% of Alignment 12D is at elevations over 200 m. The maximum elevation is 290 m and is unlikely to cause a significant issue. However Alignment 12D has the longest length above 200 m elevation. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance. According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, associated with the Droback Burn, Burn of Aulthaunachan, River Divie and Berry Burn.
	Alignment 12A passes through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. Construction and Maintenance There is an existing network of tracks and roads within	peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. Construction and Maintenance There is an existing network of tracks and roads within 1 km of Alignment 12B.	peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. Construction and Maintenance The area to the south of Cairn Eney has no existing network of tracks or roads within 1 km, making access to this Section of	Ground Conditions Alignment 12D contains a maximum slope of 17 degrees which is not considered to be an issue. The steepest slopes occur at the crossing of the Dorback Burn and River Divie. Alignment 12D passes through areas of Class 1 and
	1 km of Alignment 12A. Alignment 12A requires three angle towers, the least number of the alignment options.	Alignment 12B requires five angle towers.	Alignment 12C more challenging. Alignment 12C requires five angle towers.	Class 2 peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m.



Topic	Alignment 12A	Alignment 12B	Alignment 12C	Alignment 12D
Topic	Proximity There is one residential property located within 170 m of Alignment 12A. All alignment options in Section 12 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the overhead line to pass through, but there is no flexibility for micrositing the alignment in this area. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There is one residential property located within 170 m of Alignment 12B. All alignment options in Section 12 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the overhead line to pass through, but there is no flexibility for micrositing the alignment in this area. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There is one residential property located within 170 m of Alignment 12C. All alignment options in Section 12 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the overhead line to pass through, but there is no flexibility for micrositing the alignment in this area. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Construction and Maintenance The area to the south of Cairn Eney has no existing network of tracks or roads within 1 km, making access to this Section of Alignment 12D more challenging. Alignment 12D requires six angle towers. Proximity There is one residential property located within 170 m of Alignment 12D. All alignment options in Section 12 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the overhead line to pass
Economic	Alignment 12A has the lowest estimated Capital Cost. Alignment 12A has the lowest estimated capital cost.	Alignment 12B has almost double the tree felling costs of Alignment 12A, pushing it close to 120% of the lowest cost option. The estimated operational cost for Alignment 12B is greater than 140% of the lowest cost option, due to the requirement for one additional low voltage crossing.	Alignment 12C is over 120% of the lowest cost option. Alignment 12C has substantially higher tree felling costs than Alignment 12A. In addition, Alignment 12A is 1.6 km longer than Alignment 12A, increasing capital costs associated with towers, conductors and access tracks. Alignments 12C and 12D are estimated to have similar operational costs.	through, but there is no flexibility for micrositing the alignment in this area. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option. Alignment 12D is greater than 120% of the lowest cost option. Alignment 12D is the highest cost option, with capital cost associated with forestry estimated to me more than triple that of the lowest cost option. Alignments 12C and 12D are estimated to have similar operational costs.

Section 13

Topic	Alignment 13A	Alignment 13B	Alignment 13C
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 13A is within 10 km Kellas Oakwood SSSI, Darnaway and Lethen	Alignment 13B natural heritage designation appraisal is the same as	Alignment 13C natural heritage designation appraisal is the same as
	Forest SPA, Gull Nest SSSI, Lower Findhorn Woods SAC/SSSI, Moidach More	Alignment 13A.	Alignment 13A.
	SAC/SSSI, Lethenhill SSSI, Buinach and Glenlatterach SSSI, River Spey SAC, River Spey SSSI, Boghole, Muckle Burn SSSI and Burn of Ballintomb SSSI.	Protected Species	Protected Species
Moray and Nairn Coast SPA/Ramsar is within 20 km and has the p	Moray and Nairn Coast SPA/Ramsar is within 20 km and has the potential to support wintering geese and breeding osprey, though there is likely more	The habitats and their suitability to support protected species within Alignment 13B are largely the same as to those within Alignment 13A. However, 13B has greater suitability to support red squirrels, pine marten and, to a lesser degree, bat species, due to larger area of coniferous woodland.	The habitats and their suitability to support protected species within Alignment 13C are largely the same as to those within Alignment 13B. Habitats
			The habitats appraisal for Alignment 13C is the same as Alignment 13A.



Topic	Alignment 13A	Alignment 13B	Alignment 13C
	There are no non-statutory designations or nature conservation sites within	<u>Habitats</u>	BNG
	2 km of the alignment.	The habitats appraisal for Alignment 13B is the same as Alignment 13A.	Unavoidable irreplaceable blanket bog habitat is present within 100 m.
	Protected Species	BNG	Therefore, the total BU for this alignment option is 183.67 BU.
	Mature woodland groups and standing trees within the alignment have the potential to support roosting bats. However, the majority of these tress are	Unavoidable irreplaceable blanket bog habitat is present within 100 m.	Ornithology
	coniferous which have lower potential suitability to support roosting bats than	Therefore, the total BU for this alignment option is 261.79 BU.	The ornithology appraisal for Alignment 13C is the same as Alignment 13A.
	mature broadleaf specimens.	Ornithology	Hydrology, Geology and Hydrogeology
	The edges of wooded areas, semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats.	The ornithology appraisal for Alignment 13B is mostly the same as Alignment 13A with the following exception:	The hydrology, geology and hydrogeology appraisal for Alignment 13C is the same as Alignment 13A.
	The habitats within Alignment 13A, including dry heath and grassland, have the	the curlew breeding pair are located further from the alignment.	
	potential to support foraging badgers.	Hydrology. Geology and Hydrogeology	
	Where mature and undisturbed, the larger conifer woodlands have the potential to support wildcat, pine marten and red squirrel. The open, undisturbed heath and riparian habitats also have the potential to support wildcats.	The hydrology, geology and hydrogeology appraisal for Alignment 13B is the same as Alignment 13A.	
	The River Lossie and Burn of Auchness have the potential to support commuting and foraging otters. These watercourses and other smaller channels have the potential to support water voles.		
	Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations, including great crested newts. Heathland and wooded areas may provide habitat for reptiles.		
	The Burn of Auchness has the potential to support migratory salmonids. A waterfall on the River Lossie acts as a barrier to fish passage further upstream. The smaller freshwater burns have the potential to support lamprey species. Alignment 13A occurs within the known distribution range for FWPM ⁴⁶ .		
	The varied habitats within Alignment 13A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.		
	<u>Habitats</u>		
	HABMOS data identifies the following Annex I habitats within the alignment:		
	H91C0 – Caledonian forest.		
	The NWSS identified upland birchwood and native pinewood within 100 m. No woodland listed in the AWI is present.		
	The carbon and peatland map of Scotland identified Class 1 and Class 2 peatland within 100 m, including the presence of irreplaceable blanket bog.		
	BNG		
	Unavoidable irreplaceable blanket bog habitat is present within 100 m. Therefore, the total BU for this alignment option is 369.97 BU.		

⁴⁶ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

Topic Alignment 13A Alignment 13B Alignment 13C **Ornithology** Data collected to inform the desk-study, identified frequent flight activity by pink-footed geese and greylag geese over agricultural land and forestry during the winter, autumn and spring passage months. Goshawk were occasionally recorded. The VP surveys recorded no Target Species over Section 13. During the scarce breeding bird surveys red kites and merlin were recorded on rare occasion. Black grouse were heard lekking over 1 km from the alignment. Curlew were frequently recorded, with a breeding pair likely to be in close proximity to the alignment. Capercaillie surveys undertaken in the woodlands along this section during the spring recorded no sightings of the species or evidence of their presence in the Hydrology, Geology and Hydrogeology Alignment 13A crosses River Lossie – upper catchment (ID: 23043) and one tributary of the river. It is underlain by Grampian Group low productive aquifer. Alignment 13A is not located within any SEPA or surface water DWPA. 13A is not located within a SW SWPA. According to The Moray Council Open Map Data⁴⁷, there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km. Cultural Heritage **Designations Designations Designations** There are no World Heritage Sites, GDLs, Scheduled Monuments, SMR entries or The Designation Appraisal for Alignment 13B is mostly the same as Alignment The Designation Appraisal for Alignment 13C is the same as Alignment 13B. Inventory Battlefields within 1 km. 13A. However, there is one SMR entry, Redcraig, farmstead (Canmore ID <u>Assets</u> 156024). Direct physical impacts can be avoided through micro sitting of the The cultural heritage assets appraisal for Alignment 13C is the same as alignment option. There are no Non-inventory GDLs, Conservation Areas or Listed Buildings within Alignment 13A. 1 km of the alignment. The cultural heritage assets appraisal for Alignment 13B is the same as Alignment 13A. Landscape and Landscape Designations Landscape Designations **Landscape Designations** Visual

The Landscape Designations appraisal for Alignment 13B is mostly the same as

Alignment 13A. However, Drynachan, Lochindorb and Dava Moors SLA is 3 km

from the alignment.

There are no National Parks, National Scenic Areas or Wild Land Areas within

topography, intervening vegetation and close paralleling of the existing OHL are

Pluscarden Valley and Spey Valley SLA are located within 10 km. General

10 km of the alignment.

likely to limit the effects on the National Park.

The Landscape Designations appraisal for Alignment 13C is the same as

The landscape character appraisal for Alignment 13C is mostly the same as

Alignment 13A. However, when running through the area of inaccessible

Alignment 13B.

Landscape Character

⁴⁷ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 13A	Alignment 13B	Alignment 13C
	Drynachan, Lochindorb and Dava Moors SLA is 3.5 km from the alignment. Landscape Character Alignment 13A is located in Upland Moorland and Forestry LCT through forestry. It follows the landscape grain to Lochnabraan, then heads east against the landscape grain, across Lochna Speur. This alignment runs through an area of generally inaccessible moorland and forestry but does not appear to risk substantially compromising the character of the landscape. Visual Alignment 13A avoids most sensitive receptors, although comes in close proximity to Auchness, Soccach and Torwinny. The alignment would be seen from these properties, backdropped by trees and rising land behind.	Landscape Character The landscape character appraisal for Alignment 13B is mostly the same as Alignment 13A. However, when running through the area of generally inaccessible moorland and forestry, it follows the grain of the landscape more closely than Alignment 13A, remaining on more of a plateau. It does not appear to risk substantially compromising the landscape character. Visual The visual appraisal for Alignment 13B is mostly the same as Alignment 13A.	forestry, it follows the grain of the landscape more closely than Alignment 13A, remaining on more of a plateau. It does not appear to risk substantially compromising the landscape character. Visual The visual appraisal for Alignment 13C is mostly the same as Alignment 13A. However, Alignment 13C is more distant from properties in Auchness, Soccach and Torwinny, but is closer to a single property in Glen Lissue. Alignment 13C is at more risk of skylining due to running on higher ground.
Land Use	Alignment 13A avoids prime agricultural and Class 3.2 land. Forestry Alignment 13A passes through significant areas of mixed age commercial conifer forestry and interacts with a small island of isolated broadleaves. The estimated area of commercial woodland that would be impacted by Alignment 13A is 55.09 ha, comprising 1.30 ha broadleaved woodland and 53.79 ha coniferous woodland. Of this, 7.46 ha comprises restock of young trees and 21.94 ha is currently felled. Recreation Alignment 13A does not cross over any core paths, long distance routes or cycle routes. The alignment passes north of Loch Dallas, a notable fishing spot.	Agriculture The agriculture appraisal for 13B is the same as 13A. Forestry Alignment 13B passes through significant areas of mixed age commercial conifer forestry and interacts with a small island of isolated broadleaves. The estimated area of commercial woodland that would be impacted by Alignment 13B is 59.17 ha, comprising 0.60 ha broadleaved woodland and 58.57 ha coniferous woodland. Of this, 8.42 ha comprises restock of young trees and 25.71 ha is currently felled. Recreation The recreation appraisal for 13B is the same as 13A.	Agriculture The agriculture appraisal for 13C is the same as 13A. Forestry Alignment 13C passes through significant areas of mixed age commercial conifer forestry and interacts with small islands of isolated broadleaves. The estimated area of commercial woodland that would be impacted by Alignment 13C is 68.32 ha, comprising 0.60 ha broadleaved woodland and 67.72 ha coniferous woodland. Of this, 9.05 ha comprises restock of young trees and 28.61 ha is currently felled. Recreation The recreation appraisal for 13C is the same as 13A.
Planning	 Within 500 m lie the following consented planning applications: Clash Gour Wind Farm (ECU Ref: ECU00000738). Alignment 13A passes through the red line boundary for the wind farm, and may conflict with the substation infrastructure, however it will avoid the proposed turbine locations. Alignment 13A will pass through the compensatory planting area but will avoid the Habitat Management Areas. The following application is known to the planning system, but not yet consented: Clash Gour 275 kV Overhead Line Diversion (ECU Ref: ECU00003366). Approximately 300 m west. 	The planning appraisal for Alignment 13B is the same as Alignment 13A.	The planning appraisal for Alignment 13C is the same as Alignment 13A.
Engineering	Infrastructure Crossings Alignment 13A crosses Loch na Speur. There are no road crossings within Section 13.	Infrastructure Crossings There are no major crossings or road crossings required for Alignment 13B.	Infrastructure Crossings There are no major crossings or road crossings required for Alignment 13C.



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Topic	Alignment 13A	Alignment 13B	Alignment 13C
	Environmental Design	Environmental Design	Environmental Design
	Over 25% of Alignment 13A is at elevations over 200 m. The maximum elevation is 316 m and is unlikely to cause a significant issue.	Over 25% of Alignment 13B is at elevations over 200 m. The maximum elevation is 316 m and is unlikely to cause a significant issue.	Over 25% of Alignment 13C is at elevations over 200 m. The maximum elevation is 316 m and is unlikely to cause a significant issue.
	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.
	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.
	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.
	Ground Conditions	Ground Conditions	Ground Conditions
	Alignment 13A contains a maximum slope of 28 degrees. The alignment is located within an area where slopes exceed 20 degrees for more than a span length, which could cause challenges with siting towers and construction.	Alignment 13B contains a maximum slope of 28 degrees. The alignment is located within an area where slopes exceed 20 degrees for more than a span length, which could cause challenges with siting towers and construction.	Alignment 13C contains a maximum slope of 31 degrees. The alignment is located within an area where slopes exceed 20 degrees for more than a span length, which could cause challenges with siting towers and construction.
	Alignment 13A passes through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. The peatland is located at the western end of the alignment north of Johnstripe and also to the north of Moss of Bednawinny.	Alignment 13B passes through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. The peatland is located at the western end of the alignment north of Johnstripe and also to the north of Moss of Bednawinny.	Alignment 13C passes through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging between 0.5 m to greater than 1.5 m. The peatland is located at the western end of the alignment north of Johnstripe and also to the north of Moss of Bednawinny.
	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance
	The area to the south of Auchness has a limited network of existing tracks or roads within 1 km, making access to this Section of all of the alignment options more challenging.	The area to the south of Auchness has a limited network of existing tracks or roads within 1 km, making access to this Section of all of the alignment options more challenging.	The area to the south of Auchness has a limited network of existing tracks or roads within 1 km, making access to this Section of all of the alignment options more challenging.
	Alignment 13A requires three angle towers.	Alignment 13B requires five angle towers.	Alignment 13B requires four angle towers.
	Proximity	Proximity	Proximity
	There are no residential properties located within 170 m of Alignment 13A.	There are no residential properties located within 170 m of Alignment 13B.	There are no residential properties located within 170 m of Alignment 13C.
	All alignment options in Section 13 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the overhead line to pass through, but there is no flexibility for micrositing the alignment in this area.	All alignment options in Section 13 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the overhead line to pass through, but there is no flexibility for micrositing the alignment in this area.	All alignment options in Section 13 are in close proximity to the consented Clash Gour wind farm development. Based on the current wind turbine layout and proposed substation location, there is sufficient space for the overhead line to pass through, but there is no flexibility for micrositing the alignment in this area.
	There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 13A has the lowest estimated capital cost. Operational costs are estimated to be similar for all options.	Alignment 13B has slightly higher costs than Alignment 13A, with requirement for additional angle towers and slightly higher tree felling costs estimated. Operational costs are estimated to be similar for all options.	Alignment 13C is estimated to have the highest capital cost but there is very little variation in costs for this section, with only approximately 6% increase in costs. This difference is due to increased costs associated with forestry. Operational costs are estimated to be similar for all options.



Section 14

Topic	Alignment 14A	Alignment 14B	Alignment 14C	Alignment 14D	Alignment 14E
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 14A is within 10 km Kellas Oakwood SSSI, Darnaway and Lethen Forest SPA, Gull Nest SSSI, Moidach More SAC/SSSI, Lethenhill SSSI, River Spey SAC/SSSI, Coleburn Pasture SSSI, Quarry Wood SSSI and Burn of Ballintomb SSSI.	Alignment 14B natural heritage designation appraisal is the same as Alignment 14A. Protected Species	Alignment 14C natural heritage designation appraisal is the same as Alignment 14A, with the following exception:	Alignment 14D natural heritage designation appraisal is the same as Alignment 14A, with the following exceptions:	Alignment 14E natural heritage designation appraisal is the same as Alignment 14D. Protected Species
	Buinach and Glenlatterach SSSI is crossed by the alignment on its southern boundary. Moray and Nairn Coast SPA/Ramsar is within 20 km and has the potential to support wintering geese and breeding osprey, though there is likely more suitability of habitat in the surrounding region. There are no non-statutory designations and nature conservation sites within 2 km of the alignment. Protected Species Mature woodland groups and standing trees within the alignment have the potential to support roosting bats. However, the majority of these trees are coniferous which have lower potential suitability to support roosting bats than mature broadleaf areas.	The habitats and their suitability to support protected species within Alignment 14B are largely the same as to those within Alignment 14A. Habitats The habitats appraisal for Alignment 14B is the same as Alignment 14A. BNG Unavoidable irreplaceable blanket bog habitat is present in 100 m. Therefore, the total BU for this alignment option is 295.62 BU. Ornithology	 Moidach More SSSI/SAC is more than 10 km from this option. Protected Species The habitats and their suitability to support protected species within Alignment 14C are largely the same as to those within Alignment 14A. Habitats The habitats appraisal for Alignment 14C is the same as Alignment 14A. BNG Moidach Wood S from the Wood S from th	 Moidach More SSSI/SAC is more than 10 km from this option. Protected Species The habitats and their suitability to support protected species within Alignment 14C are largely the same as to those within Alignment 14A. Habitats 	 The habitats and their suitability to support protected species within Alignment 14E are largely the same as to those within Alignment 14A, with the following exceptions: smaller areas of broadleaf and coniferous woodlands are present in Alignment 14E, decreasing the habitat's suitability for red squirrels, pine marten and bat species; and less agricultural land is present in 14E, reducing the foraging potential for badgers. Habitats
	The edges of wooded areas, semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment 14A, including agricultural land and scrub, have the potential to support foraging badgers. The scrub and dry wooded areas have the potential to provide suitable habitat for sett creation. Where mature and undisturbed, the larger conifer woodlands have the potential to support wildcat, pine marten and red squirrel. The remaining open areas are considered sub-optimal for wildcats. The large watercourses have the potential to support commuting and foraging otters. These watercourses and other smaller channels have the potential to support water voles. Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations, including great crested newts. Heathland and wooded areas may provide habitat for reptiles. The Cold Burn and Burn of Yellowbog have the potential to support migratory salmonids. The smaller freshwater burns have	The ornithology appraisal for Alignment 14B is mostly the same as Alignment 14A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 14B is mostly the same as Alignment 14A, with the following exceptions: 14B crosses six tributaries of the River Lossie — upper catchment (ID: 23043). It also crosses Leanoch Burn - d/s reservoir (ID 23040).	Ornithology The ornithology appraisal for Alignment 14C is the same as Alignment 14A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 14C is the same as Alignment 14B.	 increasing the habitat's suitability for red squirrels, pine marten and bat species; and slightly more riparian deciduous trees, increasing the habitat's suitability for bat species. Habitats No Annex I habitats were identified within 100 m. No woodland listed within the AWI is present within 100 m. The carbon and peatland map of Scotland identified Class 1 and Class 2 peatland within 100 m. BNG Unavoidable irreplaceable blanket bog habitat is present in 100 m. Therefore, the total BU for this alignment option is 304.34 BU. 	The habitats appraisal for Alignment 14E is the same as Alignment 14D. BNG Unavoidable irreplaceable blanket bog habitat is present within 100 m. Therefore, the total BU for this alignment option is 430.23 BU. Ornithology The ornithology appraisal for Alignment 14E is the same as Alignment 14D. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 14D is the same as Alignment 14E.

Topic	Alignment 14A	Alignment 14B	Alignment 14C	Alignment 14D	Alignment 14E
	the potential to support lamprey species. Alignment 14A occurs within the known distribution range for FWPM48.			Ornithology The ornithology appraisal for	
	The varied habitats within Alignment 14A have the potential to support a wide terrestrial and aquatic invertebrate assemblages, including species of conservation concern.			Alignment 14D is the same as Alignment 14A, with the following exception.	
	<u>Habitats</u>			only one curlew breeding pair is located within 500 m of the alignment.	
	HABMOS data identifies the following Annex I habitats within the alignment:			Hydrology, Geology and Hydrogeology The hydrology, geology and	
	 H91C0 - Caledonian forest; H91A0 - Old sessile oak woods; H9180 - Tilio-Acerion forests; 			hydrogeology appraisal for Alignment 14D is the same as Alignment 14A, with the following exceptions:	
	H7130 - Blanket bogs; andH4030 - Dry heaths			Alignment 14D crosses one tributary of the River Lossie – upper catchment (ID: 23043). It also	
	The NWSS identified upland birchwood within 100 m. No woodland listed in the AWI is present.			crosses Leanoch Burn - d/s reservoir (ID 23040);	
	The carbon and peatland map of Scotland identified Class 1 and Class 2 peatland within 100 m, including the presence of irreplaceable blanket bog.			Alignment 14D is only located within Leanoch Burn upper catchment SEPA DWPA;	
	BNG			There are no SEPA abstractions within 1 km of Alignment 14D;	
	Unavoidable irreplaceable blanket bog habitat is present in 100 m. Therefore, the total BU for this alignment option is 342.27 BU.			There are SW abstractions within 1 km.	
	Ornithology				
	Data collected to inform the desk-study found limited information on Target Species.				
	No fight activity surveys were conducted over Section 14, however black grouse and scarce breeding bird surveys were conducted in the moorland associated with Mill Buie and Glenlatterach Reservoir. Occasional sightings of golden eagle, goshawk, red kite and merlin were recorded over the open moorland with more frequent flights of osprey observed over Glenlatterach Reservoir, although there was no evidence recorded of nesting by these species within 1 km of the alignment.				
	Curlew were frequently recorded, with at least two breeding pairs likely to be within 2 km of the alignment.				

⁴⁸ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

Red-throated diver and goldeneye were observed at Glenlatterach Reservoir the beginning of the breeding season. However, no evidence of breeding was observed.				
3				
Other Target Species recorded over this section during the breeding season included golden plover and lapwing, with breeding pairs likely to be present on the wider surrounding moorland over 500 m away. Two male black grouse were identified almost 2 km away.				
Hydrology, Geology and Hydrogeology				
Alignment 14A crosses River Lossie – upper catchment (ID: 23043) and six tributaries of the river. It is underlain by Grampian Group low productive aquifer.				
A small Section of Alignment 14A is located within the catchment of Leanoch Burn and Glenlatterach reservoir, which is designated as a SEPA DWPA for surface water. A small Section of 14A is also located in SW DWPA of Glenlatterach reservoir.				
According to The Moray Council Open Map Data ^{49,} there are Private Water Supplies within 1 km.				
According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.				
<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
There are no World Heritage Sites, GDLs, Scheduled Monuments or Inventory Battlefields within 1 km of the alignment.	The Designation appraisal for Alignment 14B is the same as Alignment 14A, with	The Designation appraisal for Alignment 14C is the same as Alignment 14A, with	The Designation appraisal for Alignment 14D is the same as Alignment 14A, with	The Designation appraisal for Alignment 14E is the same as Alignment 14A, with the following
There are two SMR entries within 100 m, a natural feature and a post-medieval building. Direct impacts can be avoided through micro siting of the alignment. Assets There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are two Listed Buildings (one Category A, one Category B) within 1 km of the alignment. There is the potential for direct impacts through changes within the setting of the Listed Buildings. Kellas House (Category A) gardens are elevated and	Three SMR entries are within 100 m, a natural feature and two postmedieval buildings. Assets The cultural heritage assets appraisal for Alignment 14B is the same as Alignment	 One SMR entry is identified, Loch na Curs building. Assets The cultural heritage assets appraisal for Alignment 14C is the same as Alignment 14A. 	 There are two SMR entries within 100 m, a farmstead and a natural spring. Assets The cultural heritage assets appraisal for Alignment 14D is the same as Alignment 14A, with the following exception: No Listed Buildings are identified within 1 km of the alignment. 	 There are no SMR entries within 100 m. Assets The cultural heritage assets appraisal for Alignment 14E is the same as Alignment 14D.
	breeding pairs likely to be present on the wider surrounding moorland over 500 m away. Two male black grouse were identified almost 2 km away. Hydrology, Geology and Hydrogeology Alignment 14A crosses River Lossie – upper catchment (ID: 23043) and six tributaries of the river. It is underlain by Grampian Group low productive aquifer. A small Section of Alignment 14A is located within the catchment of Leanoch Burn and Glenlatterach reservoir, which is designated as a SEPA DWPA for surface water. A small Section of 14A is also located in SW DWPA of Glenlatterach reservoir. According to The Moray Council Open Map Data ⁴⁹ , there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km. Designations There are no World Heritage Sites, GDLs, Scheduled Monuments or Inventory Battlefields within 1 km of the alignment. There are two SMR entries within 100 m, a natural feature and a post-medieval building. Direct impacts can be avoided through micro siting of the alignment. Assets There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are two Listed Buildings (one Category A, one Category B) within 1 km of the alignment. There is the potential for direct impacts through changes within the setting of the Listed	breeding pairs likely to be present on the wider surrounding moorland over 500 m away. Two male black grouse were identified almost 2 km away. Hydrology. Geology and Hydrogeology Alignment 14A crosses River Lossle — upper catchment (ID: 230-43) and six tributaries of the river. It is underlain by Grampian Group low productive aquifer. A small Section of Alignment 14A is located within the catchment of Leanoch Burn and Glenlatterach reservoir, which is designated as a SEPA DWPA for surface water. A small Section of 14A is also located in SW DWPA of Glenlatterach reservoir. According to The Moray Council Open Map Data ¹⁰ , there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km. Designations There are no World Heritage Sites, GDLs, Scheduled Monuments or Inventory Battlefields within 1 km of the alignment. There are two SMR entries within 100 m, a natural feature and a post-medieval building. Direct impacts can be avoided through micro siting of the alignment. There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are two Listed Buildings (one Category A), one Category B) within 1 km of the alignment. There is the potential for clirect impacts through changes within the setting of the Listed Buildings. Kellas House (Category A) gardens are elevated and look south towards to Alignment 14A, therefore there is	breeding pairs likely to be present on the wider surrounding moorland over 500 m away. Two male black grouse were identified almost 2 km away. Hydrology, Ceology and Hydrogeology Alignment 14A crosses River Lossie — upper catchment (ID: 23043) and six tributaries of the river. It is underlain by Grampian Group low productive aquifer. A small Section of Alignment 14A is located within the catchment of Leanoch Burn and Glenlatterach reservoir, which is designated as a SEPA DWPA for surface water. A small Section of 14A is also located in SW DWPA of Glenlatterach reservoir. According to The Moray Council Open Map Data ¹⁶ there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km. Designations There are no World Heritage Sites, GDLs, Scheduled Monuments or Inventory Battlefields within 1 km of the alignment. There are two SMR entries within 100 m, a natural feature and a post-medieval building. Direct impacts can be avoided through micro siting of the alignment. There are two SMR entries within 100 m, a natural feature and a post-medieval building. Direct impacts can be avoided through micro siting of the alignment. There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are two Listed Buildings (one Category A) one Category B) within 1 km of the alignment. There are two Listed Buildings (one Category A) one Category B) within 1 km of the alignment. There are two Listed Buildings (one Category A) one Category B) within 1 km of the alignment. There are two Listed Buildings (one Category A) one Category B) within 1 km of the alignment. The cultural heritage assets appraisal for Alignment 14A. With the following exception: The cultural heritage assets appraisal for Alignment 14A. The cultural heritage assets appraisal for Alignment 14A	bitreeding pairs likely to be gresent on the wider surrounding moorland over 500 m away. Two male black grouse were identified almost 2 km away. Hydrology, Geology and Hydrogeology Alignment 114A crosses River Lossio – uppor catchment (ID: 2024) and six tributants of the river. It is underlain by Grampian Group low productive agulfer. A small Section of Alignment 114B is located within the catchment of Leanneon Burn and Glentatreach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located in SW DWPA of Glentaterach reservoir, which is designated as a SEPA DWPA for surface water, A small Section of 14A is also located with the following succession of the 15A is the same as Alignm

⁴⁹ The Highland Council Open Map Data. Available at: Private Water Supplies | Private Water Supplies | Highland Council Open Map Data (arcgis.com) (Accessed January 2023).



Topic	Alignment 14A	Alignment 14B	Alignment 14C	Alignment 14D	Alignment 14E
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. Pluscarden Valley and Spey Valley SLAs are located within 5 km. General intervening topography are likely to limit the effects of the alignment on the SLAs. Landscape Character Alignment 14A is located in Upland Moorland and Forestry LCT. This alignment risks being skylined in Mill Buie, however it will be seen in the context of forested slopes and the Cairn Uish wind farm behind. Visual There are few sensitive receptors along the alignment. However, the alignment runs near the summit of Mill Buie risking a short Section being skylined.	Landscape Designations The Landscape Designations appraisal for Alignment 14B is the same as Alignment 14A. Landscape Character The landscape character appraisal for Alignment 14B is mostly the same as Alignment 14A, with the following exception: Initially the alignment starts further southeast of Torwinny, therefore runs more centrally through forestry. Visual Alignment 14B runs south of most sensitive visual receptors through inaccessible forestry and moorland with little sign of recreational activity.	Landscape Designations The Landscape Designations appraisal for Alignment 14C is the same as Alignment 14A. Landscape Character The landscape character appraisal for Alignment 14C is mostly the same as Alignment 14V, with the following exception: • Alignment 14C travels slightly more eastwards, passing south of Coldwells and Yellowbog on slightly higher ground. Visual The visual appraisal for Alignment 13C is the same as Alignment 13B.	Landscape Designations The Landscape Designations appraisal for Alignment 14D is the same as Alignment 14A. Landscape Character The landscape character appraisal for Alignment 14D is mostly the same as Alignment 14E, with the following exceptions: • Alignment 14D diverges around Cairn Uish to push slightly further north. • It follows a less steep course towards the Leanoch Burn. Visual The visual appraisal for Alignment 13D mostly the same as Alignment 13E however it is on slightly higher ground.	Landscape Designations The Landscape Designations appraisal for Alignment 14E is the same as Alignment 14A. Landscape Character The landscape character appraisal for Alignment 14E is mostly the same as Alignment 14C, with the following exception: • Alignment 14E avoids the summit of Mill Buie, hugging Cairn Uish, with the wind farm as a backdrop. Visual Alignment 14E runs further south and generally further from sensitive visual receptors. The alignment is located on slightly lower elevation so reduces the risk of skylining by following a natural notch along the Allt Creach.
Land Use	Agriculture Alignment 14A avoids prime agricultural and Class 3.2 land. Forestry Alignment 14A passes through a significant area of mixed age commercial forestry and interacts with a small area of Buinach and Glenlatterach SSSI, which is designated for its upland oak and birch woodland and lowland dry heath. The estimated area of commercial woodland that would be impacted by Alignment 14A is 47.64 ha, comprising 2.66 ha broadleaved woodland and 44.98 ha coniferous woodland. Of this, 6.81 ha comprises restock of young trees and 14.71 ha is currently felled. Recreation Alignment 14A does not pass near to core paths, long distance routes or cycle routes. The alignment passes north of Glenlatterach Reservoir, which is a known fishing spot.	Agriculture The agriculture appraisal for 14B is the same as 14A. Forestry Alignment 14B passes through a significant area of mixed age commercial forestry and interacts with a small area of Buinach and Glenlatterach SSSI. The estimated area of commercial woodland that would be impacted by Alignment 14B is 44.52 ha, comprising 2.66 ha broadleaved woodland and 41.86 ha coniferous woodland. Of this, 6.82 ha comprises restock of young trees and 27.90 ha is currently felled. Recreation The recreation appraisal for 14B is mostly the same as 14A, however Alignment 14B passes south of Glenlatterach Reservoir.	Agriculture The agriculture appraisal for 14C is the same as 14A. Forestry Alignment 14C passes through a significant area of mixed age commercial forestry and interacts with a small area of Buinach and Glenlatterach SSSI. The estimated area of commercial woodland that would be impacted by Alignment 14C is 48.41 ha, comprising 2.66 ha broadleaved woodland and 45.75 ha coniferous woodland. Of this, 6.35 ha comprises restock of young trees and 27.90 ha is currently felled. Recreation The recreation appraisal for 14C is the same as 14B.	Agriculture The agriculture appraisal for 14D is the same as 14A. Forestry Alignment 14D passed through significant area of mixed age commercial forestry. The estimated area of commercial woodland that would be impacted by Alignment 14E is 45.18 ha coniferous woodland. Of this, 11.62 ha comprises restock of young trees and 30.20 ha is currently felled. Recreation The recreation appraisal for 14D is the same as 14B.	Agriculture The agriculture appraisal for 14E is the same as 14A. Forestry Alignment 14E passes through a significant area of mixed age commercial forestry. The estimated area of commercial woodland that would be impacted by Alignment 14E is 43.09 ha coniferous woodland. Of this, 9.53 ha comprises restock of young trees and 30.20 ha is currently felled. Recreation The recreation appraisal for 14E is the same as 14B.
Planning	Within 500 m lies the following consented planning applications:	The planning appraisal for Alignment 14B is the same as Alignment 14A.	The planning appraisal for Alignment 14C is the same as Alignment 14A.	Within 500 m lies the following consented planning applications:	Within 500 m lies the following consented planning applications:



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Topic	Alignment 14A	Alignment 14B	Alignment 14C	Alignment 14D	Alignment 14E
	 Rothes III Wind Farm (ECU Ref: ECU00000474). Alignment 14A lies within the red line boundary and the area designated for the operations centre, however it avoids the wind turbines and compensatory planting search area. Clash Gour Wind Farm (ECU Ref: ECU00000738). Alignment 14A passes through the red line boundary for the wind farm but avoids any infrastructure and habitat management areas. The following application is known to the planning system, but not yet consented: Kellas Drum Wind Farm (ECU Ref: ECU00005054). Alignment 14A passes through the red line boundary, however avoids the location of wind turbines. 			 Installation of a single meteorological mast (24/00136/APP). Approximately 50 m north. The following application is known to the planning system, but not yet consented: Kellas Drum Wind Farm (ECU Ref: ECU00005054). Alignment 14D passes through the red line boundary and conflicts with the location of the wind turbines. 	 Installation of a single meteorological mast (24/00136/APP). Approximately 450 m north. The following application is known to the planning system, but not yet consented: Kellas Drum Wind Farm (ECU Ref: ECU00005054). Alignment 14E passes through the red line boundary, however avoids the location of wind turbines.
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 14A crosses two minor roads and one restricted local access road. The alignment is in close proximity to Glenlatterach reservoir. Environmental Design	Alignment 14B crosses two minor roads and one restricted local access road. The alignment is in close proximity to Glenlatterach reservoir.	Alignment 14C crosses two minor roads and four restricted local access roads. The alignment is in close proximity to Glenlatterach reservoir.	Alignment 14D crosses one minor road and seven restricted local access roads. The alignment is in close proximity to Glenlatterach reservoir.	Alignment 14E crosses one minor road and seven restricted local access roads. The alignment is in close proximity to Glenlatterach reservoir.
	Over 25% of Alignment 14A is at elevations over 200 m. The	Environmental Design	Environmental Design	Environmental Design	Environmental Design
	maximum elevation is 328 m and is unlikely to cause a significant issue as there is good existing access in the area.	Over 25% of Alignment 14B is at elevations over 200 m. The maximum	Over 25% of Alignment 14C is at elevations over 200 m. The maximum	Over 25% of Alignment 14D is at elevations over 200 m. The maximum	Over 25% of Alignment 14E is at elevations over 200 m. The maximum elevation is 336 m
	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	elevation is 328 m and is unlikely to cause a significant issue as there is good existing access in the area.	elevation is 328 m and is unlikely to cause a significant issue as there is good existing access in the area.	elevation is 333 m and is unlikely to cause a significant issue as there is good existing access in the area.	and is unlikely to cause a significant issue as there is good existing access in the area.
	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	The alignment is more than 10 km from coastal areas so atmospheric pollution is	The alignment is more than 10 km from coastal areas so atmospheric pollution is	The alignment is more than 10 km from coastal areas so atmospheric pollution is	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.
	According to SEPA flood maps, less greater than 25% of each	not a concern.	not a concern.	not a concern.	All alignment options pass through an area
	alignment optionAlignment 14A is located within the 1 in 10 year flood risk zone.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.
	Ground Conditions	presence of unexploded ordnance.	presence of unexploded ordnance.		According to SEPA flood maps, less greater
	Alignment 14A contains a maximum slope of 24 degrees. However this is for a short distance and could potentially be spanned across so is not a significant issue	According to SEPA flood maps, less than 25% of each alignment optionAlignment 14B is located within the 1 in 10 year	According to SEPA flood maps, less than 25% of each alignment optionAlignment 14C is located within the 1 in 10 year	According to SEPA flood maps, greater than 5% of Alignment 14D is located within the 1 in 10 year flood risk zone.	than 25% of each alignment optionAlignment 14E is located within the 1 in 10 year flood risk zone.
	Alignment 14A passes through areas of Class 1 and Class 2	flood risk zone.	flood risk zone.	Ground Conditions	Ground Conditions
	peatland on the slopes of Mill Buie, with estimated peat depths	Ground Conditions	Ground Conditions	Alignment 14D contains a maximum	Alignment 14E contains a maximum slope of
	microsite towers to avoid this area completely.	slope of 25 degrees. However this is for a	Alignment 14C contains a maximum slope of 25 degrees. However this is for a	slope of 17 degrees which is not considered to be an issue.	17 degrees which is not considered to be an issue.
	Construction and Maintenance		short distance and could potentially be	Alignment 14D passes through areas of	Alignment 14E passes through a longer
	There is an existing network of tracks and roads within 1 km of Alignment 14A.	spanned across so is not a significant issue	spanned across so is not a significant issue	Class 1 and Class 2 peatland to the north of Cairn Uish, with estimated peat depths	Section of Class 1 and Class 2 peatland to the north of Cairn Uish, with estimated peat
				of 0.5 m to greater than 1.5 m. It is	depths of 0.5 m to greater than 1.5 m. It is



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Topic	Alignment 14A	Alignment 14B	Alignment 14C	Alignment 14D	Alignment 14E
	Alignment 14A requires four angle towers. Proximity There are no residential properties located within 170 m of Alignment 14A. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development (ECU Ref: ECU00005054). Alignment 14A is located just over 3 x rotor diameters from one of the proposed turbine locations, however if the turbine was microsited under its limit of deviation this could impact the viability of this alignment option. Alignment 14A would however not impact on the previously consented Kellas wind farm scheme (Moray Council ref: 13/00615/EIA). All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development (ECU Ref: ECU00003441). Alignment 14A is located less than 3 x rotor diameters from one of the proposed turbine locations. Alignment 14A would however not impact on the previously consented Kellas wind farm scheme (Moray Council ref: 13/00615/EIA). There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Alignment 14B passes through areas of Class 1 and Class 2 peatland on the slopes of Mill Buie, with estimated peat depths ranging from 0.5 to 1.0 m. It is unlikely that it will be possible to microsite towers to avoid this area completely. Construction and Maintenance There is an existing network of tracks and roads within 1 km of Alignment 14B. Alignment 14B requires three angle towers. Proximity There is one residential property located within 170 m of Alignment 14B. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development. Alignment 14B is located just over 3 x rotor diameters from one of the proposed turbine locations, however if the turbine was microsited under its limit of deviation this could impact the viability of this alignment option. Alignment 14B would however not impact on the previously consented Kellas wind farm scheme. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development. Alignment 14B is located less than 3 x rotor diameters from one of the proposed Kellas Drum wind farm development. Alignment 14B is located less than 3 x rotor diameters from one of the previously consented Kellas wind farm scheme. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Alignment 14C passes through areas of Class 1 and Class 2 peatland on the slopes of Mill Buie, with estimated peat depths ranging from 0.5 to 1.0 m. It is unlikely that it will be possible to microsite towers to avoid this area completely. Construction and Maintenance There is an existing network of tracks and roads within 1 km of Alignment 14C. Alignment 14C requires three angle towers. Proximity There is one residential property located within 170 m of Alignment 14C. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development. Alignment 14C is located just over 3 x rotor diameters from one of the proposed turbine locations, however if the turbine was microsited under its limit of deviation this could impact the viability of this alignment option. Alignment 14C would however not impact on the previously consented Kellas wind farm scheme. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development. Alignment 14C is located less than 3 x rotor diameters from one of the proposed turbine locations. Alignment 14C would however not impact on the proposed turbine locations. Alignment 14C would however not impact on the proposed turbine locations. Alignment 14C would however not impact on the previously consented Kellas wind farm scheme. There is a radio communications mast located approximately 80 m from Alignment 14C. There are no known urban areas or metallic pipelines that will impact on the alignment option.	unlikely that it will be possible to microsite towers to avoid this area completely. Construction and Maintenance There is an existing network of tracks and roads within 1 km of Alignment 14D. Alignment 14D requires three angle towers. Proximity There is one residential property located within 170 m of Alignment 14D. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development. Alignment 14D is located less than 3 x rotor diameters from four of the proposed turbine locations. Alignment 14D would however not impact on the previously consented Kellas wind farm scheme. There is a radio communications mast located approximately 80 m from Alignment 14D. There are no known urban areas or metallic pipelines that will impact on the alignment option.	unlikely that it will be possible to microsite towers to avoid this area completely. Construction and Maintenance There is an existing network of tracks and roads within 1 km of Alignment 14E. Alignment 14E requires three angle towers. Proximity There is one residential property located within 170 m of Alignment 14E. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development. Alignment 14E is located less than 3 x rotor diameters from two of the proposed turbine locations. Alignment 14E would also impact on four turbines associated with the previously consented Kellas wind farm scheme. All alignment options in Section 14 are in close proximity to the proposed Kellas Drum wind farm development. Alignment 14E is located less than 3 x rotor diameters from two of the proposed turbine locations. Alignment 14E would also impact on four turbines associated with the previously consented Kellas wind farm scheme. There is a radio communications mast located approximately 80 m from Alignment 14E. There are no known urban areas or metallic pipelines that will impact on the alignment option.



Topic	Alignment 14A	Alignment 14B	Alignment 14C	Alignment 14D	Alignment 14E
Economic	Alignment 14A is the highest capital cost option with costs more than 150% of the lowest cost option. The substantially higher cost is driven by an increased line length, in comparison to Alignment 14E. In addition, the costs associated with forestry are highest for this option. Operational costs are estimated to be similar for all options.	Alignment 14B is the second lowest cost option but is still just over 140% of the lowest cost option. The line is 3 km longer than Alignment 14E (more than 40% increase in length), significantly impacting costs associated with construction of towers, the cost of conductor and additional access tracks needed to enable construction. Operational costs are estimated to be similar for all options.	As for Alignment 14B, the high cost is driven by an increase in line length of more than 40%. Operational costs are estimated to be similar for all options.	Alignment 14D is slightly higher in cost than the lowest estimated capital cost (roughly 5% increase), due to additional line length and a slight increase in costs associated with forestry. Operational costs are estimated to be similar for all options.	Alignment 14E has the lowest estimated capital cost. Operational costs are estimated to be similar for all options.

Section 15

Topic	Alignment 15A	Alignment 15B	Alignment 15C
Topic Natural Heritage	Designations Alignment 15A is within 10 km of Kellas Oakwood SSSI, Lower River Spey- Spey Bay SAC/Lower River Spey SSSI, River Spey SSSI/SAC, Gull Nest SSSI, Coleburn Pasture SSSI, Lethenhill SSSI, Quarry Wood SSSI, Buinach and Glenlatterach SSSI, Loch Oire SSSI and Burn of Ballintomb SSSI. Sections of 15A are upstream of Glenlatterach Reservoir which sits immediately upstream of Buinach and Glenlatterach SSSI. There is a risk of accidental pollution reaching the SSSI. Moray and Nairn Coast SPA/Ramsar is within 20 km and has the potential to support wintering geese and breeding osprey, though there is likely more suitability of habitat in the surrounding region. There are no non-statutory designations and nature conservation sites within 2 km of the alignment. Protected Species Mature woodland groups and standing trees within the alignment have the potential to	Alignment 15B Designations Alignment 15B natural heritage designation appraisal is the same as Alignment 15A. Protected Species The habitats and their suitability to support protected species within Alignment 15B are largely the same as to those within Alignment 15A, with the following exception: • A smaller area of coniferous woodland is present in 15B, decreasing the habitat's suitability for red squirrels and pine marten, as well as bat species to a more limited degree. Habitats The habitats appraisal for Alignment 15B is mostly the same as Alignment 15A, with the following exception:	Alignment 15C Designations Alignment 15C natural heritage designation appraisal is the same as Alignment 15A. Protected Species The habitats and their suitability to support protected species within Alignment 15C are largely the same as to those within Alignment 15B. Habitats The habitats appraisal for Alignment 15C is the same as Alignment 15B. BNG Unavoidable irreplaceable blanket bog habitat is present in 100 m. Therefore, the total BU for this alignment option is 438.65 BU. Ornithology
	support roosting bats. However, the majority of these trees are coniferous which have lower potential suitability to support roosting bats than mature broadleaf areas. The edges of wooded areas, semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats.	 The carbon and peatland map of Scotland identified Class 1 peat overlapping the alignment at the west of the option. BNG	The ornithology appraisal for Alignment 15C is the same as Alignment 15B. Hydrology. Geology and Hydrogeology
	The habitats within Alignment 15A, including agricultural land and scrub, have the potential to support foraging badgers. The scrub and dry wooded areas have the potential to provide suitable habitat for sett creation.	Unavoidable irreplaceable blanket bog habitat is present in 100 m. Therefore, the total BU for this alignment option is 267.17 BU.	The hydrology, geology and hydrogeology appraisal for Alignment 15C is the same as Alignment 15A.
	Where mature and undisturbed, the larger conifer woodlands have the potential to support wildcat, pine marten and red squirrel. The large watercourses have the potential to support commuting and foraging otters. These watercourses and other smaller channels have the potential to support water voles.	Ornithology The ornithology appraisal for Alignment 15B is mostly the same as Alignment 15A, with the following exception: only one curlew breeding pair was observed within 1 km of the alignment.	

Topic	Alignment 15A	Alignment 15B	Alignment 15C
	Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations. Heathland and scrub areas may provide habitat for reptiles.	Hydrology, Geology and Hydrogeology	
	The large watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 15A occurs within the known distribution range for FWPM ⁵⁰ .	The hydrology, geology and hydrogeology appraisal for Alignment 15B is mostly the same as Alignment 15A, with the following exceptions: 15B is not located within a SEPA DWPA for surface water or a SW	
	The varied habitats within Alignment 15A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.	DWPA.	
	<u>Habitats</u>		
	HABMOS data identifies no Annex I habitats within the alignment.		
	Woodland listed in the AWI is present but is Category 2b LEPO woodland and no considered irreplaceable habitat.		
	The carbon and peatland map of Scotland identified a small area of Class 1 peat within 100 m. However, this could potentially be avoided.		
	BNG		
	There is no unavoidable irreplaceable habitat present in 100 m. Therefore, no BU have been calculated for this alignment.		
	Ornithology		
	Data collected as part of the desk-study found limited information on Target Species in Section 15.		
	No flight activity surveys were conducted over Section 15, however a programme of black grouse and scarce breeding bird surveys were conducted over the open moorland to the east of Glenlatterach Reservoir. Whilst there were sightings of osprey and merlin, there was no evidence of nesting observed for these species within 1 km.		
	Curlew were frequently recorded, with two breeding pairs likely to be within 1 km of the alignment.		
	Golden plover were rarely recorded over Section 15 during the breeding season, leading to the conclusion that this species was not breeding.		
	Hydrology, Geology and Hydrogeology		
	Alignment 15A crosses Leanoch Burn - d/s reservoir (ID 23040) and one tributary of the river, Gedloch Burn (ID: 23042) and Linkwood Burn (ID: 23034). It is underlain by Grampian Group, a low productive aquifer, and Middle Old Red Sandstone, a moderately productive aquifer.		
	A Section of Alignment 15A is located within the catchment of Leanoch Burn, which is designated as a SEPA DWPA for surface water. A Section of 14A is also located in SW DWPA of Glenlatterach reservoir.		
	According to Moray Council Data, there are Private Water Supplies within 1 km.		
	According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.		

 $^{^{50}}$ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora

^{(92/43/}EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (Margaritifera margaritifera).



Topic	Alignment 15A	Alignment 15B	Alignment 15C
Cultural Heritage Landscape and Visual	Designations There are no World Heritage Sites, GDLs, Scheduled Monuments or Inventory Battlefields within 1 km of the alignment. There are two SMR entries within 100 m, a cairnfield and tracks. Direct impacts can be avoided through micro siting of the alignment. Assets There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. There are four Category B Listed Buildings within 1 km of the alignment. The alignment may impact the setting however due to intervening topography, the impacts are likely to lead to significant effects. Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. Pluscarden Valley and Spey Valley SLAs are located within 5 km. General intervening topography are likely to limit the effects on the SLAs. Landscape Character Alignment 15A is located in Upland Moorland and Forestry LCT. This alignment generally runs reasonably with the grain of the landscape. The alignment zigzags across the landscape to maintain it on lower slopes and crosses the A941 and Glen of Rothes at an angle, in close proximity to a number of properties. Visual	Designations The Designation Appraisal for Alignment 15B is the same as Alignment 15A, with the following exception: Two SMR entries are within 100 m, a standing stone and a track. Assets The cultural heritage assets appraisal for Alignment 15B is the same as Alignment 15A. Landscape Designations The Landscape Designations appraisal for Alignment 15B is the same as Alignment 15A. Landscape Character The landscape character appraisal for Alignment 15B is mostly the same as Alignment 15A, however, follows a different alignment following steeper terrain south of Hart Hill. Visual Alignment 15B will be skylined due to its location on higher ground to the south of Lochbuie and Hart Hill. There are fewer properties in close proximity, being located north of the	Designations The Designation Appraisal for Alignment 15C is the same as Alignment 15A, with the following exception: One SMR entry is identified, a standing stone. Assets The cultural heritage assets appraisal for Alignment 15C is the same as Alignment 15A. Landscape Designations The Landscape Designations appraisal for Alignment 15C is the same as Alignment 15A. Landscape Character The landscape character appraisal for Alignment 15C is mostly the same as Alignment 15B, however Alignment CB10C runs south of Mill Our over slightly higher ground before following the same alignment as Alignment CB10B from south of Lochbuie eastwards. Visual The visual appraisal for Alignment 15C is mostly the same as Alignment 15B. However, Alignment 15C runs along higher ground at Mill Our and
	Visual There are scattered properties along the length of the alignment. Properties on the lower slopes of Lochbuie and Hart Hill risk becoming sandwiched between the existing OHL and the proposed alignment. It is likely that Alignment 15A will be skylined near Hart Hill. This may be limited by forestry and the topography of Hart Hill. The alignment would be clearly visible from the A941 where it crosses Glen of Rothes and for properties immediately north along the A941 as well as from Coleburn Distillery.	There are fewer properties in close proximity, being located north of the forested ridgelines of Lochbuie and Hart Hill. The crossing of the A941enables greater distance between the alignment and the nearest property.	15B. However, Alignment 15C runs along higher ground at Mill Our and therefore risks being skylined here.
Land Use	Alignment 15A avoids prime agricultural and Class 3.2 land. Forestry Alignment 15A passes through significant areas of commercial forestry and a small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 15A is 31.95 ha, comprising 0.63 ha broadleaved woodland and 31.32 ha coniferous woodland. Of this, 0.70 ha is currently felled.	Agriculture Alignment 15B passes through a small Section of Class 3.2 land. This is potentially avoidable. Forestry Alignment 15B passes through significant areas of commercial forestry and a small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 15B is 24.18 ha, comprising 0.02 ha broadleaved woodland and 24.16 ha coniferous woodland. Of this, 0.05 ha comprises restock of young trees and 13.66 ha is currently felled.	Agriculture The agriculture appraisal for 15C is the same as 15B. Forestry Alignment 15C passes through significant areas of commercial and a small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 15C is 24.18 ha, comprising 0.02 ha broadleaved woodland and 24.16 ha coniferous woodland. Of this, 0.05 ha comprises restock of young trees and 13.66 ha is currently felled.



Topic	Alignment 15A	Alignment 15B	Alignment 15C
	Recreation	Recreation	Recreation
	Alignment 15A passes over a core path, east of Mill Our. The eastern point of this alignment is southeast of Coleburn Distillery. The Highland Gliding Club lies approximately 1.6 km north of this option. There may be overlap with the alignment and airspace used for low gliding.	The recreation appraisal for Alignment 15B is mostly the same as 15A, however Alignment 15B lies 2.5 km from the Highland Gliding Club.	The recreation appraisal for Alignment 15C is the same as 15B.
	There are no interactions with long distance routes, cycle routes or known areas for commercial highland sports.		
Planning	Within 500 m lies the following consented planning applications:	The planning appraisal for Alignment 15B is the same as Alignment 15A	The planning appraisal for Alignment 15B is the same as Alignment 15A
	Rothes III Wind Farm (ECU Ref: ECU00000474). Consented 21/10/22. Alignment 15A lies within the red line boundary but avoids any infrastructure and compensatory planting areas.		
	The following application is known to the planning system, but not yet consented:		
	Kellas Drum Wind Farm (ECU Ref: ECU00005054). Approximately 300 m west.		
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 15A crosses the A941 and two restricted local access roads.	Alignment 15B crosses the A941 and two restricted local access roads.	Alignment 15C crosses the A941 and two restricted local access roads.
	Environmental Design	Environmental Design	Environmental Design
	Over 25% of Alignment 15A is at elevations over 200 m. The maximum elevation is 272 m and is unlikely to cause a significant issue as there is good existing access in the area.	Over 25% of Alignment 15B is at elevations over 200 m. The maximum elevation is 273 m and is unlikely to cause a significant issue as there is good existing access in the area.	Over 25% of Alignment 15C is at elevations over 200 m. The maximum elevation is 295 m and is unlikely to cause a significant issue as there is good existing access in the area.
	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric	The alignment is more than 10 km from coastal areas so atmospheric
	All alignment options pass through an area recorded as a historical military training area so	pollution is not a concern.	pollution is not a concern.
	have a moderate risk for presence of unexploded ordnance. According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.	All alignment options pass through an area recorded as a historical military training area so have a moderate risk for presence of unexploded ordnance.
	Ground Conditions	According to SEPA flood maps, greater than 5% of each alignment option	According to SEPA flood maps, greater than 5% of each alignment option
	Alignment 15A contains a maximum slope of 26 degrees. However this is for less than a	is located within the 1 in 10 year flood risk zone.	is located within the 1 in 10 year flood risk zone.
	single span length so is not a significant issue.	Ground Conditions	Ground Conditions
	Alignment 15A does not pass through any known areas of peatland.	Alignment 15B contains a maximum slope of 36 degrees. This steeper section is for less than a span length on the approach to Hart Hill, but it may restrict tower placement and pose some access challenges in this	Alignment 15C contains a maximum slope of 34 degrees. This steeper section is for less than a span length on the approach to Hart Hill, but it may restrict tower placement and pose some access challenges in this
	Construction and Maintenance		
	There is an existing network of tracks and roads within 1 km of all alignment options in	area.	area.
	Section 15. Alignment 15A requires three angle towers.	Alignment 15B passes through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging from 0.5 to 1.5 m.	Alignment 15C passes through areas of Class 1 and Class 2 peatland, with estimated peat depths ranging from 0.5 to 1.5 m.
	Proximity	Construction and Maintenance	Construction and Maintenance
	There are seven residential properties located within 170 m of Alignment 15A and one property located within 100 m.	There is an existing network of tracks and roads within 1 km of all alignment options in Section 15.	There is an existing network of tracks and roads within 1 km of all alignment options in Section 15.
		Alignment 15B requires three angle towers.	Alignment 15C requires three angle towers.



Topic	Alignment 15A	Alignment 15B	Alignment 15C
	All alignment options in Section 15 are in close proximity to the proposed Kellas Drum wind farm development (ECU Ref: ECU00003441), but are not within 3 x rotor diameter of any of the proposed turbine locations. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There are no residential properties located within 170 m of Alignment 15B. All alignment options in Section 15 are in close proximity to the proposed Kellas Drum wind farm development (ECU Ref: ECU00003441), but are not within 3 x rotor diameter of any of the proposed turbine locations. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There are no residential properties located within 170 m of Alignment 15C. All alignment options in Section 15 are in close proximity to the proposed Kellas Drum wind farm development (ECU Ref: ECU00003441), but are not within 3 x rotor diameter of any of the proposed turbine locations. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 15A has the highest tree felling cost for this Section, more than double the lowest cost option. Alignment 15A is greater than 120% of the lowest cost option. Operational costs are estimated to be similar for all options.	Alignment 15B has the lowest estimated capital cost. Operational costs are estimated to be similar for all options.	Alignment 15C is 1 km longer than the cheapest option but the costs associated with required tree felling are lower than for Option A, keeping it less than 120% of the lowest cost option. Operational costs are estimated to be similar for all options.

Section 16

Topic	Alignment 16A	Alignment 16B	Alignment 16C
Natural Heritage	Designations Alignment 16A is within 10 km Moray and Nairn Coast SPA/Ramsar, Kellas Oakwood SSSI, Lower River Spey- Spey Bay SAC/Lower River Spey SSSI, River Spey SSSI/SAC, Gull Nest SSSI, Quarry Wood SSSI, Buinach and Glenlatterach SSSI, Loch Spynie SSSI/SPA/Ramsar and Loch Oire SSSI. The alignment is adjacent to Coleburn Pasture SSSI. Moray and Nairn Coast and Loch Spynie SPA/Ramsar has the potential to support wintering geese and breeding osprey, though there is likely more suitability of habitat in the surrounding region. There are no non-statutory designations or nature conservation sites within 2 km of the alignment. Protected Species Small areas of woodland are present within the alignment, as well as a number of farm and residential structures. These have the potential to support roosting bats. The majority of trees are coniferous, with a limited area of broadleaf trees, which have lower potential suitability to support roosting bats. The edges of wooded areas, semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment 16A, including agriculture and scrub, have the potential to support foraging badgers.	Designations Alignment 16B natural heritage designation appraisal is mostly the same as Alignment 16A. However, Spey Bay SSSI is also within 10 km of the alignment. Protected Species The habitats and their suitability to support protected species within Alignment 16B are largely the same as to those within Alignment 16A. However, 16B has greater suitability to support red squirrels, pine marten and, to a lesser degree, bat species, due to larger area of coniferous woodland. Habitats The habitats appraisal for Alignment 16B is the same as Alignment 16A. BNG The BNG appraisal for Alignment 16B is the same as Alignment 16A. Ornithology The ornithology appraisal for Alignment 16B is the same as Alignment 16A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 16B is mostly the same as Alignment 16A. However, a very small part of Alignment 16B is located within the SW DWPA for the Spey boreholes and Ordiequish Collecting Chambers. There are also no SEPA water abstractions within 1 km.	Alignment 16C natural heritage designation appraisal is mostly the same as Alignment 16B with the addition: • Spey Bay SSSI (9.1 km northeast). There are also small differences in distances to some sites. Protected Species The habitats and their suitability to support protected species within Alignment 16C are largely the same as to those within Alignment 16A. However, 16C has greater suitability to support bat species due to larger area of broadleaf dominated woodland. Habitats The habitats appraisal for Alignment 16C is mostly the same as Alignment 16A. However, NWSS identifies only upland birchwood in the alignment. BNG The BNG appraisal for Alignment 16C is the same as Alignment 16A. Ornithology The ornithology appraisal for Alignment 16C is the same as Alignment 16A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 16C is the same as A

Topic	Alignment 16A	Alignment 16B	Alignment 16C
	Where mature and undisturbed, the larger conifer woodlands have the potential to support foraging badger. The scrub areas and dry wooded areas have the potential to provide suitable habitat for sett creation.		
	Where mature and undisturbed, the large conifer woodlands also have the potential to support wildcat, pine marten and red squirrel. The remaining open areas are considered sub-optimal for wildcats. Potential pine marten scat was observed within 40 m of the alignment.		
	The Logie Burn has the potential to support commuting and foraging otters. These watercourses and other smaller channels have the potential to support water voles.		
	Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations. No habitat to support the great crested newt was identified. Heathland and scrub areas may provide habitat for reptiles.		
	The Logie Burn has the potential to support migratory salmonids. A waterfall on the River Lossie acts as a barrier to fish passage further upstream. The smaller freshwater burns have the potential to support lamprey species. Alignment 16A occurs within the known distribution range for FWPM 51.		
	The varied habitats within Alignment 16A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.		
	<u>Habitats</u>		
	HABMOS data identifies the following Annex I habitats within the alignment:		
	H4010 – Wet heaths; and		
	H6230 – Species-rich Nardus grassland.		
	The NWSS identified upland birchwood and upland mixed ashwood within 100 m. Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable habitat.		
	The carbon and peatland map of Scotland does not identify Class 1 or Class 2 peatland within 100 m.		
	BNG		
	There is no unavoidable irreplaceable habitat present within 100 m, therefore no BU were calculated.		
	<u>Ornithology</u>		
	Data collected as part of the desk-study found limited information on Target Species in Section 16.		
	No flight activity surveys were recorded over Section 16, although a programme of black grouse and scarce breeding bird surveys were conducted		

European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).



Topic	Alignment 16A	Alignment 16B	Alignment 16C
	over the open moorland associated with Brown Muir. The only Target Species recorded was curlew were recorded, with a possible breeding territory identified within 1 km of the alignment.		
	Hydrology, Geology and Hydrogeology		
	Alignment 16A crosses the Linkwood Burn (ID: 23034) and Stipe Burn (ID: 23014). It is underlain by Middle Old Red moderately productive aquifer.		
	Alignment 1311A is not located within any SEPA or surface water DWPA. 16A is not located within a SW DWPA.		
	According to Moray Council data, there are Private Water Supplies within 1 km.		
	According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.		
Cultural	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
Heritage	There are no World Heritage Sites, GDLs, Scheduled Monuments, or Inventory	The Designation Appraisal for Alignment 16B is mostly the same as Alignment	The Designation Appraisal for Alignment 16C is the same as Alignment 16B.
	Battlefields within 1 km.	16A. However, there is no SMR entry for Alignment 16B.	<u>Assets</u>
	There is one SMR entry: Greenside, farmstead (Canmore ID 143193), which can be avoided through micro siting of the alignment option.	Assets The cultural heritage assets apprecial for Alignment 1/D is the come as	The cultural heritage assets appraisal for Alignment 16C is mostly the same as Alignment 16A. However, due to the intervening topography for Alignment 16C, any potential impacts on Listed Buildings would be reduced.
	<u>Assets</u>		
	There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment.		
	Within 1 km, there are four Category B Listed Buildings. There is the potential for impacts through changes to the setting of the Listed Buildings as the alignment options would be visible on the west facing slopes overlooking the Listed Buildings.		
Landscape and	Landscape Designations	Landscape Designations	Landscape Designations
Visual	There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment.	The Landscape Designations appraisal for Alignment 16B is the same as Alignment 16A.	The Landscape Designations appraisal for Alignment 16C is the same as Alignment 16A.
	The Spey Valley SLA is located 1.5 km from the alignment. The surrounding	Landscape Character	Landscape Character
	topography means the special qualities of the SLA are unlikely to be affected. <u>Landscape Character</u>	The landscape character appraisal for Alignment 16B is mostly the same as Alignment 16B. However, the alignment of Alignment 16B runs against the grain	The landscape character appraisal for Alignment 16C is mostly the same as Alignment 16A. However, Alignment 16C follows a higher alignment along Brown
	Alignment 16A is located in Upland Moorland and Forestry and Rolling Farmland and Forests - Moray & Nairn LCT.	of the landscape along Bown Muir slopes. It remains below 250 m so should remain backdropped by Brown Muir.	Muir and therefore risks being skylined against the exposed flanks of the mountain.
	The alignment passes a small number of properties in close proximity but runs	<u>Visual</u>	<u>Visual</u>
	largely with the grain of the landscape in close parallel to the existing OHL. It is therefore unlikely to significantly compromise the characteristic qualities of the landscape.	Alignment 16B sits higher in the landscape than Alignment 16A. Alignment 16B would result in the slight 'boxing in' of properties at Greenside and Moniemouies, and would pass directly in front of Moniemouies Farm.	Alignment 16C is located on higher ground and results in the 'boxing in' of a couple of properties at Greenside and Moniemouies. It risks being skylined in views from the north and west, including from the A941 and Fogwatt. Forestry at
	<u>Visual</u>		Teindland would allow a small degree of screening.
	Alignment 16A mostly close parallels the existing OHL.		



Topic	Alignment 16A	Alignment 16B	Alignment 16C
	There are scattered residential properties along the length of the alignment to the west and north. The property at Humbreck would be impacted with two lines located behind it.		
	No properties would become 'boxed in' by Alignment 16A, but properties to the north of the existing 275 kV OHL would face the alignment at close proximity.		
Land Use	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 16A passes through Class 3.2 land which is unavoidable. It does not pass through any prime agricultural land.	The agriculture appraisal for Alignment 16B is the same as alignment 16A. Forestry	The agriculture appraisal for Alignment 16C is the same as alignment 16A. Forestry
	<u>Forestry</u>	Alignment 16B passes through and close to significant areas of commercial	Alignment 16C passes through and close to significant areas of commercial
	Alignment 16A passes through a small island of commercial forestry and	forestry and passes through native broadleaved woodland.	forestry and passes through native broadleaved woodland.
	passes close to areas of commercial forestry. It also passes through a small area of broadleaved woodland.	The estimated area of commercial woodland that would be impacted by Alignment 16B is 10.86 ha, comprising 2.86 ha broadleaved woodland and	The estimated area of commercial woodland that would be impacted by Alignment 16C is 14.07 ha, comprising 5.81 ha broadleaved woodland and 8.26 ha
	The estimated area of commercial woodland that would be impacted by	8.00 ha coniferous woodland. Of this, 0.43 ha comprises restock of young trees.	coniferous woodland.
	Alignment 16A is 3.34 ha, comprising 1.10 ha broadleaved woodland and 2.24 ha coniferous woodland.	Recreation	<u>Recreation</u>
	The alignment runs parallel to the existing 275 kV OHL, reducing the requirement for woodland removal on the north side of the operational corridor between the new alignment and the existing OHL.	The recreation appraisal for Alignment 16B is the same as alignment 16A.	The recreation appraisal for Alignment 16C is the same as alignment 16A.
	Recreation		
	Alignment 16A does not pass over core paths, long distance routes, national cycle routes or areas known for commercial highland sports.		
Planning	Within 500 m lie the following consented planning applications:	The planning appraisal for Alignment 16B is the same as Alignment 16A.	There are no consented planning applications within 500 m.
	• Erection of a dwellinghouse (21/00738/APP). Approximately 400 m north.		The following application is known to the planning system, but not yet consented:
	The following application is known to the planning system, but not yet consented:		Teindland Wind Farm Scoping (ECU Ref - ECU00004556). Approx 350 m east.
	Teindland Wind Farm Scoping (ECU Ref - ECU00004556). Approximately 350 m east.		
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 16A crosses two minor roads.	Alignment 16B crosses one local access road and one restricted local access	Alignment 16C crosses one local access road and one restricted local access road.
	Environmental Design	road.	Environmental Design
	Less than 25% of Alignment 16A is at elevations over 200 m. The maximum elevation is 222 m and is unlikely to cause a significant issue.	Environmental Design Over 25% of Alignment 16B is at elevations over 200 m. The maximum elevation	Over 25% of Alignment 16C is at elevations over 200 m. The maximum elevation is 291 m and is unlikely to cause a significant issue.
	The alignment is more than 10 km from coastal areas so atmospheric pollution	Over 25% of Alignment 16B is at elevations over 200 m. The maximum elevation is 244 m and is unlikely to cause a significant issue.	The alignment is more than 10 km from coastal areas so atmospheric pollution is
	is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution	not a concern.
	There are no reports of contaminated land within Section 16.	is not a concern.	There are no reports of contaminated land within Section 16.
	According to SEPA flood maps, less than 2% of each alignment option is	There are no reports of contaminated land within Section 16.	According to SEPA flood maps, less than 2% of each alignment option is located
	located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 2% of each alignment option is located within the 1 in 10 year flood risk zone.	within the 1 in 10 year flood risk zone.



Topic	Alignment 16A	Alignment 16B	Alignment 16C
	Ground Conditions	Ground Conditions	Ground Conditions
	Alignment 16A contains a maximum slope of 25 degrees for distances greater than a single span length, which could pose challenges for tower placement	Alignment 16B contains a maximum slope of 24 degrees for distances greater than a single span length, which could pose challenges for tower placement	Alignment 16C contains a maximum slope of 31 degrees. This could pose challenges for tower placement and access.
	and access. Alignment 16A does not pass through any known areas of peatland.	and access. Alignment 16B does not pass through any known areas of peatland.	Alignment 16C does not pass through any known areas of peatland.
	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance The Section on the northern slopes of Brown Muir has no existing network of
	There is an existing network of tracks and roads within 1 km of Alignment 16A.	There is an existing network of tracks and roads within 1 km of Alignment 16B.	tracks or roads within 1 km, making access to this Section of Alignment 16C more challenging.
	Alignment 16A requires three angle towers. Proximity	Alignment 16B requires four angle towers. Proximity	Alignment 16C requires three angle towers.
	There is one residential property located within 170 m of Alignment 16A.	There is one residential property located within 170 m of Alignment 16B.	Proximity
	There are no known wind farms, communication masts, urban areas or	There are no known wind farms, communication masts, urban areas or metallic	There are no residential properties located within 170 m of Alignment 16C.
	metallic pipelines that will impact on the alignment option.	pipelines that will impact on the alignment option.	There are no known wind farms, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 16A has the lowest estimated capital cost. Operational costs are estimated to be similar for all options.	Alignment 16B has 20% higher costs than Alignment 16A. It has a greater length than Alignment 16A, an additional angle tower and triple the forestry costs.	Alignment 16C is similar in costs to Alignment 16A for all aspects except forestry. Although the cost differential for felling is significant (close to four times the cost),
		Operational costs are estimated to be similar for all options.	in comparison to total cost this is not significant and remains under 10% difference in costs.
			Operational costs are estimated to be similar for all options.

Section 17

Topic	Alignment 17A	Alignment 17B	Alignment 17C
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 17A lies within 10 km of Moray and Nairn Coast SPA/Ramsar, Lower River Spey-Spey Bay SAC/Lower River Spey SSSI, Spey Bay SSSI, River Spey SSSI/SAC, Gull Nest SSSI, Coleburn Pasture SSSI, Quarry Wood SSSI, Buinach and Glenlatterach SSSI, Loch Spynie SSSI/SPA/Ramsar, and Loch Oire SSSI. Whilst 17A is within the foraging range for some of the qualifying goose species associated with the Moray and Nairn Coast SPA/Ramsar and Loch Spynie SPA/Ramsar, it is relatively unlikely that the land in this option would be used by these birds as there is more suitable habitat outside of the alignment option. However, there is suitable habitat for osprey, another qualifying species of the Moray and Nairn Coast SPA/Ramsar. As Alignment 17A is within 25 m of the River Spey SSSI/SAC there is a risk of adverse effects, through accidental pollution and disturbance to qualifying species of the River Spey SAC/SSSI in particular, with disturbance to species such as otter	 The natural heritage designation appraisal for Alignment 17B is the same as Alignment 17A. Protected Species The habitats and their suitability to support protected species within Alignment 17B are largely reflective of those within Alignment 17A, with the following exceptions: Whilst avoiding Blackburn Wood and Trochelhill Wood, it crosses a larger area of woodland at Badentinan Wood and a small Section of mixed broadleaf trees at the Red Burn, north of Orbliston. This increases the habitat's suitability for red squirrels; pine marten; and bat species. Habitats HABMOS data identifies the following Annex I habitats within the alignment: 	The natural heritage designation appraisal for Alignment 17C is the same as Alignment 17A. Protected Species The habitats and their suitability to support protected species within Alignment 17C are largely reflective of those within Alignment 17B, with the following exceptions: It will potentially impact a smaller portion of broadleaf trees by crossing a different Section of the Red Burn, decreasing the habitat suitability for bat species. Habitats The Habitat appraisal for Alignment 17B is the same as Alignment 17C.
	likely. This proximity means that there is also a higher risk of pollution events affecting downstream designated sites: Lower River Spey-Spey Bay SAC/Lower	H6230 - Species-rich Nardus grassland.	



Topic	Alignment 17A	Alignment 17B	Alignment 17C
	River Spey SSSI and habitats that support qualifying species of Moray and Nairn	The NWSS identified lowland mixed deciduous woodland within 100 m.	BNG
	Coast SPA/Ramsar. Protected Species	Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable.	There is no unavoidable irreplaceable habitat present within this alignment option. Therefore, no BU were calculated.
	Coast SPA/Ramsar.	Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m. BNG There is no unavoidable irreplaceable habitat present within this alignment option. Therefore, no BU were calculated.	There is no unavoidable irreplaceable habitat present within this alignment option.
	Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable.		
	The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.		
	<u>BNG</u>		
	There is no unavoidable irreplaceable habitat present within this alignment option. Therefore, no BU were calculated.		

⁵² European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive

from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (Margaritifera margaritifera).



Topic	A

Topic	Alignment 17A	Alignment 17B	Alignment 17C
	Ornithology		
	Data collected as part of the desk-study identified frequent flight activity by osprey and peregrine along the River Spey valley during breeding season. High levels of flight activity by pink-footed geese and frequent activity by greylag geese were also recorded along the River Spey during the winter, autumn and spring passage months. This location may therefore represent a collision hotspot for geese. VP surveys primarily recorded frequent flight activity by pink-footed geese during the autumn passage months with flocks of between 100 and up to 280 birds		
	often being recorded passing along the River Spey valley. These flights are typically above the height of the existing OHL.		
	Otherwise, flight activity by Target Species was very limited, only involving a small flock of whooper swans and a pair of peregrines during the Winter months; no Target Species were recorded during the VP surveys over the breeding season.		
	<u>Hydrology, Geology and Hydrogeology</u>		
	Alignment 17A crosses the Stripe Burn (ID:23045) and Red Burn (ID:23068). It is underlain by the Middle Old Red Sandstone; a moderately productive aquifer.		
	The majority of Alignment 17A is located within the catchment of the River Spey, which is a designated SEPA DWPA for surface water. It is also located within the SW DWPA of the Spey boreholes and Ordequish Collecting Chambers which supply the Spey Scheme (Badentinan) WTW. The eastern extent of Alignment 17A is located approx. 130 m south of the closest Spey borehole. According to Moray Council data, there are no Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.		
Cultural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Within 1 km there is a single GDL, Blackhills House (GDL00409), approx. 660 m northwest. There is the potential for direct impacts through changes within the setting of this GDL, but this is not likely to lead to any significant effects as the setting relates to the internal relationship to Blackhills House rather than its external relationships and wider views. Within 100 m, there are two SMR entries consisting of prehistoric palisaded settlement and a findspot of an arrowhead. Direct physical impacts can be avoided through design. Assets	Within 100 m, there is a single SMR entry, Orbliston, palisaded settlement (Canmore ID 339578). Direct physical impacts can be avoided through design. Assets The cultural heritage assets appraisal for Alignment 17B is the same as Alignment 17A.	Within 100 m, there is a single SMR entry, Easterton enclosure (Canmore ID 284826). Direct physical impacts can be avoided through design. Assets The Cultural Heritage appraisal for Alignment 17C is similar to Alignment 17A with the following exception: • The Category C Listed Building lies further than 1 km.
	Within 1 km, there is one Category B, and one Category C Listed Building. There is the potential for direct impacts within the setting of both the Listed Buildings. The impacts on the Category B Listed Building have the potential to lead to significant effects.		
Landscape and	Landscape Designations	<u>Landscape Designations</u>	<u>Landscape Designations</u>
Visual	Alignment 17A crosses the Spey Valley SLA to the south of Fochabers close to the existing 132 kV OHL and approx. 700 m from the existing 275 kV OHL. This would	1	Alignment 17C crosses the Spey Valley SLA to the south of Fochabers close to the existing 132 kV OHL and in parallel to the existing 275 kV OHL. This would considerably intensify the adverse effect of OHL infrastructure on the SLA and



Topic	Alignment 17A	Alignment 17B	Alignment 17C
	considerably intensify the adverse effect of OHL infrastructure on the SLA and extend the area affected.	Landscape Character The landscape character appraisal for this alignment option is very similar to	extend the area affected. The presence of two sealing end compounds (required to cross the existing 275 kV OHL) will further impact the SLA.
	Landscape Character	Alignment 17A but takes a more direct line across the landscape.	<u>Landscape Character</u>
	This alignment option runs briefly northeast through the Rolling Farmland and Forests – Moray & Nairn (LCT 285) around Altonside before turning slightly southeast around Clatternbriggs towards Millhill and across the wide Spey valley towards Ordiequish, where it forms part of the Coastal Farmlands - Moray & Nairn (LCT 284). The Coastal Farmlands LCT is characterised by a relatively flat, open landscape with local undulations, allowing expansive, open long-distance views. These are often disturbed by the vertical prominence of wind turbines. Existing OHLs are clearly noticeable in the landscape and the proposed alignment would cross the existing 132 kV and 275 kV lines around the wood at Altonside. Alignment 17A would intensify the effects of OHL on a landscape already affected and the area, including around Altonside, would suffer from 'wirescaping' across the flat, open, scenic Spey valley. Visual In Alignment 17A there is a broad scatter of individual residential properties, with small clusters of houses around Orbliston. Properties at Burnside of Dipple, Orbliston, Clattenbriggs and north of Altonside will become 'boxed in' between existing and proposed OHL infrastructure, with oversailing of lines making them even more visible north of Alton. The alignment would be clearly visible across the Spey Valley, including from the B9015 and potentially the Ordiequish viewpoint.	Visual In Alignment 17B there is a broad scatter of individual residential properties, with small clusters of houses around Orbliston. Properties north of Altonside, at Orbliston and Burnside of Dipple would become 'boxed in' with the oversailing of existing lines particularly prominent for properties north of Altonside and at Orbliston. The alignment would be clearly visible across the Spey valley, including from the B9015 and Ordiequish viewpoint.	 The landscape character appraisal for this alignment option is similar to Alignment 17B but parallels the existing 275 kV OHL. with the following exception: A short Section of the existing 275 kV OHL would need to be undergrounded (between Westerton and Burnside of Dipple) resulting in two terminal towers and sealing end compounds. Alignment 17C would intensify the effects of OHL on the landscape and the additional OHL would create a 'wirescape' across the flat, open, scenic Spey Valley, which would be very disruptive to the landscape. Visual In Alignment 17C there is a broad scatter of individual residential properties, with small clusters of houses around Orbliston. Properties north of Altonside would become 'boxed in' and the alignment would be clearly visible across the Spey Valley, including from the B9015 and across the Ordiequish viewpoint.
Land Use	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 17A passes through Class 3.1 and 3.2 land.	Alignment 17B passes through Class 3.2 and Class 2 land.	The agriculture appraisal for Alignment 17C is the same as 17B.
	<u>Forestry</u>	<u>Forestry</u>	<u>Forestry</u>
	Alignment 17A passes through commercial forestry and a small area of broadleaved woodland.	Alignment 17B passes through a significant area of commercial forestry and small islands of conifer and broadleaved shelterwoods.	Alignment 17C passes through a significant area of commercial forestry and a small area of broadleaved woodland.
	The estimated area of commercial woodland that would be impacted by Alignment 17A is 8.24 ha, comprising 1.21 ha broadleaved woodland and 7.03 ha coniferous woodland. Of this, 1.28 ha is felled. Recreation	The estimated area of commercial woodland that would be impacted by Alignment 17B is 14.80 ha, comprising 0.12 ha broadleaved woodland and 14.68 ha coniferous woodland. Of this, 1.50 ha comprises restock of young trees and 0.37 ha is felled.	The estimated area of commercial woodland that would be impacted by Alignment 17C is 14.45 ha, comprising 0.11 ha broadleaved woodland and 14.34 ha coniferous woodland. Of this, 1.88 ha comprises restock of young trees and 0.49 ha is felled.
	Alignment 17A passes over a core path. The Alignment does not pass over long- distance paths, cycle routes and areas known for commercial highland sports.	Recreation The recreation appraisal for Alignment 17B is the same as Alignment 17A.	Recreation Alignment 17C does not pass over any core paths, long distance paths, cycle routes and areas known for commercial highland sports.
Planning	Within 500 m lies the following consented planning applications:	Within 500 m lies the following consented planning applications:	There are no consented planning applications within 500 m.
	 Erection of a dwellinghouse (22/01596/PPP). Approximately 150 m southeast. Erection of a dwellinghouse (22/00108/PPP). Approximately 150 m southeast. Erection of a dwellinghouse (20/00515/PPP). Approximately 150 m north. Erection of a dwellinghouse (20/00350/APP). Approximately 100 m south. The following application is known to the planning system, but not yet consented: 	 Erection of a dwellinghouse (20/00350/APP) approx. 350 m north. Consented 27/05/20. The following application is known to the planning system, but not yet consented: 	 The following application is known to the planning system, but not yet consented: Teindland Wind Farm Scoping (ECU Ref - ECU00004556). Alignment 17B passes through the north of the wind farm red line boundary, but avoids wind turbines and other infrastructure.



Topic	Alignment 17A	Alignment 17B	Alignment 17C
	Teindland Wind Farm Scoping (ECU Ref - ECU00004556). Approximately 250 m north.	Teindland Wind Farm Scoping (ECU Ref - ECU00004556). Alignment 17B passes through the north of the wind farm red line boundary but avoids wind turbines and other infrastructure.	
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 17A crosses a railway line, the B9103 and B9815. The alignment also crosses two minor roads, one local access road and one restricted local access	Alignment 17B crosses a railway line, the B9103 and B9815. The alignment also crosses two minor roads and one restricted local access road.	Alignment 17C crosses a railway line, the B9103 and B9815. The alignment also crosses one minor road and one restricted local access road.
	road. Alignment 17A crosses the existing 132 kV and 275 kV OHLs.	Alignment 17B crosses the existing 132 kV and 275 kV OHLs. Environmental Design	Alignment 17C crosses the existing 275 kV OHL. Due to the proximity of properties, approximately three spans of the existing 275 kV OHL would either need to be realigned or undergrounded to provide sufficient space for the 400 kV
	Environmental Design	Alignment 17B remains at elevations below 200 m.	OHL along this alignment.
	Alignment 17A remains at elevations below 200 m.	All alignments in Section 17 are located within 10 km of the coast and will	Environmental Design
	All alignments in Section 17 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition	therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	Alignment 17C remains at elevations below 200 m.
	that builds up over time. There are no reports of contaminated land within Section 17.	There are no reports of contaminated land within Section 17.	All alignments in Section 17 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition
	According to SEPA flood maps, more than 5% of each alignment option is located	According to SEPA flood maps, more than 5% of each alignment option is located within the 1 in 10 year flood risk zone. This flood risk area is unavoidable	that builds up over time.
	within the 1 in 10 year flood risk zone. This flood risk area is unavoidable and	and towers will be required within the flood zone.	There are no reports of contaminated land within Section 17.
	towers will be required within the flood zone.	Ground Conditions	According to SEPA flood maps, more than 5% of each alignment option is located within the 1 in 10 year flood risk zone. This flood risk area is unavoidable and
	Ground Conditions	Alignment 17B contains a maximum slope of 14 degrees which is not a concern.	towers will be required within the flood zone.
	Alignment 17A contains a maximum slope of 10 degrees which is not a concern.	Alignment 17B does not pass through any known areas of peatland.	Ground Conditions
	Alignment 17A does not pass through any known areas of peatland.	Construction and Maintenance	Alignment 17C contains a maximum slope of 9 degrees which is not a concern.
	Construction and Maintenance	There is an existing network of tracks and roads within 1 km of all alignment	Alignment 17C does not pass through any known areas of peatland.
	There is an existing network of tracks and roads within 1 km of all alignment options.	options. Alignment 17B requires two angle towers.	Construction and Maintenance
	Alignment 17A requires four angle towers.	Proximity	There is an existing network of tracks and roads within 1 km of all alignment
	<u>Proximity</u>	There are five residential properties located within 170 m of Alignment 17B.	options. Alignment 17C requires three angle towers
	There are nine residential properties located within 170 m of Alignment 17A.	There is one registered communications mast located approximately 180 m	Alignment 17C requires three angle towers.
	There is one registered communications mast located approximately 180 m from the alignment option, however based on aerial imagery there is no existing mast	from the alignment option, however based on aerial imagery there is no existing mast in this location.	Proximity There are four residential properties located within 170 m of Alignment 17C.
	in this location. Alignment 17A crosses a Scottish Gas Networks (SGN) high pressure gas pipeline.	Alignment 17B crosses a Scottish Gas Networks (SGN) high pressure gas pipeline.	Alignment 17B crosses a Scottish Gas Networks (SGN) high pressure gas pipeline and parallels the pipeline for approximately 2.5 km, introducing risks of AC
	There are no known wind farms or urban areas that will impact on the alignment	There are no known wind farms or urban areas that will impact on the	interference.
	option.	alignment option	There are no known wind farms, communication masts or urban areas that will impact on the alignment option.
Economic	Alignment 17A has higher capital costs than Alignment 17C due to the cost	Alignment 17B remains within 120% of the lowest cost option. The cost	Alignment 17C has the lowest estimated capital cost.
	associated with crossing existing infrastructure. In addition, Alignment 17A has a greater line length, increasing capital costs.	differential between Alignment 17B and 17C is predominantly caused by capital cost of undergrounding / diverting existing assets, with a crossing of a 275 kV	Alignment 17C has the lowest estimated operational cost.
	Alignment 17A has significantly higher estimated operational costs (greater than 140%) than the lowest cost option, due to the higher number of low voltage	OHL required and several additional lower voltage crossings.	



Topic	Alignment 17A	Alignment 17B	Alignment 17C
	crossings and associated cable sealing end compounds requiring inspection and maintenance.	Alignment 17B has similar operational costs to Alignment 17A, over 140% of the lowest cost option.	

Section 18

Topic Alignment 18A	Alignment 18B	Alignment 18C	Alignment 18D	Alignment 18E	Alignment 18F	18G
Natural <u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
Natural Heritage Alignment 18A is within a Loch Oire SSSI, Lower Ri Bay SAC/Lower River Sport Bay SSSI, Moray and Nair SPA/Ramsar, Loch Spynit Coleburn Pasture SSSI, E SSSI and Mill Wood. The alignment is within S Moray and Nairn Coast Shas the potential to supping geese and breeding osping Loch Spynie SPA/Ramsa 20 km of Alignment 14A abundant suitable habitate geese closer to that site. The non-statutory designature conservation sites of the alignment included Stronghold and a Bugliffer Protected Species Mature woodland group trees are present within the as well as a number of fare residential structures. The potential to support roos majority of trees are conhave lower potential suit support roosting bats comature broadleaf areas. The edges of wooded are natural habitats and water have the potential to support roosting bats comaturely potential to support roosting bats comaturel	Alignment 18B natural heritage designation appraisal is the san as Alignment 18A. Protected Species The habitats and their suitability support protected species with Alignment 18B are largely the same as to those within Alignment 18B. However, 18B has greater suitability to support red squirre pine marten and, to a lesser degree, bat species, due to largarea of coniferous woodland. Habitats The habitats appraisal for Alignment 18B is the same as Alignment 18B. BNG The BNG appraisal for Alignment 18B is the same as Alignment 18B. Hydrology The ornithology appraisal for Alignment 18B. Hydrology, Geology and hydrogeology appraisal for Alignment 18B is the same as Alignment 18B. Hydrology, geology and hydrogeology appraisal for Alignment 18B is the same as Alignment 18B is the same as Alignment 18B.	Alignment 18C natural heritage designation appraisal is the same as Alignment 18A. Protected Species The habitats and their suitability to support protected species within Alignment 18C are the same as to those within Alignment 18B. Habitats HABMOS data identified the following Annex I habitats within 100 m: • H0180 – Tilio-Acerion forests The NWSS identified upland birchwood within 100 m. Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable habitat.	Alignment 18D natural heritage designation appraisal is mostly the same as Alignment 18A. However, Tips of Corsemaul and Tom Mor SSSI/SPA are also within 10 km of the alignment. Protected Species The habitats and their suitability to support protected species within Alignment 18D are the same as to those within Alignment 18A. However, 18D has reduced suitability to support red squirrels, pine marten and, to a lesser degree, bat species, due to a smaller area of coniferous woodland. There is also potential for badger activity in the area, with a dung pit observed in the alignment. Habitats	Alignment 18E natural heritage designation appraisal is the same as Alignment 18D. Protected Species The habitats and their suitability to support protected species within Alignment 18E are the same as to those within Alignment 18D. However, 18E has increased suitability to support red squirrels, pine marten and, to a lesser degree, bat species, due to a larger area of coniferous woodland. Habitats The habitats appraisal for Alignment 18E is mostly the same as Alignment 18A. However, NWSS identified upland birchwood within the alignment. The carbon and peatland map of Scotland identified Class 1 peat at Gow Moss within 100 m. BNG There is unavoidable irreplaceable habitat present in the alignment, therefore 80.30 BU were calculated for this alignment option.	Alignment 18F natural heritage designation appraisal is mostly the same as Alignment 18D. However, Loch Spynie SPA/Ramsar is further away, being 13.4 km from the alignment. This still has the potential to support wintering geese and breeding osprey. Protected Species The habitats and their suitability to support protected species within Alignment 18F are the same as to those within Alignment 18C. However, 18F has increased suitability to support red squirrels, pine marten and, to a lesser degree, bat species, due to a larger area of coniferous woodland. Habitats HABMOS data identified the following Annex I habitats within 100 m: H91EO — Alluvial forests The NWSS identified upland birchwood within 100 m. Woodland listed in the AWI is present but is Category 2b LEPO woodland and not	Alignment 18G natural heritage designation appraisal is the same as Alignment 18F. Protected Species The habitats and their suitability to support protected species within Alignment 18G are the same as to those within Alignment 18F. However, 18G has decreased suitability to support red squirrels, pine marten and, to a lesser degree, bat species, due to a smaller area of coniferous woodland. Habitats The habitats appraisal for Alignment 18F. BNG There is unavoidable irreplaceable habitat present in the alignment, therefore 230.142 BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 18G is the same as Alignment 18A.

Topic Alignment 18A	Alignment 18B	Alignment 18C	Alignment 18D	Alignment 18E	Alignment 18F	18G
commuting and foraging activities for bats. The habitats within Alignment 18A, including agriculture and scrub, have the potential to support foraging badgers. Where mature and undisturbed, the larger conifer woodlands have the potential to support foraging badger. The dry wooded areas have the potential to provide suitable habitats for sett creation. A sett was observed near the southern end of woodland to the north of Aultmore. Where mature and undisturbed, the large conifer woodlands have the potential to support wildcat, pine marten and red squirrel, with a red squirrel identified in the alignment. The larger watercourses have the potential to support commuting and foraging otters. Signs of otter activity were identified in the River Spey, with the potential for further activity in areas intersecting with the alignment. The smaller channels have the potential to support water voles. Areas of standing water and slowflowing field drains have the potential to support breeding amphibian populations. Heath and scrub areas may provide habitat for reptiles. The larger watercourses have the potential to support breeding amphibian populations. Heath and scrub areas may provide habitat for reptiles. The larger watercourses have the potential to support lamprey species. The alignment occurs within the known distribution range for FWPM ⁵³ . The varied habitats within the alignment have the potential to support a wide terrestrial and aquatic		Hydrology, Geology and Hydrogeology, geology appraisal for Alignment 18C is the same as Alignment 18A.	Hydrology, Geology and Hydrogeology, geology and hydrogeology appraisal for Alignment 18D is the same as Alignment 18A.	Ornithology The ornithology appraisal for Alignment 18E is the same as Alignment 18A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 18E is mostly the same as Alignment 18A. However, a small part of Alignment 18E crosses the River Spey - R. Fiddich to tidal limit (ID: 23065) and three tributaries and Crooksmill Burn / Haughs Burn (ID: 23180).	The carbon and peatland map of Scotland also identified Class 1 peat at Gow Moss within 100 m. BNG There is unavoidable irreplaceable habitat present in the alignment, therefore 80.59 BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 18F is the same as Alignment 18A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 18F is the same as Alignment 18E.	Hydrology, Geology and Hydrogeology, geology and hydrogeology appraisal for Alignment 18G is mostly the same as Alignment 18E. However, Alignment 18G crosses the River Spey - R. Fiddich to tidal limit (ID: 23065) and three tributaries and Crooksmill Burn / Haughs Burn (ID: 23180).

⁵³ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

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Topic	Alignment 18A	Alignment 18B	Alignment 18C	Alignment 18D	Alignment 18E	Alignment 18F	18G
	invertebrate assemblage, including species of conservation concern.						
	<u>Habitats</u>						
	HABMOS data identifies no Annex I habitats within Alignment 18A.						
	Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable habitat.						
	The carbon and peatland map of Scotland does not identify Class 1 or Class 2 peatland within 100 m.						
	BNG						
	There is no unavoidable irreplaceable habitat present in the alignment, therefore no Biodiversity Units (BU) were calculated.						
	Ornithology						
	Data collected as part of the desk- study found frequent flight activity of pink-footed geese and greylag geese were recorded along the River Spey and River Isla valleys throughout the Winter, Autumn and Spring passage months.						
	VP surveys aligned with this, recording flocks of 100 to 280 pink-footed geese during the Autumn passage months. Small flocks of whooper swans and a peregrine pair were recorded during Winter months. No target species were recorded in the breeding season.						
	Goshawk were recorded occasionally from breeding bird surveys, with no evidence of breeding behaviour.						
	Capercaillie surveys undertaken in the woodlands along this section during the spring recorded no sightings of the species or evidence of their presence in the vicinity.						



Topic	Alignment 18A	Alignment 18B	Alignment 18C	Alignment 18D	Alignment 18E	Alignment 18F	18G
	Hydrology, Geology and Hydrogeology Alignment 18A crosses the River Spey -						
	R. Fiddich to tidal limit (ID: 23065) and its tributary, Burn of Fochabers (ID: 23067), Crooksmill Burn / Haughs Burn (ID: 23180) and its tributary. It is underlain by Middle Old Red moderately productive aquifer and Appin Group a low productivity aquifer.						
	Alignment 18A is located within a SEPA DWPA for surface water, the River Spey catchment.						
	Alignment 18A is located within SW DWPA Spey boreholes, Ordiequish Collecting Chambers and the River Deveron.						
	According to Moray Council data, there are Private Water Supplies within 1 km.						
	According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.						
Cultural	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
Heritage	There are no World Heritage Sites, GDLs, Scheduled Monuments, or Inventory Battlefields within 1 km.	The Designation Appraisal for Alignment 18B is mostly the same as Alignment 18A. However, there	The Designation Appraisal for Alignment 18C is mostly the same as Alignment 18A. However, the	The Designation Appraisal for Alignment 18D is mostly the same as Alignment 18C.	The Designation Appraisal for Alignment 18E is mostly the same as Alignment 18A.	The Designation Appraisal for Alignment 18F is the same as Alignment 18A. However, the	The Designation Appraisal for Alignment 18G is the same as Alignment 18F.
	There is one SMR entry, Ordiequish, medieval enclosure (Canmore ID 314449), which can be avoided through micro siting of the alignment option.	are two SMR entries for Alignment 18B, Ordequish, medieval enclosure (Canmore ID 314449) and Bridge of Bogbain (Canmore ID 104692).	ID 314449. Assets The cultural heritage assets	However, there is an additional SMR entry, Bridge of Bogbain (Canmore ID 104692), which can be avoided through micro siting of the alignment option.	However, there is an additional SMR entry, the Bridge of Bogbain (Canmore ID 104692). Assets	SMR entry is Ordequish Hill, bank (Canmore ID 314452). Assets There are no Non-inventory	Assets The cultural heritage assets appraisal for Alignment 18G is the same as Alignment 18F.
	Assets There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment.	Assets The cultural heritage assets appraisal for Alignment 18B is mostly the same as Alignment 18A. However, there is one	appraisal for Alignment 18C is mostly the same as Alignment 18A. However, there is only one Category C Listed Buildings.	Assets The cultural heritage assets appraisal for Alignment 18D is mostly the same as Alignment 18A. However, there is one	The cultural heritage assets appraisal for Alignment 18C is mostly the same as Alignment 18A. However, there is one Category B and two Category	GDLs, Conservation Areas or LBs within 1 km of the alignment.	
	Within 1 km, there is one Category B and one Category C Listed Buildings. There is unlikely to be any significant effects due to the nature of the Listed	Category B and two Category C Listed Buildings.		Category B and two Category C Listed Buildings.	C Listed Buildings.		



Topic	Alignment 18A	Alignment 18B	Alignment 18C	Alignment 18D	Alignment 18E	Alignment 18F	18G
	Buildings being positioned within wooded areas.						
Landscape	<u>Landscape Designations</u>	Landscape Designations	Landscape Designations	Landscape Designations	<u>Landscape Designations</u>	Landscape Designations	Landscape Designations
and Visual	There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. The alignment crosses the Spey Valley SLA. This would be intrusive to the landscape and substantially detract from the quality of the SLA. Landscape Character Alignment 18A is located in the Coastal Farmlands — Moray & Nairn LCT (284), the Low Forested Hills LCT (293), and Upland Farmland LCT (288). The alignment takes a direct alignment across Ordiequish Hill, away from existing OHLs, running against the grain of the landscape. Visual Alignment 18A would be highly visible and intrusive from the River Spey, Ordiequish Hill and nearby residential properties. This alignment crosses through large blocks of woodland, providing a good degree of screening. Its separation from existing OHLs prevents any direct 'boxing in' of properties, although risks 'wirescaping'.	The Landscape Designations appraisal for Alignment 18A. Landscape Character The landscape character appraisal for Alignment 18B is mostly the same as Alignment 18A. However, the alignment of Alignment 18B follows the grain of the landscape much more beyond Blackfold. Visual Alignment 18B would result in the 'boxing in' of properties, most notably at Upper Drakemyres and Lower Drakemyres, as well as North Bogbain and South Bogbain. This alignment option would require oversailing the existing 132 kV and 275 kV OHL, resulting in increased tower height and visibility in close proximity to 'boxed-in' properties. Alignment 18B would be clearly visible across the more open ground crossing the railway line and A95, and from the houses high on the north side of the valley east of Mulben.	The Landscape Designations appraisal for Alignment 18C is mostly the same as Alignment 18A. However, would be slightly less intrusive as existing OHL infrastructure would be closely paralleled. Landscape Character Alignment 18C parallels the existing OHL, however, still largely sits against the grain of the landscape. Visual Infrastructure adjacent to the River Spey in Alignment 18C would be highly intrusive from the Ordiequish viewpoint and clearly visible from properties immediately north at Upper Ordiequish. The alignment would result in the 'boxing in' of properties, namely Lower Drakemyres and Tarrcroys.	The Landscape Designations appraisal for Alignment 18D is the same as Alignment 18C. Landscape Character Alignment 18D is similar to Alignment 18C, however from Lower Drakemyres it follows the grain of the landscape more closely. Visual Alignment 18D would result in the severe and complete 'boxing in' of Lower Drakemyres and in partial 'boxing in' of further properties at South Bogbain and Allanbuie Farm/Burnside. Additionally, it is likely to require infrastructure close to 'boxed-in' properties. The alignment risks being intrusive in views from the A95 and the railway, and from the houses high on the north side of the valley east of Mulben.	The Landscape Designations appraisal for Alignment 18E is the same as Alignment 18C. Landscape Character Alignment 18E is similar to Alignment 18C, however follows a slightly alternate alignment that crosses existing OHLs. It runs more with the grain of the landscape and on slightly lower ground once beyond the Burn of Fochabers. Visual Alignment 18E crosses the existing 132 kV and 275 kV OHL, which would result in the requirement for increased tower height and visibility in close proximity to 'boxed-in' properties at South Bogbain.	The Landscape Designations appraisal for Alignment 18F is the same as Alignment 18C. Landscape Character Alignment 18F crosses the River Spey parallel to existing OHL. The alignment runs against the grain of the landscape for much of the alignment, except for a Section through Wood of Ordiequish. Visual Infrastructure adjacent to the River Spey in Alignment 18F would be highly intrusive from the Ordiequish viewpoint and Aultderg, and risks 'wirescaping'. It passes numerous properties around North Bogbain and Croftmore, resulting in the 'boxing in' of a number of properties. It also passes in close proximity to numerous properties leading down to the A95. The alignment also risks being intrusive in views from the A95 and the railway, and from the houses high on the north side of the valley east of Mulben.	The Landscape Designations appraisal for Alignment 18G is the same as Alignment 18C. Landscape Character Alignment 18G is similar to Alignment 18F, however takes a gentler angle in Gow Moss following the grain of the landscape more closely. Visual Alignment 18G follows mostly the same Alignment as 18F. However, the alignment prevents the 'boxing in' of properties around North Bogbain and Croftmore.
Land Use	Agriculture	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 18A passes through Class 3.2 land which is unavoidable. It does not pass through any prime agricultural land.	The agriculture appraisal for Alignment 18B is the same as Alignment 18A.	The agriculture appraisal for Alignment 18C is the same as Alignment 18A. Forestry	The agriculture appraisal for Alignment 18D is the same as Alignment 18A. Forestry	The agriculture appraisal for Alignment 18E is the same as Alignment 18A.	The agriculture appraisal for Alignment 18F is the same as Alignment 18A. Forestry	The agriculture appraisal for Alignment 18G is the same as Alignment 18A. Forestry
	Forestry Alignment 18A passes through and close to significant areas of mature	Alignment 18B passes through and close to the edge of significant areas of mature	Alignment 18C passes through significant areas of mature	Alignment 18D passes through significant areas of mature	Forestry Alignment 18E passes through significant areas of mature commercial forestry and a	Alignment 18F passes through and close to significant areas of mixed age commercial	Alignment 18G passes through and close to significant areas of mixed age



Topic	Alignment 18A	Alignment 18B	Alignment 18C	Alignment 18D	Alignment 18E	Alignment 18F	18G
	commercial forestry and through a small area of broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment 18A is 40.21 ha, comprising 0.44 ha broadleaved woodland and 39.77 ha coniferous woodland. Of this 0.65 ha is felled. Recreation Alignment 18A passes over the Speyside Way, a long-distance walking route and core path. It also passes over the River Spey which is a known fishing river.	commercial forestry and a small area of broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment 18B is 37.59 ha, comprising 1.90 ha broadleaved woodland and 35.69 ha coniferous woodland. Of this, 2.36 ha is felled. Recreation The recreation appraisal for Alignment 18B is the same as Alignment 18A.	commercial forestry and small islands of broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment 18C is 48.31 ha, comprising 3.12 ha broadleaved woodland and 45.19 ha coniferous woodland. Of this, 9.31 ha is felled. The alignment runs parallel with the existing 132 kV OHL through Wood of Ordiequish, reducing the requirement for woodland removal on the south side of the operational corridor. Recreation The recreation appraisal for Alignment 18C is the same as Alignment 18A.	commercial forestry and areas of mixed age native woodlands. The estimated area of commercial woodland that would be impacted by Alignment 18D is 46.10 ha, comprising 4.30 ha broadleaved woodland and 41.80 ha coniferous woodland. Of this, 11.02 ha is felled. The alignment runs parallel with the existing 132 kV OHL through Wood of Ordiequish, reducing the requirement for woodland removal on the south side of the operational corridor. Recreation The recreation appraisal for Alignment 18D is the same as Alignment 18A.	small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 18E is 59.04 ha, comprising 0.69 ha broadleaved woodland and 58.35 ha coniferous woodland. Of this, 19.21 ha is felled. The alignment runs parallel with the existing 275 kV OHL through Wood of Ordiequish, reducing the requirement for woodland removal on the south side of the operational corridor. Recreation The recreation appraisal for Alignment 18E is the same as Alignment 18A.	forestry and a small area of broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment 18F is 62.29 ha, comprising 0.51 ha broadleaved woodland and 61.77 ha coniferous woodland. Of this, 9.03 ha is restock (young trees) and 12.77 ha is felled. The alignment runs parallel with the existing 275 kV OHL through Wood of Ordiequish, reducing the requirement for woodland removal on the north side of the operational corridor. Recreation The recreation appraisal for Alignment 18F is the same as Alignment 18A.	commercial forestry and a small area of broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment 18G is 59.56 ha, comprising 0.51 ha broadleaved woodland and 59.05 ha coniferous woodland. Of this, 2.04 ha is restock (young trees) and 19.03 ha is felled. The alignment runs parallel with the existing 275 kV OHL through Wood of Ordiequish, reducing the requirement for woodland removal on the north side of the operational corridor. Recreation The recreation appraisal for Alignment 18G is the same as Alignment 18A.
Planning	There are no known planning applications within 500 m.	Within 500 m lies the following consented planning applications: Erection of a dwellinghouse (20/01436/APP). Approximately 350 m west. Aultmore Distillery Expansion (22/00585/APP). Approximately 50 m east.	The planning appraisal for Alignment 18C is similar to Alignment 18B, with the following exceptions: • 20/01436/APP is approximately 250 m south. • 22/00585/APP is approximately 450 m south.	The planning appraisal for Alignment 18D is similar to Alignment 18B, with the following exceptions: • 20/01436/APP is approximately 250 m south.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse (21/01389/APP). Approximately 350 m southwest.	The planning appraisal for Alignment 18F is similar to Alignment 18E with the following exception: • 21/01389/APP is approximately 200 m northeast.	The planning appraisal for Alignment 18G is the same as Alignment 18F.
Engineering	Infrastructure Crossings Alignment 18A crosses the River Spey, the A96 trunk road and the B9016. The alignment also crosses three minor roads, one local road and five restricted local access roads. Alignment 18A also crosses a single 320 kV underground cable.	Infrastructure Crossings Alignment 18B crosses the River Spey, the A96 trunk road twice, the A95 and a single track railway. The alignment also crosses four minor roads and six restricted local access roads. Alignment 18B also includes two crossings of a 320 kV underground cable, one 132 kV	Infrastructure Crossings Alignment 18C crosses the River Spey, the A96 trunk road and the B9016. The alignment also crosses three minor roads, one local road and three restricted local access roads. Alignment 18C also crosses a single 320 kV underground cable.	Infrastructure Crossings Alignment 18D crosses the River Spey, the A96 trunk road twice, the A95 and a single track railway. The alignment also crosses four minor roads and four restricted local access roads. Alignment 18D also includes two crossings of a 320 kV	Infrastructure Crossings Alignment 18E crosses the River Spey, the A95 and a single track railway. The alignment also crosses four minor roads and eight restricted local access roads. Alignment 18E also crosses one 132 kV OHL and one 275 kV OHL and runs parallel to a single 320 kV cable route.	Infrastructure Crossings Alignment 18F crosses the River Spey, the A95 and a single track railway. The alignment also crosses four minor roads, one local road and ten restricted local access roads. Environmental Design Over 25% of Alignment 18F is at elevations over 200 m. The	Infrastructure Crossings Alignment 18G crosses the River Spey, the A95 and a single track railway. The alignment also crosses four minor roads, one local road and eight restricted local access roads. Environmental Design Over 25% of Alignment 18G is at elevations over 200 m.



Environmental Design

Between 10% and 25% of Alignment 18A is at elevations over 200 m. The maximum elevation is 218 m and is unlikely to cause a significant issue.

All alignments in Section 18 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.

There are no reports of contaminated land within Section 18. Alignment 18A passes nearby an aircraft crash site but is designated low for unexploded ordnance hazard.

According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, predominantly where they cross the River Spey.

Ground Conditions

Alignment 18A contains a maximum slope of 27 degrees. However this is for less than a span length which is not a significant concern.

Alignment 18A does not pass through any known areas of peatland.

Construction and Maintenance

There is an existing network of tracks and roads within 1 km of all alignment

Alignment 18A requires four angle towers.

Proximity

There is one residential property located within 170 m of Alignment 18A.

There is one 20 kW wind turbine with a 13.1 m rotor diameter. This is more than 200 m from the alignment option and is unlikely to cause a constraint.

There is one registered communications mast located approximately 220 m from the

OHL crossing and one 275 kV OHL crossing.

Environmental Design

Between 10% and 25% of Alignment 18B is at elevations over 200 m. The maximum elevation is 218 m and is unlikely to cause a significant issue.

All alignments in Section 18 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.

There are no reports of contaminated land within Section 18. Alignment 18C passes nearby an aircraft crash site but is designated low for unexploded ordnance hazard.

According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, predominantly where they cross the River Spey.

Ground Conditions

Alignment 18B contains a maximum slope of 27 degrees. However this is for less than a span length which is not a significant concern.

Alignment 18B does not pass through any known areas of peatland.

Construction and Maintenance

There is an existing network of tracks and roads within 1 km of all alignment options.

Alignment 18B requires six angle towers.

Environmental Design

Between 10% and 25% of Alignment 18C is at elevations over 200 m. The maximum elevation is 229 m and is unlikely to cause a significant issue.

All alignments in Section 18 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.

There are no reports of contaminated land within Section 18.

According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, predominantly where they cross the River Spey.

Ground Conditions

Alignment 18C contains a maximum slope of 22 degrees. However this is for less than a span length which is not a significant concern.

Alignment 18C does not pass through any known areas of peatland.

Construction and Maintenance

There is an existing network of tracks and roads within 1 km of all alignment options.

Alignment 18C requires two angle

Proximity

There is one residential property located within 170 m of Alignment

There are no known wind farms or urban areas that will impact on the alignment option.

There is one registered communications mast located

underground cable, one 132 kV OHL and one 275 kV OHL.

Environmental Design

Less than 10% of Alignment 18D is at elevations over 200 m The maximum elevation is 229 m and is unlikely to cause a significant issue.

All alignments in Section 18 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.

There are no reports of contaminated land within Section 18.

According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, predominantly where they cross the River Spey.

Ground Conditions

Alignment 18D contains a maximum slope of 22 degrees. However this is for less than a span length which is not a significant concern.

Alignment 18D does not pass through any known areas of peatland.

Construction and Maintenance

There is an existing network of tracks and roads within 1 km of all alignment options.

Alignment 18D requires four angle towers.

Proximity

There are three residential properties located within 170 m of Alignment 18D.

There is one 20 kW wind turbine with a 12.8 m rotor

Environmental Design

Between 10% and 25% of Alignment 18E is at elevations over 200 m. The maximum elevation is 229 m and is unlikely to cause a significant

All alignments in Section 18 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt

There are no reports of contaminated land within Section 18.

risk zone, predominantly where they cross the River Spey.

Alignment 18E contains a maximum slope of 22 is not a significant concern.

Alignment 18E passes through an area of Class 1 peatland at Gow Moss, with estimated peat depths of 0.5 m to greater than 1.5 m depth.

Construction and **Maintenance**

There is an existing network of tracks and roads within 1 km of all alignment options.

Alignment 18E requires five angle towers.

deposition that builds up over

According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood

Ground Conditions

degrees. However this is for less than a span length which

maximum elevation is 234 m and is unlikely to cause a significant issue.

All alignments in Section 18 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over

There are no reports of contaminated land within Section 18.

According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, predominantly where they cross the River Spey.

Ground Conditions

Alignment 18F contains a maximum slope of 34 degrees. This is for less than a span length which is not a significant concern, but could limit the locations where crossing towers could be placed at the River Spey.

Alignment 18F passes through an area of Class 1 peatland at Gow Moss, with estimated peat depths of 0.5 m to greater than 1.5 m depth.

Construction and <u>Maintenance</u>

There is an existing network of tracks and roads within 1 km of all alignment options.

Alignment 18F requires six angle towers.

Proximity

There is one residential property located within 100 m of Alignment 18F and four

The maximum elevation is 234 m and is unlikely to cause a significant issue.

All alignments in Section 18 are located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.

There are no reports of contaminated land within Section 18.

According to SEPA flood maps, greater than 5% of each alignment option is located within the 1 in 10 year flood risk zone, predominantly where they cross the River Spey.

Ground Conditions

Alignment 18G contains a maximum slope of 34 degrees. This is for less than a span length which is not a significant concern, but could limit the locations where crossing towers could be placed at the River Spey.

Alignment 18G passes through an area of Class 1 peatland at Gow Moss, with estimated peat depths of 0.5 m to greater than 1.5 m depth.

Construction and **Maintenance**

There is an existing network of tracks and roads within 1 km of all alignment options.

Alignment 18G requires seven angle towers.



Topic	Alignment 18A	Alignment 18B	Alignment 18C	Alignment 18D	Alignment 18E	Alignment 18F	18G
	alignment option operated by Airwave Solutions. Alignment 18A crosses one underground gas pipeline.	Proximity There are three residential properties located within 170 m of Alignment 18B. There is one 20 kW wind turbine with a 13.1 m rotor diameter. This is more than 200 m from the alignment option and is unlikely to cause a constraint. There is one registered communications mast located approximately 220 m from the alignment option operated by Airwave Solutions. Alignment 18B crosses three underground gas pipelines.	approximately 100 m from the alignment option operated by Airwave Solutions. Alignment 18C crosses one underground gas pipeline.	diameter. This is more than 100 m from the alignment option and is unlikely to cause a constraint. There is one registered communications mast located approximately 100 m from the alignment option operated by Airwave Solutions. Alignment 18D crosses three underground gas pipelines.	Proximity There are no residential properties located within 170 m of Alignment 18E. There is one 20 kW wind turbine with a 12.8 m rotor diameter. This is more than 100 m from the alignment option and is unlikely to cause a constraint. There is one registered communications mast located approximately 100 m from the alignment option operated by Airwave Solutions. Alignment 18E crosses one underground gas pipeline.	residential properties located within 170 m. Alignment 18F also passes directly over the top of some farm buildings which would likely cause clearance infringements and is not acceptable. There is one consented wind turbine located 280 m from the alignment option recorded on the Moray Council planning portal, however this is not visible on aerial imagery. There is one registered communications mast located approximately 150 m from the alignment option operated by Airwave Solutions. Alignment 18F crosses one underground gas pipeline.	Proximity There is one residential property located within 100 m of Alignment 18G and two residential properties located within 170 m. There is one consented wind turbine located 280 m from the alignment option recorded on the Moray Council planning portal, however this is not visible on aerial imagery. There is one registered communications mast located approximately 150 m from the alignment option operated by Airwave Solutions. Alignment 18G crosses one underground gas pipeline.
Economic	Alignment 18A has only slightly higher capital costs than the lowest cost option (18C), with cost increase driven by a slightly longer line length and marginally higher forestry costs. Alignments 18A and 18C have the lowest estimated operational costs.	Although Alignment 18B has the lowest forestry costs, it has the highest total estimated capital cost for Section 18 (more than 120% of the lowest cost option). The cost differential is driven by substantially longer line length, increasing capital cost for tower and conductors and access tracks. Alignment 18B is greater than 120% of the lowest operational cost option. The line length is almost 40% greater than the shortest alignment option (18C). This is balanced by the shortest length through woodland.	Alignment 18C has the lowest estimated capital cost. Alignments 18A and 18C have the lowest estimated operational costs.	Alignment 18D is more than 120% of the lowest cost option. It has comparatively low forestry costs but this is balanced by costs associated with a longer line length. Operational costs are similar for Alignments 18D, 18E and 18G, with an increased line length, in comparison to the lowest cost option.	Alignment 18E is similar in cost to Alignment 18D. Although shorter, it has higher forestry costs which balance the total capital cost estimates. Operational costs are similar for Alignments 18D, 18E and 18G, with an increased line length, in comparison to the lowest cost option.	Alignment 18F has the highest estimated forestry capital cost and is close in total cost to the highest cost option. Alignment 18F has a 40% longer section through woodland than the shortest option in this section, increasing costs for ongoing forestry management.	Although Alignment 18G is shorter in length and has lower forestry costs, it is more expensive overall due to the higher cost of additional angle towers. Operational costs are similar for Alignments 18D, 18E and 18G, with an increased line length, in comparison to the lowest cost option.



Section 19 – Beauly to Blackhillock 400 kV OHL

Topic	Alignment 19A	Alignment 19B	Alignment 19C	Alignment 19D
Natural Heritage	Designations Alignment 19A is within 10 km of Moray and Nairn Coast SPA/Ramsar, Mortlach Moss SSSI/SAC, Whitehill SSSI, Mill Wood SSSI, Den of Pitlurg SSSI, Lower River Spey SSSI, Lower River Spey SSSI, Lower River Spey SAC, River Spey SSSI, River Spey SAC, Tips of Corsemaul and Tom Mor SSSI/SPA, Shiel Wood Pastures SSSI and Craigs of Succoth SSSI.	Alignment 19B natural heritage designation appraisal is the same as Alignment 19A. Protected Species The habitats and their suitability to support protected species within Alignment 19B are largely the same as to those within Alignment 19A. However, 19B has greater suitability to support red squirrels, pine marten and, to a lesser degree, bat species, due to larger area of coniferous woodland. Habitats The habitats appraisal for Alignment 19B is the same as Alignment 19A. BNG The BNG appraisal for Alignment 19B is the same as Alignment 19A. Ornithology The ornithology appraisal for Alignment 19B is the same as Alignment 19A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 19B is the same as Alignment 19B.	Designations Alignment 19C natural heritage designation appraisal is the same as Alignment 19A. Protected Species The habitats and their suitability to support protected	 Designations Alignment 19D natural heritage designation appraisal is mostly the same as Alignment 19A, with the following exception: Moray and Nairn Coast SPA/Ramsar is 12 km from Alignment 19D, however is still considered
	Moray and Nairn Coast SPA/Ramsar has the potential to support wintering geese and breeding osprey. The habitat around the alignment contains limited habitat suitable for winter geese associated with this SPA. Non-statutory designations and nature conservation sites within 2 km of the alignment include a Buglife B-Line.		species within Alignment 19C are largely the same as to those within Alignment 19A. However, 19C has greater area of woodland to cross, including mixed mature riparian trees at Burn of Kinminitie and riparian broadleaf over Herricks Burn and the Birken Burn.	 in the appraisal due to its potential to support wintering geese; Lower River Spey SSSI is 12 km from Alignment 19D and therefore is not considered in the appraisal. Protected Species
	Protected Species Small areas of broadleaf trees are present within the alignment, largely within watercourse riparian zones. The alignment also runs adjacent to coniferous woodland. A number of farm and residential structures are also present in the alignment. These have the potential to support roosting bats.		Habitats The habitats appraisal for Alignment 19D is very similar to Alignment 19A but with the absence of habitat H91AO - Old sessile oak woods and in proximity to Category 1a and 1b ancient woodland.	The habitats and their suitability to support protected species within Alignment 19D are the same as to those within Alignment 19A. Habitats
	The edges of wooded areas, semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment 19A, including agricultural land, have the potential to support foraging badgers. The dry wooded or unmaintained field margin areas have the potential to provide suitable habitats for sett creation, with badger setts observed within the alignment.		BNG The BNG appraisal for Alignment 19D is the same as Alignment 19A. Ornithology The ornithology appraisal for Alignment 15D is the	HABMOS data identified no Annex I habitat within 100 m of Alignment 19D. The NWSS identified upland mixed ashwood and wet woodland within the alignment. Woodland listed in the AWI is present within the alignment but is Category 2b LEPO woodland and not considered
	The coniferous woodlands have the potential to support red squirrel and pine martin. The open, exposed areas within the alignment are considered suboptimal for wildcats. The larger watercourses have the potential to support commuting and foraging otters. Signs of otter spraints were observed on watercourses within the alignment. The smaller channels have the potential to support water voles.		same as Alignment 19A. Hydrology, Geology, and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 19C is the same as Alignment 19A.	irreplaceable habitat. The carbon and peatland map of Scotland does not indicate the presence of any Class 1 or Class 2 peat within 100 m. BNG
	Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows and scrub areas may provide habitat for reptiles. The larger watercourses have the potential to support migratory salmonids. However, an impassable weir in Keith restricts movement south of the settlement. Also, an impassable waterfall on the Burn of Drum limits movement further upstream. The smaller freshwater burns have the potential to support lamprey species. The alignment occurs within the known distribution range for FWPM 54.			The BNG appraisal for Alignment 19D is the same as Alignment 19A. Ornithology Frequent flight activity of pink-footed geese and greylag geese were recorded along the River Spey and River Isla valleys throughout the Winter, Autumn and Spring passage months. This location may therefore represent a collision hotspot for geese.

European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).



Topic	Alignment 19A	Alignment 19B	Alignment 19C	Alignment 19D
	The varied habitats within the alignment have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.			No further bird surveys were conducted along Alignment Option 19D as the associated agricultural and coniferous woodland habitats were anticipated to be of low importance.
	<u>Habitats</u>			Hydrology, Geology and Hydrogeology
	HABMOS data identified the following Annex I habitats within Alignment 19A:			The hydrology, geology and hydrogeology appraisal
	 H91A0 - Old sessile oak woods H91C0 - Caledonian forest 			for Alignment 19D is the same as Alignment 19A, with the following exceptions:
	NWSS identified native pinewood and wet woodland within 100 m. Woodland listed in AWI is present within 100 m of the alignment and a Section of Category 1a ancient woodland of semi-natural origin is located south-east of Keith and considered irreplaceable habitat. The remaining woodland is Category 2b LEPO woodland and not considered irreplaceable habitat.			 Alignment 19D also crosses River Isla – source to Keith (ID: 23181); The majority of Alignment 19D is located in SEPA DWPA, the River Isla; and
	The carbon and peatland map of Scotland does not identify Class 1 or Class 2 peatland within 100 m.			There are no potential water abstractions according to SEPA abstraction data within 1 km of Alignment 19D.
	BNG			of Alignment 17D.
	There is no unavoidable irreplaceable habitat present in the alignment, therefore no Biodiversity Units (BU) were calculated.			
	Ornithology			
	Data collected as part of the desk-study found frequent flight activity of pink- footed geese and greylag geese were recorded along the River Spey and River Isla valleys throughout the winter, autumn and spring passage months. This location may therefore represent a collision hotspot for geese.			
	VP surveys overlooking agricultural habitat recorded infrequent flights from small pink-footed geese flocks suggesting that the area was not an important foraging ground or commuting route. No other Target Species were recorded.			
	Hydrology, Geology and Hydrogeology			
	Alignment 19A crosses the Burn of Drum (ID: 23177) and River Isla - Keith to Shiel Burn (ID: 23179). It is underlain by Appin Group and Unnamed igneous intrusion, low productivity aquifers.			
	Alignment 19A is located within a SEPA DWPA for surface water, the Herricks Burn catchment.			
	19A is entirely located within SW DWPA Burn of Davidstone and Shenwell Spring.			
	According to Moray Council data, there are Private Water Supplies within 1 km.			
	According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.			
Cultural	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
Heritage	There are no World Heritage Sites, Garden and Designated Landscapes (GDLs), Scheduled Monuments, or Inventory Battlefields within 1 km of the alignment.	The Designation Appraisal for Alignment 19B is mostly the same as Alignment 19A. However, there	The cultural heritage designations appraisal for Alignment 19C is the same as Alignment 19A.	The Designation Appraisal for Alignment 19D is mostly the same as Alignment 19A. However, the are



Topic	Alignment 19A	Alignment 19B	Alignment 19C	Alignment 19D
	There is one SMR entry: Keith, pillbox (Canmore ID 320124), which can be avoided through micro siting of the alignment option. Assets There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment. Within 1 km, there are two Category C Listed Buildings. There is unlikely to be any significant effects on their settings due to intervening topography and buildings.	are two SMR entries for Alignment 19B, a modern pillbox and a findspot of a carved stone ball. Assets The cultural heritage assets appraisal for Alignment 19B is the same as Alignment 19A.	Assets The cultural heritage assets appraisal for Alignment 19C is the same as Alignment 19A.	no SMR entries within 1 km of Alignment 19D. Assets The cultural heritage assets appraisal for Alignment 19D is mostly the same as Alignment 19A. However, there are no Listed Buildings within 1 km of Alignment 19D.
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. The Spey Valley and Deveron Valley SLAs are located within 10 km of the alignment. Intervening topography, vegetation and distance make the alignment unlikely to affect the special qualities of either SLA. Landscape Character Alignment 19A is located in Upland Farmland and Farmed Moorland Edge — Aberdeenshire LCT. The alignment runs predominantly against the grain of the landscape across the rolling agricultural farmland and more open and exposed farmland to the northwest of Newmill, although keeping below 220 m in elevation until it reaches Hill of Greenwood. Visual Alignment 19A passes small concentrations of properties along the route, including around Brunthall, Drum and Mains of Auchoynane, as well as properties on the north, east and south sides of Newmill and the east and southeast of Keith. It would increase the 'wirescape' around Keith and Newmill, with the 'boxing in' of properties around Drum and Ardimannoch. The alignment crosses existing OHLs to the east of Newmill and Keith. The alignment would be widely visible in the panoramic views across the broad open valley from Newmill.	Landscape Designations The Landscape Designations appraisal for Alignment 19B is the same as Alignment 19A. Landscape Character The landscape character appraisal for Alignment 19B is mostly the same as Alignment 19A. However, Alignment 19B is more prominent across the open and exposed farmland to the northwest of Newmill. Visual The visual appraisal for Alignment 19B is mostly the same as Alignment 19A. However, Alignment 19B would be strongly visible on the approaches to the settlements, increasing the 'wirescape' for properties around Keith and Newmill. It would be particularly prominent in the panoramic views across the broad open valley from Newmill and widely visible in this open landscape.	Landscape Designations The Landscape Designations appraisal for Alignment 19C is the same as Alignment 19A. Landscape Character The landscape character appraisal for Alignment 19C is the same as Alignment 19A. Visual The visual appraisal for Alignment 19C is mostly the same as Alignment 19B. However, this alignment crosses west of the property at Mains of Birkenburn before entering the proposed Coachford substation. This may help visually contain the spread of infrastructure around Mains of Birkenburn.	Landscape Designations The Landscape Designations appraisal for Alignment 19D is the same as Alignment 19A. Landscape Character Alignment 19D runs south of Keith in an almost straight line from the section start across rolling terrain past Blackhillock Substation before turning sharply east to pass south of Hill of Greenwood and into the proposed Coachford substation Whilst Alignment 19D runs predominantly against the grain of the landscape, it is generally low lying, keeping below 230 m in elevation until it reaches Hill of Greenwood. It avoids the more open and exposed landscape to the northwest of Newmill and is therefore a slightly better 'fit' in the landscape. Visual Alignment 19D runs south of Keith in an almost straight line from Hillockhead wood, just east of Muldearie Mains, across rolling terrain before turning sharply east to pass south of Hill of Greenwood and into the proposed Coachford substation. Alignment 19D crosses two existing OHLs and potentially one 275 kV OHL into the proposed Coachford Substation, increasing the 'wirescape' around Keith. However, the more complex terrain helps to contain visibility, resulting in fewer wide, open views when compared to options going north of Keith, making it overall less visually prominent.
Land Use	Agriculture Alignment 19A passes through Class 3.2 land, which is unavoidable, for majority of its length. It does not pass through any prime agricultural land.	Agriculture The agriculture appraisal for Alignment 19B is the same as alignment 19A.	Agriculture The agriculture appraisal for Alignment 19C is the same as alignment 19A.	Agriculture The agriculture appraisal for Alignment 19D is the same as alignment 19A.



Topic	Alignment 19A	Alignment 19B	Alignment 19C	Alignment 19D
	<u>Forestry</u>	<u>Forestry</u>	Forestry	<u>Forestry</u>
	Alignment 19A passes close to mature commercial forestry and passes through very small islands of native broadleaves. The estimated area of commercial woodland that would be impacted by	Alignment 19B passes close to mature commercial forestry and passes through very small islands of native broadleaves.	Alignment 19C passes close to and through the edge of mixed age commercial forestry and through small areas of mixed age broadleaved shelterwood.	Alignment 19D passes close to and through the edge of mature commercial forestry and passes through a small area of mixed age broadleaved shelterwood.
	Alignment 19A is 4.90 ha, comprising 1.71 ha broadleaved woodland and 3.19 ha coniferous woodland. Of this 1.68 ha is restock (young trees). Recreation Alignment 19A passes over core paths east of Newmill and Keith. It does not pass over long-distance routes or cycling routes. The alignment passes over the River Isla, which is known for fishing activities.	The estimated area of commercial woodland that would be impacted by Alignment 19B is 4.86 ha, comprising 2.23 ha broadleaved woodland and 2.63 ha coniferous woodland. Of this 1.68 ha is restock (young trees). Recreation Alignment 19A passes over a core path east of Keith. It avoids direct routeing over a core path east of Newmill. It does not pass over long-distance routes or cycling routes. The alignment passes over the River Isla, which is known for fishing activities.	The estimated area of commercial woodland that would be impacted by Alignment 19C is 4.82 ha, comprising 2.19 ha broadleaved woodland and 2.63 ha coniferous woodland. Of this, 1.68 ha is felled. Recreation The recreation appraisal for Alignment 19C is the same as Alignment 19A.	The estimated area of commercial woodland that would be impacted by Alignment 19D is 6.12 ha, comprising 0.91 ha broadleaved woodland and 5.21 ha coniferous woodland. Of this 3.33 ha is felled. Recreation Alignment 19D does not pass over core paths, long-distance routes or cycling routes. The alignment passes over the River Isla, which is known for fishing activities. This alignment also passes near to Keith Golf club.
Planning	 Within 500 m lie the following consented planning applications: Approval of matters specified in conditions on planning consent 18/01046/EIA to construct onshore electrical transmission infrastructure comprising a cable transition jointing bay, underground cable circuits, construction of a substation south of Keith, and further connecting cable to allow connection with the existing transmission network (21/01402/AMC). Within the alignment. Installation of an energy storage facility, including battery enclosures, power conversion units, transformer substation, grid connection infrastructure, vehicle access and associated works (22/00715/APP). Approximately 350 m west. 	The planning appraisal for Alignment 19B is the same as Alignment 19A.	 Within 500 m lie the following consented planning applications: Approval of matters specified in conditions on planning consent 18/01046/EIA to construct onshore electrical transmission infrastructure comprising a cable transition jointing bay, underground cable circuits, construction of a substation south of Keith, and further connecting cable to allow connection with the existing transmission network (21/01402/AMC). Within the alignment. Quarry extension (Cairdshill Quarry) (22/00499/APP). Approximately 400 m west. Proposed hard rock quarry and mineral processing area (20/01251/MIN). Approximately 200 m west. Installation of an energy storage facility, including battery enclosures, power conversion units, transformer substation, grid connection infrastructure, vehicle access and associated works (22/00715/APP). Approximately 350 m west. The following application is known to the planning system, but not yet consented: Install a battery energy storage system (BESS) with associated infrastructure at Blackhillock Substation (23/01032/S36SCN). Within the alignment. 	 Within 500 m lie the following consented planning applications: Approval of matters specified in conditions on planning consent 18/01046/EIA to construct onshore electrical transmission infrastructure comprising a cable transition jointing bay, underground cable circuits, construction of a substation south of Keith, and further connecting cable to allow connection with the existing transmission network (21/01402/AMC). Within the alignment. Installation of synchronous compensators with electrical connection to Blackhillock Substation and associated infrastructure (21/01777/APP) Adjacent to the LOD. The following application is known to the planning system, but is not yet consented: Erect four wind turbines and ancillary infrastructure (24/00167/EIA). Within the alignment.



Topic	Alignment 19A	Alignment 19B	Alignment 19C	Alignment 19D
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 19A crosses the River Isla, the Burn of Drum, the A95, the B9017 and a railway line. The alignment also crosses five minor roads, one local road and two restricted local access roads. Alignment 19A also crosses a 132 kV OHL, a 400 kV OHL and the Moray West	Alignment 19B crosses the River Isla, the Burn of Drum, the A95, the B9017 and B9116, and a railway line. The alignment also crosses three minor roads, one local road and four restricted local access roads.	Alignment 19C crosses the River Isla, the Burn of Drum, the A95, the B9017 and a railway line. The alignment also crosses five minor roads, one local road and four restricted local access roads.	Alignment 19D crosses the River Isla, the A96, the B9014 and a single track railway. The alignment also crosses one minor road and three restricted local access roads.
	220 kV underground cable route three times. It should be noted however that the 400 kV OHL is proposed to be diverted into the proposed Coachford 400 kV substation site, which will remove the requirement for a 400 kV OHL crossing.	Alignment 19B also crosses a 132 kV OHL and a 400 kV OHL and the Moray West 220 kV underground cable route three times. It should be noted however that the 400 kV OHL is proposed to	Alignment 19C also crosses a 132 kV OHL, a 400 kV OHL and the Moray West 220 kV underground cable route once. It should be noted however that the 400 kV OHL is proposed to be diverted into the proposed	Alignment 19D also crosses two 132 kV OHLs, a 275 kV OHL and the Moray West 220 kV underground cable route twice.
	Environmental Design Between 10% and 25% of Alignment 19A is at elevations over 200 m. The maximum elevation is 263 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	be diverted into the proposed Coachford 400 kV substation site, which will remove the requirement for a 400 kV OHL crossing.	Coachford 400 kV substation site, which will remove the requirement for a 400 kV OHL crossing. Environmental Design	Environmental Design Over 25% of Alignment 19D is at elevations over 200 m. The maximum elevation is 245 m and is unlikely to cause a significant issue.
		Environmental Design Between 10% and 25% of Alignment 19B is at elevations over 200 m. The maximum elevation is	Between 10% and 25% of Alignment 19C is at elevations over 200 m. The maximum elevation is 263 m and is unlikely to cause a significant issue.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.
	There are no reports of contaminated land within Alignment 19A. Alignment 19A passes nearby an aircraft crash site but is designated low for unexploded ordnance hazard.	263 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within	There are no reports of contaminated land within Alignment 19D. The alignment passes within 100 m of a historical rifle range that was in use between at least 1886 and 1945. There is a high unexploded
	According to SEPA flood maps, greater than 5% of Alignment 19A is located within the 1 in 10 year flood risk zone, associated with the crossing of the River Isla.	There are no reports of contaminated land within Alignment 19B. Alignment 19B passes nearby an aircraft crash site but is designated low for	Alignment 19C. Alignment 19C passes nearby an aircraft crash site but is designated low for unexploded ordnance hazard.	ordnance risk associated with this site. According to SEPA flood maps, less than 5% of Alignment 19D is located within the 1 in 10 year flood
	Ground Conditions	unexploded ordnance hazard.	According to SEPA flood maps, greater than 5% of	risk zone.
	Alignment 19A contains a maximum slope of 24 degrees. However this is for less than a span length which is not a significant concern.	According to SEPA flood maps, greater than 5% of Alignment 19B is located within the 1 in 10 year flood	Alignment 19A is located within the 1 in 10 year flood risk zone, associated with the crossing of the River	Ground Conditions
	Alignment 19A does not pass through any known areas of peatland.	risk zone, associated with the crossing of the River Isla.	Isla.	Alignment 19D contains a maximum slope of 16 degrees which is not a concern.
	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options.	Ground Conditions Alignment 19B contains a maximum slope of 24	Ground Conditions Alignment 19C contains a maximum slope of 24 degrees. However this is for less than a span length	Alignment 19D does not pass through any known areas of peatland.
	Alignment 19A requires three angle towers.	degrees. However this is for less than a span length which is not a significant concern.	which is not a significant concern. Alignment 19C does not pass through any known	Construction and Maintenance There is an existing network of tracks and roads
	Proximity There are two residential properties located within 170 m of Alignment 19A.	Alignment 19B does not pass through any known areas of peatland.	areas of peatland.	within 1 km of all alignment options. Alignment 19D requires three angle towers.
	There are two residential properties located within 170 m of Alignment 19A. There is one small wind turbine located on the alignment option and it is likely that this turbine would need to be relocated or removed.	Construction and Maintenance There is an existing network of tracks and roads	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options.	Proximity There is one residential property located within
	There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. There are no urban areas or metallic pipelines that will impact on the alignment option.	within 1 km of all alignment options. Alignment 19B requires three angle towers. Proximity There is one residential property located within 100 m of Alignment 19B and eleven residential properties located within 170 m.	Alignment 19C requires five angle towers. Proximity There are two residential properties located within 170 m of Alignment 19A.	170 m of Alignment 19D. There is one consented wind turbine located 180 m from the alignment option recorded on the Moray Council planning portal, however this is not visible on aerial imagery.



Topic	Alignment 19A	Alignment 19B	Alignment 19C	Alignment 19D
		There is one small wind turbine located on the alignment option and it is likely that this turbine would need to be relocated or removed. There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. Alignment 19B crosses two underground gas pipelines.	There are two small wind turbines on the alignment option and it is likely that these may need to be relocated or removed. There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. There are no urban areas or metallic pipelines that will impact on the alignment option.	There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. Alignment 19D crosses three underground gas pipelines. This alignment also parallels within 65 m of the pipeline for approximately 1.5 km which could result in AC interference.
Economic	Alignment 19A has a substantially higher cost than the lowest cost option, It is roughly 50% longer, increasing capital costs for towers, conductors and access tracks required for construction. Alignment 19A is over 140% of the lowest estimated capital cost option. Alignments 19A has the lowest estimated operational cost for this section.	Similar to Alignment 19A, an increased total line length increases the comparative capital cost of Alignment 19B to over 120% of the lowest cost option. Alignment 19B has the highest estimated operational cost for this section, at over 140% of the lowest cost option. Similar to Alignment 19D, it has 60% more crossings than the lowest cost option.	Alignment 19C has the highest estimated capital cost. It is similar in length to Alignment 19A but requires a greater proportion of tension towers. Alignment 19C is over 120% of the lowest operational cost option, due to an increased number of crossings requiring inspections and maintenance.	Alignment 19D has the lowest estimated capital cost. Similar to Alignment 19B, operational costs for Alignment 19D are over 140% of the lowest cost option due to the high number of crossings required. Forestry costs are however estimated to be lower than for Alignment 19B.

Section 19 – Blackhillock OHL Diversion

Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
Topic Natural Heritage	Alignment A1 Designations Alignment A1 is within 10 km of Moray and Nairn Coast SPA/Ramsar, Mortlach Moss SSSI/SAC, Whitehill SSSI, Mill Wood SSSI, Den of Pitlurg SSSI, Lower River Spey SSSI, Lower River Spey – Spey Bay SAC, River Spey SSSI, River Spey SAC, Tips of Corsemaul and Tom Mor SSSI/SPA, Shiel Wood Pastures SSSI and Craigs of Succoth SSSI. Moray and Nairn Coast SPA/Ramsar has the potential to support wintering geese and breeding osprey. The habitat around the alignment contains limited habitat suitable for winter geese associated with this SPA. The non-statutory designations and nature conservation sites within 2 km of the alignment include a Buglife B-Line.	Alignment B1 Designations Alignment B1 is within 10 km Moray and Nairn Coast SPA/Ramsar, Mortlach Moss SSSI/SAC, Whitehill SSSI, Mill Wood SSSI, Den of Pitlurg SSSI, Lower River Spey SSSI, Lower River Spey – Spey Bay SAC, River Spey SSSI, River Spey SAC, Tips of Corsemaul and Tom Mor SSSI/SPA, Shiel Wood Pastures SSSI and Craigs of Succoth SSSI. Alignment B1 passes closely adjacent to Mill Wood SSSI. Moray and Nairn Coast SPA/Ramsar has the potential to support wintering geese and breeding osprey. The habitat around the alignment contains	Designations Alignment B2 natural heritage designation appraisal is the same as Alignment B1. Protected Species The habitats and their suitability to support protected species within Alignment B2 are the same as to those within Alignment B1, with the following exceptions: Less riparian woodland is present in the north of Alignment B2 than B1; and A badger sett was observed 400 m from Alignment B2.	Designations Alignment B3 is within 10 km Moray and Nairn Coast SPA/Ramsar, Mortlach Moss SSSI/SAC, Whitehill SSSI, Mill Wood SSSI, Den of Pitlurg SSSI, Lower River Spey SSSI, Lower River Spey Bay SAC, River Spey SSSI, River Spey SAC, Tips of Corsemaul and Tom Mor SSSI/SPA, Shiel Wood Pastures SSSI and Craigs of Succoth SSSI. Moray and Nairn Coast SPA/Ramsar has the potential to support wintering geese and breeding osprey. The habitat around the alignment contains limited habitat suitable for winter geese associated	Alignment B4 Designations Alignment B4 natural heritage designation appraisal is the same as Alignment B3. Protected Species The habitats and their suitability to support protected species within Alignment B4 are the same as to those within Alignment B2, with the following exceptions: The River Isla is not crossed, reducing the amount of riparian habitat potentially affected; and A larger area of coniferous woodland is crossed.	Alignment B5 Designations Alignment B5 natural heritage designation appraisal is similar to Alignment B1. Protected Species The habitats and their suitability to support protected species within Alignment B5 are the same as to those within Alignment B1, with the following exception: A larger area of coniferous woodland is present in Alignment B5, increasing the habitat's suitability for red squirrels and pine marten, as well as bat species to a more limited degree. Habitats
			Habitats HABMOS data identified no Annex I	o a constant of the constant o	woodland is crossed. Habitats HABMOS data identified the following Annex I habitat within the alignment:	Habitats Woodland listed in the AWI is located across the width of this alignment, in the north and includes a section of category 2a ancient woodland of semi-



Topic Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
watercourse riparian zones. The aligalso runs adjacent to coniferous wo number of farm and residential strue also present in the alignment. These potential to support roosting bats. The edges of wooded areas, seminhabitats and watercourses also have potential to support commuting and activities for bats. The habitats within Alignment A1, in agricultural land, have the potential support foraging badgers. The dry wunmaintained field margin areas have potential to provide suitable habitatic creation. The coniferous woodlands have the to support red squirrel and pine mand open, exposed areas within the align considered sub-optimal for wildcats. The larger watercourses have the pusupport commuting and foraging of Signs of otter spraints were observed watercourses within the alignment. smaller channels have the potential support water voles. Areas of standing water and slow-flefield drains have the potential to support water voles. Unmaintained field margins, hedger tree lines may provide habitat for reached the potential on the Burn of limits movement further upstream. Smaller freshwater burns have the pusupport lamprey species. The alignmoccurs within the known distribution for FWPM 55. The varied habitats within the alignment alignment awide teres.	nature conservation sites within 2 km of the alignment include a Buglife B-Line. Protected Species Small areas of broadleaf trees are present within the alignment, largely within watercourse riparian zones. The alignment also runs adjacent to coniferous woodland. A number of farm and residential structures are also present in the alignment. These have the potential to support roosting bats. The edges of wooded areas, seminatural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment B1, including agricultural land, have the potential to support foraging badgers. The dry wooded or unmaintained field margin areas have the potential to provide suitable habitats for sett creation. Badget setts were observed in the surrounding area. The coniferous woodlands have the potential to support red squirrel and pine martin. The open, exposed areas within the alignment are considered sub-optimal for wildcats. The larger watercourses have the potential to support commuting and foraging otters. Signs of otter spraints were observed on watercourses within the alignment. The smaller channels have the potential to support water voles. Areas of standing water and slow-	BNG There is no unavoidable irreplaceable habitat present in the alignment, therefore no BU were calculated. Ornithology The ornithology appraisal for Alignment B2 is the same as Alignment B1. Hydrology, Geology and	km of the alignment include a Buglife B-Line. Protected Species The habitats and their suitability to support protected species within Alignment B3 are the same as to those within Alignment B2. Habitats The habitats appraisal for Alignment B3 is the same as Alignment B2, with the following exception: No woodland listed in the AWI is present within the alignment. BNG There is no unavoidable irreplaceable habitat present in the alignment, therefore no BU were calculated. Ornithology The ornithology appraisal for Alignment B3 is the same as Alignment B1. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment B3 is the same as Alignment B2.	H91A0 - Old sessile oak woods The NWSS identified upland birchwood, wet woodland and upland mixed ashwood along the alignment. No woodland listed in the AWI is present within the alignment. The carbon and peatland map of Scotland did not indicate the presence of any Class 1 or Class 2 peat within the alignment. BNG There is no unavoidable irreplaceable habitat present in the alignment, therefore no BU were calculated. Ornithology The ornithology appraisal for Alignment B4 is the same as Alignment B1. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment B4 is the same as Alignment B4.	natural origin which is considered irreplaceable habitat. The NWSS identified native pinewood and upland birchwood along the alignment. The carbon and peatland map of Scotland did not indicate the presence of any Class 1 or Class 2 peat within the alignment. HABMOS data identified the following Annex I habitat within the alignment: H6230 - Species-rich Nardus grassland H91C0 - Caledonian forest H9180 – Tilio -Acerion forests BNG The Alignment passes directly across irreplaceable ancient woodland in the form of Category 2a ancient woodland of semi-natural origin. The section of irreplaceable ancient woodland amounts to 64.04 BU, however with careful design, impacts may be avoided. Ornithology The ornithology appraisal for Alignment B5 is the same as Alignment B1. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment B5 is similar to Alignment B1, with the following exceptions: According to SEPA abstraction data, there are no abstractions within 1 km of Alignment B5.

European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).

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Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
	aquatic invertebrate assemblage, including species of conservation concern.	margins, hedgerows and tree lines may provide habitat for reptiles.				
	<u>Habitats</u>	The larger watercourses have the				
	HABMOS data identifies no Annex I habitats within the alignment.	potential to support migratory salmonids. However, an impassable waterfall on the Burn of Drum and an				
	Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable habitat.	impassable weir at Keith restricts movement of migratory salmon upstream. The smaller freshwater				
	The carbon and peatland map of Scotland does not identify Class 1 or Class 2 peatland within 100 m.	burns have the potential to support lamprey species. The alignment occurs within the known distribution range for FWPM.				
	BNG	The varied habitats within the				
	There is no unavoidable irreplaceable habitat present in the alignment, therefore no Biodiversity Units (BU) were calculated.	alignment have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including				
	Ornithology	species of conservation concern.				
	Data collected as part of the desk-study found frequent flight activity of pink-footed geese and greylag geese were recorded along the River Spey and River Isla valleys throughout the winter, autumn and spring passage months. This location may therefore represent a collision hotspot for geese. No further bird surveys were conducted along the alignment, as the associated agricultural and coniferous woodland habitats were anticipated to be of low	 Habitats HABMOS data identified the following Annex I habitat within the alignment: H6230 - Species-rich Nardus grassland NWSS identified upland birchwood and wet woodland along the alignment. Woodland listed in the AWI is present within the alignment and a Section of 				
	importance. Surveys conducted for the proposed Coachford 400 kV substation development in the area recorded a single flight by goshawk, pink-footed geese and a breeding pair of curlew. Hydrology, Geology and Hydrogeology	Category 2a ancient woodland of semi-natural origin is located at Mill Wood and considered irreplaceable habitat. It is assumed at this stage that it will be possible to oversail Mill Wood and therefore no tree removal would be required.				
	Alignment A1 crosses the Burn of Drum (ID: 23177) and unclassified watercourses. It is underlain by Appin Group a low productivity aquifer. Alignment A1 is located within a SEPA DWPA	The carbon and peatland map of Scotland did not indicate the presence of any Class 1 or Class 2 peat within the alignment. BNG				
	for surface water, the Herricks Burn catchment.	The Alignment passes directly through irreplaceable ancient woodland and therefore 20.06 BU have been calculated. However it is anticipated				

Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
	Alignment A1 is entirely located within SW DWPA Burn of Davidstone and Shenwell Spring.	that the woodland would be over sailable, and therefore the BU have the potential to be lower.				
		Shenwell Spring. According to Moray Council data, there are Private Water Supplies within 1 km.				
		According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.				



Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
Cultural Heritage	Designations There are no World Heritage Sites, GDLs, Scheduled Monuments, Inventory Battlefields entries within 1 km of the alignment. There are no SMRs within 100 m of the alignment. Assets There are no Non-inventory GDLs, Conservation Areas or Listed Buildings within 1 km of the alignment.	Designations The Designation appraisal for Alignment B1 is mostly the same as Alignment A1. However, there is one SMR entry for Alignment B1, Birkinburn (Canmore ID 156282), which can be avoided through micro siting of the alignment option. Assets The cultural heritage assets appraisal for Alignment B1 is the same as Alignment A1.	Designations The Designation appraisal for Alignment B2 is mostly the same as Alignment B1. However, there is an additional heritage asset identified, a series of 10 cairns. Direct physical impacts can be avoided through micro siting of the alignment option. Assets The cultural heritage assets appraisal for Alignment B2 is the same as Alignment A1.	Designations The Designation appraisal for Alignment B3 is the same as Alignment B2. Assets The cultural heritage assets appraisal for Alignment B3 is mostly the same as Alignment A1. However, there is only one Category B Listed Building. There is unlikely to be any significant effects on its setting due to distance of the Listed Building from the alignment.	Designations The Designation appraisal for Alignment B4 is the same as Alignment B2. Assets The cultural heritage assets appraisal for Alignment B4 is mostly the same as Alignment A1. However, there is one Category B and two Category C Listed Buildings. There is unlikely to be any significant effects on their settings due to intervening topography.	Designations The cultural heritage designations appraisal for Alignment B5 Is the same as Alignment B2. Assets The cultural heritage assets appraisal for Alignment B5 Is the same as Alignment B1.
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. The Spey Valley SLA is located within 10 km of the alignment. Intervening topography, vegetation and distance make the alignment unlikely to be visible or affect the special qualities of either SLA. Landscape Character Alignment A1 is located in Upland Farmland and Farmed Moorland Edge — Aberdeenshire LCT. The alignment runs largely against the grain of the landscape, particularly on the more elevated foothills. It runs across a landscape already characterised by OHL infrastructure so would result in a slight increase in the adverse effect of OHLs on the local landscape. Visual Alignment A1 passes between sensitive receptors at Tarnash Farm, Rosehall Cottae, Rosehall Farm and Birkenburn, as well as properties at Backnuir. Properties at Birkenburn and Backnuir will have a new OHL in close proximity, and on higher ground as it follows the Old Military Road, increasing its local prominence. The undulating landscape	Landscape Designations The Landscape Designations appraisal for Alignment B1 is the same as Alignment A1. Landscape Character The landscape character appraisal for Alignment B1 is mostly the same as Alignment A1. The alignment also runs against the grain of the landscape but keeps on the lower slopes of The Balloch. It crosses through Mill Wood — a small pocket of native woodland that is a small but characteristic feature of the area. The alignment is located in an area already intensively impacted by OHL infrastructure. Visual Alignment B1 would be closely visible from sensitive receptors at Mains of Auchoynanie, Weser Herricks and Herrockside. It would also be clearly visible from sensitive receptors at Mains of Birkenburn, Greenwood, Glen of Coachford, and Upper Auchairn. Conversely, removal of the existing OHL between Little Ardrone and Tarnash Farm would remove close views for sensitive receptors including those at Drum and the edge	Landscape Designations The Landscape Designations appraisal for Alignment B2 is the same as Alignment A1. Landscape Character The landscape character appraisal for Alignment B2 is mostly the same as Alignment B1, however does not cross Mill Wood and crosses the River Isla straight up to the summit of Hill of Ardrone completely against the grain of the landscape. Visual The visual appraisal for Alignment B2 is mostly the same as Alignment B1. However, Alignment B2 removes close views of the existing OHL from sensitive receptors at Little Ardrone but brings the alignment slightly closer to sensitive receptors at Miekle Ardrone. This alignment would also be closely visible from Crofts of Ardrone is likely to increase visibility locally, including from properties to the east and north of the River Isla.	Landscape Designations The Landscape Designations appraisal for Alignment B3 is the same as Alignment A1. Landscape Character The landscape character appraisal for Alignment B3 is mostly the same as Alignment B1. However, the alignment crosses the River Isla and across the flanks of Hill of Ardrone although just shy of the summit. Its alignment is still completely against the grain of the landscape. Visual The visual appraisal for Alignment B3 is mostly the same as Alignment B2. However, Alignment B3 would bring OHL in closer proximity to Little Cantly and Crofts of Ardrone. It would also result in the partial 'boxing in' of Little Cantly.	Landscape Designations The Landscape Designations appraisal for Alignment B4 is the same as Alignment A1. Landscape Character The landscape character appraisal for Alignment B4 is mostly the same as Alignment B1. However, the alignment crosses the landscape more sympathetically than Alignment B2 or B3, being on slightly lower ground and avoiding the summit of Hill of Ardrone as well as avoiding Mill Wood. Visual The visual appraisal for Alignment B4 is mostly the same as Alignment B2. However, Alignment B4 is slightly less prominent in the wider landscape than Alignment B2 or B3, being located further from the summit of Hill of Ardrone. It would however bring it in close proximity to Newton of Cantly and Meikle Cantly.	Landscape Designations The Landscape Designations appraisal for Alignment B5 is the same as Alignment A1. Landscape Character Alignment B5, located in the Upland Farmland LCT (288), runs against the grain of the landscape but on slightly higher ground on the lower slopes of The Balloch compared to Alignment B1. It crosses through Mill Wood – a small pocket of native woodland that is a small but characteristic feature of the character area. Visual Alignment B5 would be closely visible from sensitive receptors at Mains of Auchoynanie, Wester Herricks and Herrockside. It would also be clearly visible from sensitive receptors at Mains of Birkenburn, Greenwood, Glen of Coachford, and Upper Auchairn. Conversely, removal of the existing 275kv OHL between Little Ardrone and Tarnash Farm would remove close views for sensitive receptors including those at Drum and the edge of Keith, as well as for users of Dunnyduff Wood. The key difference from Alignment B1 is that it passes to the back of



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Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
	and rising hills of The Balloch would largely limit wider visual influence.	of Keith, as well as for users of Dunnyduff Wood.				properties at Wester Herricks and Herrockside, such that their key views to the front are less disrupted by infrastructure. However, the line sits much higher in the landscape, with a risk of being skylined in views further west.
Land Use	Alignment A1 passes through Class 3.2 land, which is unavoidable, for majority of its length. It does not pass through any prime agricultural land. Forestry Alignment A1 passes the edge of mixed age commercial forestry and passes through shelterwood broadleaves. The estimated area of commercial woodland that would be impacted by Alignment B1 is 3.62 ha, comprising 0.9 ha broadleaved woodland and 2.72 ha coniferous woodland. Recreation Alignment A1 passes immediately south of a core path, south of Dunnyduff Wood. It does not pass over long-distance walking routes, national cycle routes or areas especially known for commercial highland sports.	Agriculture The agriculture appraisal for Alignment B1 is the same as alignment A1. Forestry Alignment B1 passes the edge of mixed age commercial forestry and interacts with an area of upland birchwood. The estimated area of commercial woodland that would be impacted by Alignment B1 is 3.82 ha, comprising 2.24 ha broadleaved woodland and 1.38 ha coniferous woodland. Of this 0.28 ha is restock (young trees). It is anticipated that the alignment would be able to oversail the area of upland birchwood, and that no woodland removal would be required in this area. Recreation Alignment B1 passes over a core path, west of Balloch Wood. It does not pass over long-distance walking routes, national cycle routes or areas especially known for commercial highland sports.	Agriculture The agriculture appraisal for Alignment B2 is the same as alignment A1. Forestry Alignment B2 passes the edge of mixed age commercial forestry and passes through areas of native broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment B2 is 3.17 ha, comprising 1.5 ha broadleaved woodland and 1.67 ha coniferous woodland. Of this 0.28 ha is restock (young trees). Recreation The recreation appraisal for Alignment B2 is the same as Alignment B1.	Agriculture The agriculture appraisal for Alignment B3 is the same as alignment A1. Forestry Alignment B3 passes the edge of mixed age commercial forestry. The estimated area of commercial woodland that would be impacted by Alignment B3 is 2.75 ha, comprising 0.24 ha broadleaved woodland and 1.51 ha coniferous woodland. Of this 0.28 ha is restock (young trees). Recreation The recreation appraisal for Alignment B3 is the same as Alignment B1.	Agriculture The agriculture appraisal for Alignment B4 is the same as alignment A1. Forestry Alignment B4 passes through and close to areas of mixed age commercial forestry and passes through areas of native broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment B4 is 4.00 ha, comprising 1.85 ha broadleaved woodland and 2.15 ha coniferous woodland. Of this 0.27 ha is restock (young trees). Recreation The recreation appraisal for Alignment B4 is the same as Alignment B1.	Agriculture The agriculture appraisal for Alignment B5 is the same as alignment A1. Forestry Alignment B5 passes through and close to areas of mixed age commercial forestry and through areas of native broadleaved woodlands. The estimated area of commercial woodland that would be impacted by Alignment B5 is 23.18 ha, comprising 5.17 ha broadleaved woodland. Of this, 2.02 ha is restock (young trees). Recreation The recreation appraisal for Alignment B5 is the same as Alignment B1
Planning	Within 500 m lie the following consented planning applications: • Approval of matters specified in conditions on planning consent 18/01046/EIA to construct onshore electrical transmission infrastructure comprising a cable transition jointing bay, underground cable circuits, construction of a substation south of	 Within 500 m lie the following consented planning applications: Approval of matters specified in conditions on planning consent 18/01046/EIA to construct onshore electrical transmission infrastructure comprising a cable transition jointing bay, underground cable circuits, 	The planning appraisal for Alignment B2 is the same as Alignment B1.	The planning appraisal for Alignment B3 is the same as Alignment B1.	The planning appraisal for Alignment B4 is the same as Alignment B1.	 Within 500 m lie the following consented planning applications: Approval of matters specified in conditions on planning consent 18/01046/EIA to construct onshore electrical transmission infrastructure comprising a cable transition jointing bay, underground cable circuits,



Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
	 Keith, and further connecting cable to allow connection with the existing transmission network (21/01402/AMC) Within the alignment. Quarry extension (Cairdshill Quarry) (22/00499/APP). Approximately 300 m west. Proposed hard rock quarry and mineral processing area (20/01251/MIN). Approximately 150 m west. The following application is known to the planning system, but not yet consented: Install a battery energy storage system (BESS) with associated infrastructure at Blackhillock Substation (23/01032/S36SCN). Within the alignment. 	construction of a substation south of Keith, and further connecting cable to allow connection with the existing transmission network (21/01402/AMC). Within the alignment. Installation of new water treatment building access kiosk and solar PV array (22/00424/APP). Within the alignment. Erection of a dwellinghouse (19/01462/PPP). Approximately 200 m east. Erection of a dwellinghouse (19/00570/PPP). Approximately 200 m east. Erection of a dwellinghouse (19/00569/PPP). Approximately 200 m east.				construction of a substation south of Keith, and further connecting cable to allow connection with the existing transmission network (21/01402/AMC). Within the alignment. Installation of new water treatment building access kiosk and solar PV array (22/00424/APP). Approximately 50 m southwest. Erection of a dwellinghouse (19/01462/PPP). Approximately 100 m west. Erection of a dwellinghouse (19/00570/PPP). Approximately 100 m west. Erection of a dwellinghouse (19/00569/PPP). Approximately 100 m west.
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment A1 crosses the A96 and a medium pressure SGN pipeline. The alignment also crosses three restricted local access roads. The alignment also crosses the Moray West 220 kV underground cable route. Environmental Design Over 25% of Alignment A1 is at elevations over 200 m. The maximum elevation is 267 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment A1. According to SEPA flood maps, less than 5% of Alignment A1 is located within the 1 in 10 year flood risk zone. Ground Conditions Alignment A1 contains a maximum slope of 16 degrees which is not a concern.	Alignment B1 crosses one minor road and two restricted local access roads. The alignment also crosses the Moray West 220 kV underground cable route. Environmental Design Over 25% of Alignment B1 is at elevations over 200 m. The maximum elevation is 262 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment B1. According to SEPA flood maps, less than 5% of Alignment B1 is located within the 1 in 10 year flood risk zone. Ground Conditions Alignment B1 contains a maximum slope of 26 degrees. However this is	Alignment B2 crosses the single track Aberdeen to Inverness railway line, one minor road and three restricted local access roads. The alignment also crosses the Moray West 220 kV underground cable route. Environmental Design Over 25% of Alignment B2 is at elevations over 200 m. The maximum elevation is 262 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment B2. According to SEPA flood maps, more than 5% of Alignment B2 is located within the 1 in 10 year flood risk zone.	Alignment B3 crosses the single track Aberdeen to Inverness railway line, one minor road and three restricted local access roads. The alignment also crosses the Moray West 220 kV underground cable route three times. Environmental Design Over 25% of Alignment B3 is at elevations over 200 m. The maximum elevation is 262 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment B3. According to SEPA flood maps, less than 5% of Alignment B3 is located	Alignment B4 crosses the single track Aberdeen to Inverness railway line, one minor road and four restricted local access roads. The alignment also crosses the Moray West 220 kV underground cable route four times. Environmental Design Over 25% of Alignment B4 is at elevations over 200 m. The maximum elevation is 262 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment B4. According to SEPA flood maps, less than 2% of Alignment B4 is located	Alignment B5 crosses five restricted local access roads. The alignment also crosses the Moray West 220 kV underground cable route. Environmental Design Over 25% of Alignment B5 is at elevations over 200 m. The maximum elevation is 262 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment B5. According to SEPA flood maps, less than 5% of Alignment B5 is located within the 1 in 10 year flood risk zone. Ground Conditions Alignment B5 contains a maximum slope of 26 degrees. This alignment traverses along a significant side slope



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Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
	Alignment A1 does not pass through any known areas of peatland.	for less than a span length which is not a significant concern.	It is likely that a tower would be required within the flood zone.	within the 1 in 10 year flood risk zone.	within the 1 in 10 year flood risk zone.	for a large proportion of its route, which could pose challenges for
	Construction and Maintenance	Alignment B1 does not pass through	Ground Conditions	Ground Conditions	Ground Conditions	construction and tower placement.
	There is an existing network of tracks and roads within 1 km of all alignment options.	any known areas of peatland. Construction and Maintenance	Alignment B2 contains a maximum slope of 27 degrees. However this is	Alignment B3 contains a maximum slope of 30 degrees. However this is	Alignment B4 contains a maximum slope of 21 degrees. However this is	Alignment B5 does not pass through any known areas of peatland.
	Alignment A1 requires two angle towers.	There is an existing network of tracks and roads within 1 km of all alignment	for less than a span length which is not a significant concern.	for less than a span length which is not a significant concern.	for less than a span length which is not a significant concern.	Construction and Maintenance There is an existing network of tracks
	Proximity There is one residential property located	options. Alignment B1 requires three angle	Alignment B2 does not pass through any known areas of peatland.	Alignment B3 does not pass through any known areas of	Alignment B4 does not pass through any known areas of	and roads within 1 km of all alignment options.
	within 170 m of Alignment A1. There is one small wind turbine	towers.	Construction and Maintenance	peatland.	peatland.	Alignment B5 requires five angle
	approximately 45 m from the alignment	<u>Proximity</u>	There is an existing network of tracks	Construction and Maintenance	Construction and Maintenance	towers.
	option which may be a constraint depending on final tower locations.	There are no residential properties located within 170 m of Alignment B1.	and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.	Proximity There are no residential properties
	There is one MBNL fixed link between Millstone Hill and Coachford, and a second	There are possibly multiple cast iron Scottish Water pipeline crossings on	Alignment B2 requires three angle towers.	Alignment B3 requires three angle towers.	Alignment B4 requires four angle towers.	Iocated within 170 m of Alignment B5. There are possibly multiple cast iron
	link originating from Rattray Head operated by Northern Lighthouse Board. However,	this alignment option. These are unlikely to cause a significant	Proximity There are no residential properties	<u>Proximity</u>	<u>Proximity</u>	Scottish Water pipeline crossings on this alignment option. These are
	however these are unlikely to be an issue as the alignment is not near the transmitter or receiver end of either link. Alignment A1 crosses one medium pressure SGN gas pipeline, however this is not considered to be a significant constraint.	constraint but could influence tower placement. There are no wind turbines, communications masts or urban areas that will impact on this alignment option.	located within 170 m of Alignment B2. There is one small wind turbine at Meikle Ardrone. This is beyond 3 x rotor diameters from the alignment so is not a constraint. There is one	There are no residential properties located within 170 m of Alignment B3. There is one Telefonica fixed link located within 300 m of this alignment option between Millstone Hill and Hill of Ardrone.	There are two residential properties located within 170 m of Alignment B4. There is one Telefonica mast located within 75 m of Alignment B4. Additional checks would be	unlikely to cause a significant constraint but could influence tower placement. There are no wind turbines, communications masts or urban areas that will impact on this alignment option.
	There are no urban areas that will impact on the alignment option.		Telefonica fixed link located within 300 m of this alignment option between Millstone Hill and Hill of Ardrone. There are possibly multiple cast iron Scottish Water pipeline crossings on this alignment option. These are unlikely to cause a significant constraint but could influence tower placement. There are no urban areas that will impact on this alignment option.	There are possibly multiple cast iron Scottish Water pipeline crossings on this alignment option. These are unlikely to cause a significant constraint but could influence tower placement. There are no wind turbines or urban areas that will impact on this alignment option.	required with the mast operator to identify if interference is likely. There are possibly multiple cast iron Scottish Water pipeline crossings on this alignment option. These are unlikely to cause a significant constraint but could influence tower placement. There are no wind turbines or urban areas that will impact on this alignment option.	
Economic	As there is only one alignment option, no cost comparison is required.	Alignment B1 has the lowest estimated capital cost for this section. Alignment B1 has the lowest estimated operational cost for this section.	Alignment B2 is longer in length than Alignment B1 but has slightly lower costs associated with forestry, creating a difference in estimated capital cost of approximately 14%. Alignment B2 is over 120% of the lowest estimated operational cost	Alignment B3 is close to 120% of the lowest cost option, due to its increased length, Alignment B3 has the lowest estimated forestry costs for this section. Alignment B3 is over 120% of the lowest estimated operational cost	Alignment B4 has the highest estimated capital cost for this section, due to the costs associated with increased length and additional low voltage crossings in comparison to other options.	Alignment B5 is similar in length to Alignment B1, but has significantly higher estimated forestry costs and an overall estimated cost over 120% of the lowest cost option. Alignment B5 has significantly less low voltage crossings than Alignment B1,



Topic	Alignment A1	Alignment B1	Alignment B2	Alignment B3	Alignment B4	Alignment B5
			option, due to an additional low voltage crossing.	option, due to an additional low voltage crossing.	Alignment B4 requires 60% more low voltage crossings than Alignment B1, significantly increasing costs associated with maintenance and inspections.	but it has a substantially higher length through forestry, resulting in ongoing management costs.

Section 20 Topic	Alignment 20A	Alignment 20B	Alignment 20C	Alignment 20D	Alignment 20E	Alignment 20F		
Natural Heritage	Designations Alignment 20A is within 10 km of Den of Pitlurg SSSI, Mill	<u>Designations</u> Alignment 20B natural heritage	Designations Alignment 20C natural heritage	Designations Alignment 20D natural heritage	Designations Alignment 20E natural heritage	<u>Designations</u> Alignment 20F natural heritage		
	Wood SSSI, Shiel Wood Pastures SSSI, Moss of Crombie SSSI, Craigs of Succoth SSSI and Tips of Corsemaul and Tom Mor SSSI/SPA.	designation appraisal is the same as Alignment 20A.	designation appraisal is the same as Alignment 20A.	designation appraisal is the same as Alignment 20A.	designation appraisal is the same as Alignment 20A.	designation appraisal is the same as Alignment 20A.		
	Whitehill SSSI and Mortlach Moss SSSI/SAC are within 1 km of the alignment. There is the potential for these to incur significant effects from pollution during construction. Moray and Nairn Coast SPA/Ramsar is within 20 km and has the potential to support wintering geese and breeding osprey, though there is a large availability of suitable habitat in the surrounding region that impact on these species is unlikely to	Protected Species The habitats and their suitability to support protected species within Alignment 20B are largely the same as to those within Alignment 20A. Habitats	Protected Species The habitats and their suitability to support protected species within Alignment 20C are largely the same as to those within Alignment 20A, with following exception:	Protected Species The habitats and their suitability to support protected species within Alignment 20D are largely the same as to those within Alignment 20F, with the following exceptions:	Protected Species The habitats and their suitability to support protected species within Alignment 20E are largely the same as to those within Alignment 20A, with the following exception:	Protected Species The habitats and their suitability to support protected species within Alignment 20F are largely the same as to those within Alignment 20C, with the following exception:		
	be significant. There is a non-statutory designation, Buglife B-Line within 2 km of the alignment.	The habitats appraisal for Alignment 20B is mostly the same as Alignment 20A, with the following exceptions:	A smaller area of coniferous woodland is present in Alignment 20C, decreasing the habitat's suitability for red	A smaller area of coniferous woodland is present in Route Option 20D decreasing the habitat's suitability for red	A larger area of coniferous woodland is present in Alignment 20E, increasing the habitat's suitability for red	Coniferous woodland area is further reduced than Alignment 20C, further decreasing the habitat's		
	There are no nature conservation sites within 2 km of the alignment.	Only one Annex 1 habitat is located within 100 m, H6230	squirrels and pine marten, as well as bat species to a more limited degree.	squirrels and pine marten; as well as bat species to a more limited degree.	squirrels and pine marten, as well as bat species to a more limited degree.	suitability for red squirrels, pine marten and bat species. Habitats		
	Protected Species Mature woodland groups and standing trees, as well as	– Species-rich Nardus grassland	Habitats The habitats appraisal for	Habitats HABMOS data identified the	Habitats The habitats appraisal for	The habitats appraisal for Alignment 20F is the mostly the		
	residential and farm buildings within the alignment have the potential to support roosting bats. However, the majority of these trees are coniferous which have lower potential	to support roosting bats. However, the majority of es are coniferous which have lower potential y to support roosting bats than mature broadleaf es of wooded areas, semi-natural habitats and urses also have the potential to support commuting birchwood and wet woodland within 100 m. BNG The BNG Appraisal for Alignment 20B is the same as Alignment 20A.	birchwood and wet woodland	birchwood and wet woodland Alignment	Alignment 20C is the same as Alignment 20A.	following Annex I habitat (of the Habitats Directive) within the	Alignment 20E is the same as Alignment 20A.	same as Alignment 20A, with the following exceptions:
	suitability to support roosting bats than mature broadleaf areas.		BNG The BNG Appraisal for Alignment	LOD:H6230 - Species-rich Nardus	BNG The BNG Appraisal for Alignment	The NWSS identified native pinewood, upland birchwood and upland mixed ashwood		
	The edges of wooded areas, semi-natural habitats and watercourses also have the potential to support commuting		20C is the same as Alignment 20A.	grassland The NWSS identified native	20E is the same as Alignment 20A. Ornithology	within 100 m; and • Woodland listed in the AWI is		
	The habitats within Alignment 20A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas have the potential to provide suitable habitat for sett creation. Observed and anecdotal badger activity has been reported within 1 km of the alignment.	Ornithology The ornithology appraisal for Alignment 20B is the same as Alignment 20A.	Ornithology The ornithology appraisal for Alignment 20C is the same as Alignment 20A.	upland birchwood and wet woodland within the LOD. Woodland listed in the AWI is present within the LOD and is category 2b LEPO woodland and not considered irreplaceable	The ornithology appraisal for Alignment 20E is the same as Alignment 20A. Hydrology, Geology and Hydrogeology	Category 2a, considered irreplaceable habitat, and Category 2b. This could potentially be avoided with careful placement of the alignment.		
	Where mature and undisturbed, the larger conifer woodlands have the potential to support wildcat, pine marten and red			habitat.	The hydrology, geology and hydrogeology appraisal for			

Topic	Alignment 20A	Alignment 20B	Alignment 20C	Alignment 20D	Alignment 20E	Alignment 20F
	squirrel. Pine marten have anecdotally been reported in the Bin Forest. The 'Strathbogie' Wildcat Priority Area covers part of the alignment option, from the southeastern edge of Balloch Wood to the eastern end, with anecdotal activity of wildcats being reported. The large watercourses have the potential to support commuting and foraging otters. Anecdotal sightings of otters have been reported. These watercourses and other smaller channels have the potential to support water voles. Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations, including great crested newts. Unmaintained field margins, hedgerows and tree lines may provide habitat for reptiles. The larger watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 20A occurs within the known distribution range for FWPM56. The varied habitats within Alignment 20A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern. Habitats HABMOS data identifies the following Annex I habitats within the alignment: H6230 - Species-rich Nardus grassland; and H91C0 - Caledonian forest. The NWSS identified native pinewood, upland birchwood and wet woodland within 100 m. Woodland listed in the AWI is present, however it is Category 2b LEPO woodland and not considered irreplaceable habitat. The carbon and peatland map of Scotland identified no Class 1 or Class 2 peatland within 100 m. BNG There is no unavoidable irreplaceable habitat present in 100 m. Therefore, no BU have been calculated for this alignment option.	Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 20B is mostly the same as Alignment 20A, with the following exceptions: There are no SEPA abstractions within 1 km of Alignment 20B.	Hydrology, Geology and Hydrogeology, geology and hydrogeology appraisal for Alignment 20C is the same as Alignment 20B.	The carbon and peatland map of Scotland identified no Class 1 or Class 2 peat within the LOD. BNG There is no unavoidable irreplaceable habitat present within this Route Option. Therefore, no BUs were calculated for this option. Ornithology The ornithology appraisal for Alignment 20D is the same as Alignment 20A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 20D is the same as Alignment 20E.	Alignment 20E is the same as Alignment 20B.	BNG The BNG Appraisal for Alignment 20F is the same as Alignment 20A. Ornithology The ornithology appraisal for Alignment 20F is the same as Alignment 20A. Hydrology, Geology and Hydrogeology The hydrology, geology and hydrogeology appraisal for Alignment 20F is the same as Alignment 20B, with the following exception: According to SEPA abstraction data, there is a potential abstraction with 1 km of Alignment 20F.

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⁵⁶ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).



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Topic	Alignment 20A	Alignment 20B	Alignment 20C	Alignment 20D	Alignment 20E	Alignment 20F
	Ornithology All of the alignment options in Section 20 are considered to have little difference in the limited suitability of habitats to support important populations of Target Species. Hydrology. Geology and Hydrogeology Alignment 20A crosses Cairnie Burn (ID: 23172) and a tributary of it. It is underlain by an unnamed igneous intrusion, Appin Group and Argyll Group, low productive aquifers. Alignment 20A is not located within a SEPA DWPA for surface water. However it is entirely located within SW DWPA Burn of Davidstone and Shenwell Spring. According to Moray Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are water abstractions within 1 km.					
Cultural Heritage	Designations There are no World Heritage Sites, GDLs, Scheduled Monuments or Inventory Battlefields within 1 km of the alignment. There are two SMR entries within 100 m, a post medieval road and a boundary dyke of the same period. Direct impacts can be avoided through micro siting of the alignment. Assets There are no Listed Buildings, Non-inventory GDLs or Conservation Areas within 1 km of the alignment.	Designations The Designation Appraisal for Alignment 20B is the same as Alignment 20A, with the following exception: One SMR entry is within 100 m, a boundary dyke. Assets The cultural heritage assets appraisal for Alignment 20B is the same as Alignment 20A.	Designations The Designation Appraisal for Alignment 20C is the same as Alignment 20B. Assets The cultural heritage assets appraisal for Alignment 20C is the same as Alignment 20A.	Designations The Designation Appraisal for Alignment 20D is the same as Alignment 20A, with the following exception: There are two SMR entries consisting of a findspot and a boundary dyke. Assets The cultural heritage assets Appraisal for Alignment 20D is the same as Alignment 20A.	Designations The Designation Appraisal for Alignment 20E is the same as Alignment 20B. Assets The cultural heritage assets appraisal for Alignment 20E is the same as Alignment 20E, with the following exception: There is one Category B and two Category C Listed Buildings within 1 km of the alignment. These may cause direct impacts to setting however, due to intervening buildings and topography, impacts are unlikely to be significant.	Designations The Designation Appraisal for Alignment 20F is the same as Alignment 20A, with the following exception: There are three SMR entries, a findspot and two farmsteads. Assets The cultural heritage assets appraisal for Alignment 20F is the same as Alignment 20E.
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment.	Landscape Designations The Landscape Designations appraisal for Alignment 20B is the same as Alignment 20A.	Landscape Designations The Landscape Designations appraisal for Alignment 20C is the same as Alignment 20A.	Landscape Designations The Landscape Designations appraisal for Alignment 20D is the same as Alignment 20A.	Landscape Designations The Landscape Designations appraisal for Alignment 20E is the same as Alignment 20A.	Landscape Designations The Landscape Designations appraisal for Alignment 20F is the same as Alignment 20A.



Topic	Alignment 20A	Alignment 20B	Alignment 20C	Alignment 20D	Alignment 20E	Alignment 20F
	A Section of the alignment is within Deveron Valley SLA. This	Landscape Character	Landscape Character	Landscape Character	Landscape Character	Landscape Character
	would introduce new OHL infrastructure to the area, adversely impacting the SLA. Landscape Character Alignment 20A is located in Farmland Moorland Edge — Aberdeenshire LCT. This alignment runs against the grain of the landscape across undulating agricultural hills. Visual The alignment would be particularly intrusive for the residential receptor north of Glen of Coachford. The alignment runs within 170 m of residential receptors along its length.	The landscape character appraisal for Alignment 20B is the same as Alignment 20A. Visual The alignment would be less intrusive for the residential receptor north of Glen of Coachford. Residential receptors around Braehead have the potential to be less impacted than Alignment 20A. Careful placement of angle towers would be needed around Cairnwhelp.	The landscape character appraisal for Alignment 20C is mostly the same as Alignment 20A. Visual Alignment 20C would run within 170 m of numerous residential receptors between Braehead and Burn of Cairnie.	Alignment 20D is more elevated and exposed across Ord Hill and Cairn Hill than alignments. 20A, 20B or 20C, although avoids cutting through Garromuir Wood. The alignment runs against the grain of the landscape across undulating agricultural hills. Visual There are scattered properties along the alignment, although slightly fewer in close proximity compared to the other alignments. However, it crosses near the summit of Cairn Hill, and	The landscape character appraisal for Alignment 20E is mostly the same as Alignment 20A, with the following exception: The alignment is more elevated and exposed across Ord Hill and Cairn Hill. Visual There are scattered properties along the alignment, although fewer in close proximity compared to the other alignments. However, it crosses near the summit of Cairn Hill, exposing the alignment to view	The landscape character appraisal for Alignment 20F is mostly the same as Alignment 20E. Visual There are scattered properties along the alignment and it crosses near the summit of Cairn Hill and also passes close to the north side of Cairnie, such that it would be highly visible for residents of the village, from the primary school and from the wider landscape.
Land Use	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>	the elevated and open landscape allows for longer views, exposing the alignment to view from the wider landscape. It also requires 4 angle towers. Agriculture	from the wider landscape. Agriculture	<u>Agriculture</u>
	Alignment 20A passes through Class 3.2 land for most of its length. It does not pass through any prime agricultural land.	The agriculture appraisal for 20B is the same as 20A.	The agriculture appraisal for 20C is the same as 20A.	The agriculture appraisal for 20D is the same as 20A.	The agriculture appraisal for 20E is the same as 20A.	The agriculture appraisal for 20F is the same as 20A.
	<u>Forestry</u>	<u>Forestry</u>	<u>Forestry</u>	<u>Forestry</u>	<u>Forestry</u>	<u>Forestry</u>
	Alignment 20A passes through and close to areas of mature commercial forestry and passes the edge of mixed broadleaved wet woodland. The estimated area of commercial woodland that would be impacted by Alignment 20A is 17.93 ha, comprising 1.66 ha broadleaved woodland and 16.27 ha coniferous woodland. Of this, 2.91 ha is restock (young trees) and 7.09 ha is felled.	Alignment 20B passes through and close to areas of mature commercial forestry and passes close to a small island of mixed broadleaved woodland. The estimated area of commercial woodland that would be	Alignment 20C passes through and close to areas of mixed age commercial forestry and passes the edge of mixed broadleaved wet woodland. The estimated area of commercial woodland that would be	Alignment 20D pass through and close to areas of mixed age commercial forestry and through mixed broadleaved shelterwoods. The estimated area of commercial woodland that would be impacted by Alignment 20D is	Alignment 20E passes through and close to areas of mixed age commercial forestry and passes the edge of mixed broadleaved woodlands. The estimated area of commercial woodland that would be	Alignment 20F passes through and close to areas of mixed age commercial forestry and passes the edge of mixed broadleaved shelterwoods. The estimated area of commercial woodland that would be
	Recreation	impacted by Alignment 20B is	impacted by Alignment 20C is	11.54 ha, comprising 1.18 ha	impacted by Alignment 20E is	impacted by Alignment 20F is
	Alignment 20A does not pass over core paths, long-distance routes, national cycle routes or notable areas.	15.67 ha, comprising 1.31 ha broadleaved woodland and 14.36 ha coniferous woodland. Of this, 4.39 ha is restock (young trees) and 4.77 ha is felled.	16.84 ha, comprising 2.46 ha broadleaved woodland and 14.38 ha coniferous woodland. Of this, 4.28 ha is restock (young trees) and 4.37 ha is felled.	broadleaved woodland and 10.36 ha coniferous woodland. Of this, 4.29 ha is felled. Recreation	19.17 ha, comprising 2.11 ha broadleaved woodland and 17.06 ha coniferous woodland. Of this, 4.28 ha is restock (young trees) and 2.23 ha is felled.	9.59 ha, comprising 2.35 ha broadleaved woodland and 7.24 ha coniferous woodland. Of this, 0.27 ha is felled. Recreation
		Recreation	Recreation	The recreation appraisal for 20D is the same as 20A.	Recreation	The recreation appraisal for 20F is
		The recreation appraisal for 20B is the same as 20A.	The recreation appraisal for 20C is the same as 20A.		The recreation appraisal for 20E is the same as 20A.	the same as 20A.



Topic	Alignment 20A	Alignment 20B	Alignment 20C	Alignment 20D	Alignment 20E	Alignment 20F
Planning	 Within 500 m lie the following consented planning applications: Erection of a dwellinghouse (APP/2022/1822). Approximately 200 m south. Erection of two holiday accommodation units and installation of associated sewage treatment plants without compliance with Condition 2 (Temporary Holiday Letting Accommodation) of planning permission reference APP/2016/0910 (APP/2023/2054). Within 50 m. Erection of a dwellinghouse (APP/2021/0169). Approximately 200 m south. 	 Within 500 m lie the following consented planning applications: Erection of a dwellinghouse (APP/2022/1822). Approximately 200 m south. Erection of two holiday accommodation units and installation of associated sewage treatment plants without compliance with Condition 2 (Temporary Holiday Letting Accommodation) of planning permission reference APP/2016/0910 (APP/2023/2054). Within 50 m. Erection of a dwellinghouse (APP/2021/0169). Approximately 200 m south. 	 Within 500 m lie the following consented planning applications: Erection of a dwellinghouse (APP/2022/1822). Approximately 200 m south. Erection of two holiday accommodation units and installation of associated sewage treatment plants without compliance with Condition 2 (Temporary Holiday Letting Accommodation) of planning permission reference APP/2016/0910 (APP/2023/2054). Within 50 m. Erection of a dwellinghouse (APP/2021/0169). Approximately 200 m south. 	 Within 500 m lie the following consented planning applications: Erection of a dwellinghouse (APP/2022/1822). Approximately 200 m south. Erection of two holiday accommodation units and installation of associated sewage treatment plants without compliance with Condition 2 (Temporary Holiday Letting Accommodation) of planning permission reference APP/2016/0910 (APP/2023/2054). Within 50 m. Erection of a dwellinghouse (APP/2021/0169). Approximately 200 m south. 	 Within 500 m lie the following consented planning applications: Erection of a dwellinghouse (APP/2022/1822). Approximately 200 m south. Erection of two holiday accommodation units and installation of associated sewage treatment plants without compliance with Condition 2 (Temporary Holiday Letting Accommodation) of planning permission reference APP/2016/0910 (APP/2023/2054). Approximately 100 m northwest. Erection of a dwellinghouse (APP/2021/0169). Approximately 200 m south. 	Within 500 m lie the following consented planning applications: • Erection of a dwellinghouse (APP/2022/1822). Approximately 250 m north. • Erection of a dwellinghouse (APP/2021/0169). Approximately 250 m north.
Engineering	Infrastructure Crossings Alignment 20A crosses one minor road, one local road, one local access road and six restricted local access roads. Environmental Design Over 25% of Alignment 20A is at elevations over 200 m. The maximum elevation is 263 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment 20A. According to SEPA flood maps, less than 5% of Alignment 20A is located within the 1 in 10 year flood risk zone. Ground Conditions Alignment 20A contains a maximum slope of 14 degrees which is not a concern. Alignment 20A does not pass through any known areas of peatland.	Infrastructure Crossings Alignment 20B crosses one minor road, one local road, one local access road and five restricted local access roads. Environmental Design Over 25% of Alignment 20B is at elevations over 200 m. The maximum elevation is 261 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment 20B. According to SEPA flood maps, less than 5% of Alignment 20B is located within the 1 in 10 year flood risk zone.	Infrastructure Crossings Alignment 20C crosses one minor road, one local road, one local access road and seven restricted local access roads. Environmental Design Over 25% of Alignment 20C is at elevations over 200 m. The maximum elevation is 245 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment 20C. According to SEPA flood maps, less than 5% of Alignment 20C is located within the 1 in 10 year flood risk zone.	Infrastructure Crossings Alignment 20D crosses one minor road, two local roads and three restricted local access roads. Environmental Design Over 25% of Alignment 20D is at elevations over 200 m. The maximum elevation is 245 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment 20D. According to SEPA flood maps, less than 5% of Alignment 20D is located within the 1 in 10 year	Infrastructure Crossings Alignment 20E crosses one minor road, two local roads, three restricted local access roads. Environmental Design Less than 25% of Alignment 20E is at elevations over 200 m. The maximum elevation is 245 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment 20E. According to SEPA flood maps, less than 5% of Alignment 20E is located within the 1 in 10 year flood risk zone.	Infrastructure Crossings Alignment 20F crosses two minor roads, one local road and two restricted local access roads. Environmental Design Over 25% of Alignment 20F is at elevations over 200 m. The maximum elevation is 245 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Alignment 20F. According to SEPA flood maps, less than 5% of Alignment 20F is located within the 1 in 10 year flood risk zone.



<u>Construction and Maintenance</u>	Ground Conditions	Ground Conditions	Ground Conditions	Ground Conditions	Ground Conditions
9	Alignment 20B contains a maximum slope of 14 degrees	Alignment 20C contains a maximum slope of 14 degrees	Alignment 20D contains a maximum slope of 17 degrees	Alignment 20E contains a maximum slope of 16 degrees	Alignment 20F contains a maximum slope of 16 degrees
Alignment 20A requires three angle towers.	which is not a concern.	which is not a concern.	which is not a concern.	which is not a concern.	which is not a concern.
Proximity	Alignment 20B does not pass	Alignment 20C does not pass	Alignment 20D does not pass	Alignment 20E does not pass	Alignment 20F does not pass
The control of the co	through any known areas of peatland.	through any known areas of peatland.	through any known areas of peatland.	through any known areas of peatland.	through any known areas of peatland.
Alignment 20A.	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance
by MBNL. This mast provides coverage for emergency	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.
There are no wind turbines, urban areas or metallic pipelines	Alignment 20B requires two angle towers.	Alignment 20C requires two angle towers.	Alignment 20D requires four angle towers.	Alignment 20E requires four angle towers.	Alignment 20F requires three angle towers.
	<u>Proximity</u>	<u>Proximity</u>	<u>Proximity</u>	<u>Proximity</u>	<u>Proximity</u>
	There are nine residential properties located within 170 m of Alignment 20B. There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. This mast provides coverage for emergency services so has to be safeguarded.	There are six residential properties located within 170 m of Alignment 20C. There is one property located within 100 m of the alignment option, however this is being acquired as part of the proposed Coachford 400 kV substation development and is therefore not considered as a residential receptor.	There are four residential properties located within 170 m of Alignment 20D. There is one property located within 100 m of the alignment option, however this is being acquired as part of the proposed Coachford 400 kV substation development and is therefore not considered as a residential receptor.	There are four residential properties located within 170 m of Alignment 20E. There is one property located within 100 m of the alignment option, however this is being acquired as part of the proposed Coachford 400 kV substation development and is therefore not considered as a residential receptor.	There are four residential properties located within 170 m of Alignment 20F. There is one property located within 100 m of the alignment option, however this is being acquired as part of the proposed Coachford 400 kV substation development and is therefore not considered as a residential receptor.
	There are no wind turbines, urban areas or metallic pipelines that will impact on the alignment option.	There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. This mast provides coverage for emergency services so has to be safeguarded. There are no wind turbines, urban areas or metallic pipelines that will impact on the alignment option.	There are four wind turbines located within 300 m of the alignment option. The closest wind turbine has a rotor diameter of 13 m and is 62 m away, which is unlikely to cause a constraint. There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. This mast provides coverage for emergency services so has to be safeguarded. There is an additional mast present within 300 m, located near two existing wind turbines, however this is not	There are four wind turbines located within 300 m of the alignment option. The closest wind turbine has a rotor diameter of 13 m and is 168 m away, which is unlikely to cause a constraint. There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. This mast provides coverage for emergency services so has to be safeguarded. There is an additional mast present within 300 m, located near two existing wind turbines, however this is not	There are four wind turbines located within 300 m of the alignment option. The closest wind turbine has a rotor diameter of 13 m and is 168 m away, which is unlikely to cause a constraint. There is one communication mast located in close proximity to the proposed Coachford 400 kV substation site, operated by MBNL. This mast provides coverage for emergency services so has to be safeguarded. There is an additional mast present within 300 m, located near two existing wind turbines, however this is not

There is one medium pressure

SGN gas pipeline located within

200 m of the alignment option.

There is one medium pressure

SGN gas pipeline located within

200 m of the alignment option.

There is one medium pressure

SGN gas pipeline located within

200 m of the alignment option.



Topic	Alignment 20A	Alignment 20B	Alignment 20C	Alignment 20D	Alignment 20E	Alignment 20F
				This is unlikely to cause any constraint.	This is unlikely to cause any constraint.	This is unlikely to cause any constraint.
				There are no urban areas that will impact on the alignment option.	There are no urban areas that will impact on the alignment option.	There are no urban areas that will impact on the alignment option.
Economic	Alignment 20A was very close to the lowest cost option, only 1% greater. It is 0.1 km longer than Alignment 20C and requires an additional angle tower. Alignment 20A has an additional low voltage crossing, increasing operational costs for inspection of cable sealing end compounds by 20%.	Alignment 20B has the second highest estimated cost for this section. The variation from the lowest cost option is low at 4%. Alignment 20B has more than a 50% increase in low voltage crossings, resulting in estimated operational costs greater than 140% of the lowest cost of option.	Alignment 20C has the lowest estimated capital cost for this section. Alignment 20C has an additional low voltage crossing, increasing operational costs for inspection of cable sealing end compounds by 20%.	Alignment 20D has a similar estimated capital cost to Alignment 20B, as it is close in total length and length through forestry, Although having double the number of angle towers in comparison to Alignment 20B, this is balance by fewer OHL crossings. Alignments 20F and 20D have the lowest estimated operational cost.	Although the highest estimated capital cost option, Alignment 20E is only 11% higher than the lowest cost option. With little variation in length between the options in this section (0.4 km longer than shortest option) the cost differential is predominantly driven by the length through woodland and the associated cost of felling. Alignment 20E is only marginally higher estimated operational costs than Alignments 20D and 20F, with similar line length and the same number of low voltage crossings. It has a higher length through forestry, increasing management costs.	Estimated capital costs for Alignment 20F are only 3% greater than the lowest cost option. It is similar in length to Alignment 20E but has the lowest cost associated with forestry works. Alignments 20F and 20D have the lowest estimated operational cost.

Alignment 21A	Alignment 21B	Alignment 21C	Alignment 21D
Designations Alignment 21A is within 10 km of Mortlach Moss SSSI/SAC, Den of Pitlurg	Designations Alignment 21B natural heritage designation appraisal is	Designations Alignment 21C natural heritage designation appraisal	Designations Alignment 21D natural heritage designation appraisal
SSSI, Mill Wood SSSI, Shiel Wood Pastures SSSI, Moss of Crombie SSSI and Craigs of Succoth SSSI.	the same as Alignment 21A. <u>Protected Species</u>	is the same as Alignment 21A. <u>Protected Species</u>	is the same as Alignment 21A. <u>Protected Species</u>
Whitehill SSSI is within 1 km of the alignment. However, any potential effects to the SSSI could be managed to avoid direct impact on the site.	The habitats and their suitability to support protected species within Alignment 21B are largely the same as	The habitats and their suitability to support protected species within Alignment 21C are largely the same as	The habitats and their suitability to support protected species within Alignment 21D are largely the same as
to support wintering geese and breeding osprey. Despite this, there is a	those within Alignment 21A. <u>Habitats</u>	exception:	to those within Alignment 21B, with the following exception:
impact on these species is unlikely to be significant.	The habitats appraisal for Alignment 21B is mostly the same as Alignment 21A, with the following exceptions:	100 m; wet woodland, upland birchwood and	NWSS only identifies two woodland areas in 100 m; wet woodland and upland birchwood.
alignment.	One Annex 1 habitat is located within 100 m, H91A0 – Old sessile oak woods.	·	Habitats The habitats appraisal for Alignment 21D is the same as Alignment 21A.
	Designations Alignment 21A is within 10 km of Mortlach Moss SSSI/SAC, Den of Pitlurg SSSI, Mill Wood SSSI, Shiel Wood Pastures SSSI, Moss of Crombie SSSI and Craigs of Succoth SSSI. Whitehill SSSI is within 1 km of the alignment. However, any potential effects to the SSSI could be managed to avoid direct impact on the site. Moray and Nairn Coast SPA/Ramsar is within 20 km and has the potential to support wintering geese and breeding osprey. Despite this, there is a large availability of suitable habitat in the surrounding region that means impact on these species is unlikely to be significant. There is a non-statutory designation, Buglife B-Line within 2 km of the	Designations Alignment 21A is within 10 km of Mortlach Moss SSSI/SAC, Den of Pitlurg SSSI, Mill Wood SSSI, Shiel Wood Pastures SSSI, Moss of Crombie SSSI and Craigs of Succoth SSSI. Whitehill SSSI is within 1 km of the alignment. However, any potential effects to the SSSI could be managed to avoid direct impact on the site. Moray and Nairn Coast SPA/Ramsar is within 20 km and has the potential to support wintering geese and breeding osprey. Despite this, there is a large availability of suitable habitat in the surrounding region that means impact on these species is unlikely to be significant. There is a non-statutory designation, Buglife B-Line within 2 km of the alignment. Designations Alignment 21B natural heritage designation appraisal is the same as Alignment 21A. Protected Species The habitats and their suitability to support protected species within Alignment 21B are largely the same as those within Alignment 21A. Habitats The habitats appraisal for Alignment 21B is mostly the same as Alignment 21A, with the following exceptions: • One Annex 1 habitat is located within 100 m,	Designations Alignment 21A is within 10 km of Mortlach Moss SSSI/SAC, Den of Pitturg SSSI, Mill Wood SSSI, Shiel Wood Pastures SSSI, Moss of Crombie SSSI and Craigs of Succoth SSSI. Whitehill SSSI is within 1 km of the alignment. However, any potential effects to the SSSI could be managed to avoid direct impact on the site. Moray and Nairn Coast SPA/Ramsar is within 20 km and has the potential to support wintering geese and breeding osprey. Despite this, there is a large availability of suitable habitat in the surrounding region that means impact on these species is unlikely to be significant. There is a non-statutory designation, Buglife B-Line within 2 km of the alignment. Designations Alignment 21B natural heritage designation appraisal is the same as Alignment 21A. Protected Species The habitats and their suitability to support protected species within Alignment 21B are largely the same as those within Alignment 21A. Habitats The habitats appraisal for Alignment 21B is mostly the same as non-statutory designation, Buglife B-Line within 2 km of the alignment 21A, with the following exceptions: • One Annex 1 habitat is located within 100 m,



Protected Species

Mature woodland groups and standing trees, as well as residential and farm buildings within the alignment have the potential to support roosting bats. However, the majority of these trees are coniferous which have lower potential suitability to support roosting bats than mature broadleaf areas.

The edges of wooded areas, semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats.

The habitats within Alignment 21A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas have the potential to provide suitable habitat for sett creation.

Where mature and undisturbed, the larger conifer woodlands have the potential to support wildcat, pine marten and red squirrel. The 'Strathbogie' Wildcat Priority Area covers part of the alignment option, from the western edge of Longmoor Wood to the western end, with anecdotal activity of wildcats being reported.

The large watercourses have the potential to support commuting and foraging otters. Anecdotal sightings of otters have been reported. These watercourses and other smaller channels have the potential to support water voles.

Areas of standing water and slow-flowing field drains have the potential to support breeding amphibian populations, including the great crested newts. Unmaintained field margins, hedgerows and tree lines may provide habitat for reptiles.

The larger watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. Alignment 21A occurs out of the known distribution range for FWPM⁵⁷.

The varied habitats within Alignment 21A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.

Habitats

HABMOS data identifies no Annex I habitats within the alignment.

The NWSS identified mixed deciduous woodland, upland birchwood and mixed ashwood woodland within 100 m. Woodland listed in the AWI is present, however it is Category 2b LEPO woodland and not considered irreplaceable habitat.

The carbon and peatland map of Scotland identified no Class 1 or Class 2 peatland within 100 m.

<u>BNG</u>

There is no unavoidable irreplaceable habitat present in 100 m. Therefore, no BU have been calculated for this alignment option.

BNG

The BNG Appraisal for Alignment 21B is the same as Alignment 21A.

Ornithology

The ornithology appraisal for Alignment 21B is the same as Alignment 21A.

Hydrology, Geology and Hydrogeology

The hydrology, geology and hydrogeology appraisal for Alignment 21B is the same as Alignment 21A.

Habitats

The habitats appraisal for Alignment 21C is the same as Alignment 21A.

<u>BNG</u>

The BNG Appraisal for Alignment 21C is the same as Alignment 21A.

Ornithology

The ornithology appraisal for Alignment 21C is the same as Alignment 21A.

Hydrology, Geology and Hydrogeology

The hydrology, geology and hydrogeology appraisal for Alignment 21C is the same as Alignment 21A.

BNG

The BNG Appraisal for Alignment 21D is the same as Alignment 21A.

Ornithology

The ornithology appraisal for Alignment 21D is the same as Alignment 21A.

Hydrology, Geology and Hydrogeology

The hydrology, geology and hydrogeology appraisal for Alignment 21D is the same as Alignment 21A.

Topic	Alignment 21A	Alignment 21B	Alignment 21C	Alignment 21D
ТОРІС	Ornithology Limited difference between alignment options are considered for Target Species. However, the RSPB have advised that common cranes have bred in the nearby surrounding area in recent years. These birds, along with a very small number of other pairs in northeast Scotland, represent the entirety of this species' breeding population in Scotland. Based on this information, a programme of surveys was undertaken over the course of the 2023 breeding season, however none were observed indicating that the habitats are not used by locally occurring birds. Hydrology. Geology and Hydrogeology Alignment 21A crosses River Deveron - Huntly to Turriff (ID: 23165) and tributaries of it. It is underlain by an unnamed igneous intrusion, Appin Group, Argyll Group and Southern Highland Group low productive aquifers. Alignment 21A is located within the catchment of River Deveron - Huntly to Turriff which is designated as SEPA DWPA for surface water. Alignment 21A is entirely located within SW DWPA River Deveron. According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.	Alignment 216	Alignment 21C	Alignment 21D
Cultural Heritage	Designations There are no World Heritage Sites, GDLs or Inventory Battlefields within 1 km of the alignment. There is a Scheduled Monuments within 1 km of the alignment: • Arn Hill, stone circle located 200 m north. There is potential for direct impacts through changes within the setting of the stone circle which may lead to significant effects. There is one SMR entry within 100 m, Fourman Hill enclosure. Direct impacts can be avoided through micro siting of the alignment. Assets There are no Non-inventory GDLs or Conservation Areas within 1 km of the alignment.	Designations The Designation Appraisal for Alignment 21B is the same as Alignment 21A, with the following exception: • There are no SMR entries recorded. Assets The cultural heritage assets appraisal for Alignment 21B is the same as Alignment 21A.	 Designations The Designation Appraisal for Alignment 21C is the same as Alignment 21A, with the following exceptions: There are two Scheduled Monuments:	 Designations The Designation Appraisal for Alignment 21D is the same as Alignment 21C, with the following exceptions: There is one Scheduled Monument:

⁵⁷ European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC). Fourth Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2013 to December 2018. Supporting documentation for the conservation status assessment for the species: S1029 - Freshwater pearl mussel (*Margaritifera margaritifera*).



Topic	Alignment 21A	Alignment 21B	Alignment 21C	Alignment 21D
	There are three Category B Listed Buildings within 1 km of the alignment. The potential for significant effects on their settings could be reduced by distance and intervening vegetation and topography.			There are only two Category B Listed Buildings.
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas or Wild Land Areas within 10 km of the alignment. The alignment is nearly entirely located in Deveron Valley SLA. This would extend the influence of OHL infrastructure to the area, adversely impacting the SLA. Landscape Character Alignment 21A is located in Farmed and Wooded River Valleys and Farmed Rolling Ridges and Hills LCT. The alignment parallels existing OHL infrastructure, running at a slightly higher elevation. This makes it more exposed but contains the OHL infrastructure into the same Section of the landscape. It would impinge into various characteristic woodland blocks across the alignment. Visual There are residential receptors along the alignment, with a concentration of scattered properties between B9022 and the Burn of Cobairdy. The alignment risks 'boxing in' properties at Bogenspro. The crossing of the existing 275 kV OHL would also be visually intrusive.	Landscape Designations The Landscape Designations appraisal for Alignment 21B is the same as Alignment 21A. Landscape Character The landscape character appraisal for Alignment 21B is mostly the same as Alignment 21A, with the following exceptions: • There is only one LCT, Farmed and Wooded River Valleys; • Alignment 21B spreads OHL infrastructure in the landscape, risking 'wirescaping'; and • Alignment 21B is located at a lower elevation and is therefore less exposed than 21A. Visual The alignment passes at slightly greater distance from properties than Alignment 21A and would 'box in' a number of properties at Cobairdy. The eastern most end of the Section also runs across slightly higher ground making it slightly more exposed.	Landscape Designations The Landscape Designations appraisal for Alignment 21C is the same as Alignment 21A. Landscape Character The landscape character appraisal for Alignment 21C is mostly the same as Alignment 21B, with the following exceptions: The risk of 'wirescaping' is lower due to closer proximity to the existing OHL. Visual The alignment avoids 'boxing in' any properties up to Home Farm and remains lower in the landscape than Alignment 21A. It also avoids the concentration of properties around Millburn, although at the expense of some sharp changes of direction.	Landscape Designations The Landscape Designations appraisal for Alignment 21D is the same as Alignment 21A. Landscape Character The landscape character appraisal for Alignment 21D is mostly the same as Alignment 21C. Visual The alignment takes a relatively straight line to avoid properties around Boghead although pushes it closer to properties at Haddoch and Haddoch Cottages.
Land Use	Alignment 21A passes through Class 3.2 land for most of its length. It does not pass through any prime agricultural land. Forestry Alignment 21A passes through and close to areas of mixed age commercial forestry and passes through lowland mixed broadleaves shelterwood. The estimated area of commercial woodland that would be impacted by Alignment 21A is 8.56 ha, comprising 2.94 ha broadleaved woodland and 5.62 ha coniferous woodland. Of this, 0.18 ha is felled. Recreation Alignment 21A does not pass over core paths, long-distance routes or national cycle routes. The alignment passes over the River Deveron, which is known for fishing activities. However, no specific fishing spots on the River Deveron have been identified near the alignment.	Agriculture The agriculture appraisal for 21B is the same as 21A. Forestry Alignment 21B passes through areas of mixed age commercial forestry and passes through lowland mixed broadleaves shelterwood. The estimated area of commercial woodland that would be impacted by Alignment 21B is 10.5 ha, comprising 2.95 ha broadleaved woodland and 7.56 ha coniferous woodland. Recreation The recreation appraisal for 21B is the same as 21A.	Agriculture The agriculture appraisal for 21C is the same as 21A. Forestry Alignment 21C passes through and close to areas of mixed age commercial forestry and passes through areas of lowland mixed broadleaves. The estimated area of commercial woodland that would be impacted by Alignment 21C is 13.45 ha, comprising 3.32 ha broadleaved woodland and 10.13 ha coniferous woodland. Of this, 1.45 ha is felled. Recreation The recreation appraisal for 21C is the same as 21A.	Agriculture The agriculture appraisal for 21D is the same as 21A. Forestry Alignment 21D passes through and close to areas of commercial forestry and passes through areas of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 21D is 10.75 ha, comprising 2.36 ha broadleaved woodland and 8.40 ha coniferous woodland. Of this, 0.86 ha is felled. Recreation The recreation appraisal for 21D is the same as 21A.



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Topic	Alignment 21A	Alignment 21B	Alignment 21C	Alignment 21D	
Planning	There are no planning applications within 500 m of Alignment 21A.	The planning appraisal for Alignment 21B is the same as Alignment 21A.	The planning appraisal for Alignment 21C is the same as Alignment 21A.	Within 500 m lies the following consented planning application: • Erection of a dwellinghouse (APP/2021/0708).	
				Approximately 200 m southwest.	
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	
	Alignment 21A crosses the Aberdeen to Inverness railway line, the River	Alignment 21B crosses the Aberdeen to Inverness	Alignment 21C crosses the Aberdeen to Inverness	Alignment 21A crosses the Aberdeen to Inverness	
	Deveron, the A97 and B9022. The alignment also crosses two minor roads and three restricted local access roads.	railway line, the River Deveron, the A97 and B9022. The alignment also crosses one minor road and three	railway line, the River Deveron, the A97 and B9022. The alignment also crosses one minor road and two	railway line, the River Deveron, the A97 and B9022. The alignment also crosses one minor road.	
	Alignment 21A also crosses an existing 400 kV OHL.	restricted local access roads.	restricted local access roads.	Environmental Design	
	Environmental Design	Environmental Design	Environmental Design	Alignment 21D remains below 200 m elevation, which	
	Less than 10% of Alignment 21A is at elevations over 200 m. The	Alignment 21B remains below 200 m elevation, which is not considered challenging.	Alignment 21C remains below 200 m elevation, which is not considered challenging.	is not considered challenging.	
	maximum elevation is 205 m and is unlikely to cause a significant issue.	The alignment is more than 10 km from coastal areas	The alignment is more than 10 km from coastal areas	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	
	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	so atmospheric pollution is not a concern.	so atmospheric pollution is not a concern.	There are no reports of contaminated land within	
	There are no reports of contaminated land within Section 21.	There are no reports of contaminated land within	There are no reports of contaminated land within	Section 21.	
	According to SEPA flood maps, greater than 5% of Alignment 21A is	Section 21.	Section 21.	According to SEPA flood maps, less than 5% of	
	located within the 1 in 10 year flood risk zone. The flood zone at Burn of	According to SEPA flood maps, less than 5% of Alignment 21B is located within the 1 in 10 year flood	According to SEPA flood maps, greater than 5% of Alignment 21C is located within the 1 in 10 year flood	Alignment 21D is located within the 1 in 10 year flood risk zone.	
	Cobairdy is approximately 290 m wide, but it may be possible to span this depending on tower positions.	risk zone.	risk zone. It may be possible to span the flood risk	Ground Conditions	
	Ground Conditions	Ground Conditions	areas depending on tower positions. <u>Ground Conditions</u>	Alignment 21D contains a maximum slope of 15	
	Alignment 21A contains a maximum slope of 23 degrees. The alignment	Alignment 21B contains a maximum slope of 18 degrees which is not a concern.	Alignment 21C contains a maximum slope of 18	degrees which is not a concern.	
	passes through an area of steeper slopes at Cobairdy Hill, which could pose challenges during construction due to its proximity to the existing	Alignment 21B does not pass through any known	degrees which is not a concern.	Alignment 21D does not pass through any known areas of peatland.	
	OHL	areas of peatland.	Alignment 21C does not pass through any known	Construction and Maintenance	
	Alignment 21A does not pass through any known areas of peatland.	Construction and Maintenance	areas of peatland.	There is an existing network of tracks and roads within	
	Construction and Maintenance	There is an existing network of tracks and roads within	Construction and Maintenance	1 km of all alignment options.	
	There is an existing network of tracks and roads within 1 km of all alignment options.	1 km of all alignment options. Alignment 21B requires four angle towers.	There is an existing network of tracks and roads within 1 km of all alignment options.	Alignment 21D requires four angle towers.	
	Alignment 21A requires five angle towers.	Proximity	Alignment 21C requires six angle towers.	Proximity	
	Proximity	There is one residential property located within 170 m	<u>Proximity</u>	There are four residential properties located within 170 m of Alignment 21D.	
	There are six residential properties located within 170 m of Alignment 21A.	of Alignment 21B.	There are four residential properties located within	There are four wind turbines located within 300 m of	
	There are no existing communication masts located within 300 m of the	There are four wind turbines located within 300 m of	170 m of Alignment 21C.	the alignment option. The closest is 78 m away, which	
	alignment option. All alignment options cross two fixed links, but no	the alignment option. The closest is 78 m away, which is more than 3 x rotor diameter and is therefore not	There are four wind turbines located within 300 m of the alignment option. The closest is 78 m away, which	is more than 3 x rotor diameter and is therefore not considered to be a constraint.	
	interference is expected. There are no wind turbines, urban areas or metallic pinelines that will	considered to be a constraint.	is more than 3 x rotor diameter and is therefore not	There is an existing communication mast located	
	There are no wind turbines, urban areas or metallic pipelines that will impact on the alignment option.	There are no existing communication masts located	considered to be a constraint.	within 300 m of the alignment option at Sawmill.	
		within 300 m of the alignment option. All alignment options cross two fixed links, but no interference is	There is an existing communication mast located within 300 m of the alignment option at Sawmill.	However, no links are associated with this mast so it may only be used for radio communications on site.	
		expected.	However, no links are associated with this mast so it		



Topic	Alignment 21A	Alignment 21B	Alignment 21C	Alignment 21D
		There are no urban areas or metallic pipelines that will impact on the alignment option.	may only be used for radio communications on site. All alignment options cross two fixed links, but no interference is expected. There are no urban areas or metallic pipelines that will impact on the alignment option.	All alignment options cross two fixed links, but no interference is expected. There are no urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 21A has substantially higher costs than the other options due to the need to cross the existing 400 kV line. It has the lowest forestry costs for this section. Although Alignment 21A has a 400 kV crossing, it has the fewest number of crossings overall and is the lowest operational cost option.	Alignment 21B is very close to being the lowest capital cost, roughly 2% more than Alignment 21D so negligible difference. Alignment 21B has 40% more crossings, increasing the number of cable sealing ends requiring inspection. There is also a greater length through forestry requiring maintenance, resulting in estimated operational costs greater than 120% of the lowest cost option.	Alignment 21C has the highest costs associated with forestry for this section and the highest number of angle towers. Despite this, the cost differential from the lowest total cost is not significant and estimated to be less than 10%. The estimated operation cost for Alignment 21C is greater than 140% of the lowest cost option, due to the longer line length and a significant number of low voltage crossings.	Alignment 21D has the lowest estimated capital cost for this section. The estimated operation cost for Alignment 21D is greater than 140% of the lowest cost option, due to the significant number of low voltage crossings (almost double the number for Alignment 21A).

Topic	Alignment 22A	Alignment 22B	Alignment 22C	Alignment 22D
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 22A is within 10 km of Whitehill SSSI, Mortlach Moss SSSI/SAC, and Moss of Crombie SSSI.	The natural heritage designation appraisal for Alignment 22B is the same as 22A.	The natural heritage designation appraisal for Alignment 22C is the same as 22A.	The natural heritage designation appraisal for Alignment 22D is the same as 22A.
	There are no non-statutory designated sites within 2 km.	Protected Species	Protected Species	Protected Species
	Protected Species Mature woodland groups, tree lines, and a small number of residential and farm buildings are considered suitable habitat to support roosting bats.	The habitats and their suitability to support protected species within Alignment 22B are largely reflective of those within Alignment 22A, with the following exceptions:	The habitats and their suitability to support protected species within Alignment 22C are largely reflective of those within Alignment 22D, with the following exceptions:	The habitats and their suitability to support protected species within Alignment 22D are largely reflective of those within Alignment 22B, with the following exceptions:
	The edges of wooded areas, as well as the semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats.	A smaller area of coniferous woodland is present in Alignment 22B, decreasing the habitat suitability for red squirrels and pine marten, as well as bat species (to a more limited degree).	A slightly larger area of coniferous woodland is present in Alignment 22C, increasing the habitat suitability for red squirrels and pine marten, as well as bat species (to a more limited degree).	A smaller area of coniferous woodland is present in Alignment 22D, decreasing the habitat suitability for red squirrels and pine marten, as well as bat species (to a more limited degree).
	The habitats within Alignment 22A, including agricultural land, have the potential to support foraging badgers.	<u>Habitats</u>	<u>Habitats</u>	<u>Habitats</u>
	The dry wooded areas have the potential to provide suitable habitats for sett creation. Anecdotally, badgers are reported to be	The Habitat appraisal for Alignment 22B is the same as Alignment 22A.	The Habitat appraisal for Alignment 22C is the same as Alignment 22A.	The Habitat appraisal for Alignment 22D is the same as Alignment 22A.
	present in Chapelhill woodland.	BNG	BNG	BNG
	Where mature and undisturbed, the large conifer woodlands have the potential to support wildcat, pine marten, and red squirrel.	The BNG appraisal for Alignment 22B is the same as Alignment 22A.	The BNG appraisal for Alignment 22C is the same as Alignment 22A.	The BNG appraisal for Alignment 22D is the same as Alignment 22A.
	Potential pine marten scats were observed at tracks within the woodland areas at Newmill of Pitfancy. Wildcats and red squirrels	Ornithology	Ornithology	Ornithology
	are anecdotally reported to be present in Chapelhill woodland.	The ornithology appraisal for Alignment 22B is the same as Alignment 22A.	The ornithology appraisal for Alignment 22C is the same as Alignment 22A.	The ornithology appraisal for Alignment 22D is the same as Alignment 22A.



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Topic	Alignment 22A	Alignment 22B	Alignment 22C	Alignment 22D
	The larger watercourses have the potential to support commuting	Hydrology, Geology, Hydrogeology	Hydrology, Geology, Hydrogeology	Hydrology, Geology, Hydrogeology
	and foraging otters and otter spraint was identified at the Burn of Drumblade. Smaller channels have the potential support water voles.	The Hydrology appraisal for Alignment 22B is the same as Alignment 22A.	The Hydrology appraisal for Alignment 22C is the same as Alignment 22A.	The Hydrology appraisal for Alignment 22D is the same as Alignment 22A.
	Areas of standing water, slow-flowing field drains, and natural channels have the potential to support breeding amphibian populations. Habitat suitable to support breeding great crested newts was identified in the Chapelhill woodland.			
	Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles.			
	Larger watercourses have the potential to support migratory salmonids, however, an impassable dam on the Keithny Burn/Forgue Burn at Glen Dronach limits access upstream of this point. The smaller freshwater burns have the potential to support lamprey species.			
	The varied habitats within Alignment 22A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.			
	<u>Habitats</u>			
	HABMOS data identifies no Annex I habitats within 100 m.			
	The NWSS identified wet woodland within 100 m. Woodland listed in the AWI is present but is Category 2b LEPO woodland and not considered irreplaceable.			
	The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.			
	BNG			
	There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.			
	Ornithology			
	Limited difference between alignment options are considered for Target Species. However, the RSPB have advised that common cranes have bred in the nearby surrounding area in recent years. These birds, along with a very small number of other pairs in northeast Scotland, represent the entirety of this species' breeding population in Scotland. Based on this information, a programme of surveys was undertaken over the course of the 2023 breeding season, however none were observed indicating that the habitats are not used by locally occurring birds.			
	Hydrology, Geology and Hydrogeology			
	Alignment 22A cross Keithny Burn / Forgue Burn waterbody. It is underlain by unnamed igneous intrusion (Ordovician to Silurian) and Southern Highland Group low productivity aquifers, where small			



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Topic	Alignment 22A	Alignment 22B	Alignment 22C	Alignment 22D
	amounts of groundwater may be present in the near surface weathered zone or in secondary fractures.			
	Alignment 22A is not located within any SEPA DWPA for surface water, however, it is entirely located within SW DWPA River Deveron, which supplies Turriff WTW.			
	According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.			
Cultural Heritage	Designations There are no World Heritage Sites, GDLs, Inventory Battlefields, or SMR entries within 1 km of the alignment option. There is one Scheduled Monument within 1 km: Raich, stone circle (SM42), 400 m northeast. There is the potential for direct impacts through changes within the setting of the scheduled monument. Assets Within 1 km, there is one Category A, five Category B, and three Category C Listed Buildings. There is the potential for direct impacts through changes ton the setting of all the Listed Buildings. However, due to distances and intervening topography impacts are not likely to lead to significant effects, with the exception of Placemill, watermill (LB9464, Category B).	Designations There are no World Heritage Sites, GDLs, Inventory Battlefields, or SMR entries within 1 km of the alignment option. Assets There are no Non-Inventory GDL, Conservation Areas, or Listed Buildings within 1 km.	Designations There are no World Heritage Sites, GDL, Inventory Battlefields, or SMR entries within 1 km of the alignment option. Assets There are no Non-Inventory GDL, Conservation Areas, or Listed Buildings within 1 km.	Designations There are no World Heritage Sites, GDL, Inventory Battlefields, or SMR entries within 1 km of the alignment option. Assets There are no Non-Inventory GDL, Conservation Areas, or Listed Buildings within 1 km.
Landscape and Visual	Landscape Designations Alignment 22A crosses into the Deveron Valley SLA at Pitfancy, running along the edge for over 1.5 km, away from the existing 400 kV OHL and around Conland. Alignment 22A extends the adverse impact and influence of OHL infrastructure on the SLA designation. Landscape Character Alignment 22A is located in the Farmed Rolling Ridges and Hills LCT (19) with smoothly rounded ridges, broad open hill tops and numerous yet insignificant watercourses cutting narrow valleys. Alignment 22A clearly diverges from the existing 400 kV OHL at Knightsmill to avoid 'wirescaping', although crossing the existing 400 kV OHL would be intrusive in the landscape. Visual There are scattered properties along Alignment 22A. There are concentrations of properties around Placemill Farm and Forgue to the north of Bogcoup. Alignment 22A remains low in the landscape, not rising above 175 m Above Ordnance Datum (AOD) and the	Landscape Designations Alignment 22B lies adjacent to the Deveron Valley SLA, leaving it at Buglehole, and close paralleling the existing 400 kV OHL. Although the alignment option is outside the SLA designation, it will be closely visible from it, extending the adverse impact and influence of OHL infrastructure. Landscape Character The Landscape Character appraisal for Alignment 22B is the same as 22A. Visual There are few properties along Alignment 22B, which would view the alignment option in the context of the existing 400 kV OHL. However, it would require crossing of the existing 400 kV OHL, in close proximity to Knightsmill, Pitfancy and Buglehole. Alignment 22B will	Landscape Designations The landscape designation appraisal for Alignment 22C is very similar to Alignment 22D. Landscape Character The Landscape Character appraisal for Alignment 22C is the same as Alignment 22B. Visual There are few properties along Alignment 22C, which would view the alignment option in the context of the existing 400 kV OHL. However, Alignment 22C would require angle towers to the south of Newmill and Pitfancy. It also crosses higher ground at its eastern end where it begins to rise up Hill of Comisty and Gallows Hill.	Landscape Designations Alignment 22D lies 400 m south of the Deveron Valley SLA, leaving it a Knightsmill and paralleling the existing 400 kV OHL. Although the alignment option is outside the SLA designation, it will be closely visible from it, extending the adverse impact and influence of OHL infrastructure. Landscape Character The Landscape Character Type for Alignment 22D is the same as 22A. The separation of the two OHLs with this alignment option would risk 'wirescaping' and crossing the existing 400 kV OHL high on the flanks of Hill of Comisty would be particularly intrusive on the landscape. Visual There are few properties along Alignment 22D, which would view the alignment option in the context of the



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Topic	Alignment 22A	Alignment 22B	Alignment 22C	Alignment 22D
	woodland at Bogcoup provides a small degree of screening of the lower portions of the towers.	also cross higher ground at the eastern end where it begins to rise up Hill of Comisty and Gallows Hill.		of the existing 400 kV OHL, where it begins to rise up Hill of Comisty and Gallows Hill.
Land Use	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 22A passes through Class 3.2 land for the majority of its length. It does not pass through any prime agricultural land. Forestry Alignment 22A passes through and close to areas of mixed age commercial forestry and a small area of conifer shelterwood. It also passes through mixed broadleaved wet woodland. The estimated area of commercial woodland that would be impacted by Alignment 22A is 8.18 ha, comprising 2.42 ha broadleaved woodland and 5.76 ha coniferous woodland. Recreation Alignment 22A does not pass over core paths, long-distance routes, cycle routes or areas known for highland commercial sports. The agriculture appraisal for Alignment 22B is the same as Alignment 22B. Is the same as Alignment		Alignment 22D passes through Class 3.2 land for the majority of its length. There is a small pocket of potentially unavoidable Class 3.1 land, which is considered prime agricultural land. Forestry Alignment 22D passes through the felled edge of mature commercial forestry and has no impact on broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 22D is 0.72 ha coniferous woodland. Recreation The recreation appraisal for Alignment 22D is the same	
Planning	There are no planning applications within 500 m of the alignment.	The planning appraisal for Alignment 22B is the same as Alignment 22A.	The planning appraisal for Alignment 22D is the same as Alignment 22A.	as Alignment 22A. The planning appraisal for Alignment 22C is the same as Alignment 22A.
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
Ali				
	Alignment 22A crosses two minor roads and one restricted local access road. The alignment option also crosses an existing 400 kV OHL.	Alignment 22B crosses two minor roads. The alignment option also crosses an existing 400 kV OHL.	Alignment 22C crosses two minor roads. The alignment option also crosses an existing 400 kV OHL.	Alignment 22D crosses two minor roads. The alignment option also crosses an existing 400 kV OHL.
	access road.	The alignment option also crosses an existing 400 kV	The alignment option also crosses an existing 400 kV	The alignment option also crosses an existing 400 kV
	access road. The alignment option also crosses an existing 400 kV OHL.	The alignment option also crosses an existing 400 kV OHL.	The alignment option also crosses an existing 400 kV OHL.	The alignment option also crosses an existing 400 kV OHL.
	access road. The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m
	access road. The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22.	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so
	access road. The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22. According to SEPA flood maps, greater than 5% of Alignment 22B is located within the 1 in 10 year flood risk zone associated with Burn of Cobairdy and Burn of Forgue. The flood zone area is approximately 220 m	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22. According to SEPA flood maps, greater than 5% of Alignment 22C is located within the 1 in 10 year flood risk zone associated with the Burn of Drumblade. It may be possible to span the area of flood risk depending on	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22. According to SEPA flood maps, greater than 5% of Alignment 22D is located within the 1 in 10 year flood risk zone associated with the Burn of Drumblade. It may be possible to span the area of flood risk depending on
	access road. The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22. According to SEPA flood maps, greater than 5% of Alignment 22A is located within the 1 in 10 year flood risk zone associated with Burn of Cobairdy and Burn of Forgue. The flood zone area is approximately 220 m wide at the widest point and may therefore be	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22. According to SEPA flood maps, greater than 5% of Alignment 22B is located within the 1 in 10 year flood risk zone associated with Burn of Cobairdy and Burn of	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22. According to SEPA flood maps, greater than 5% of Alignment 22C is located within the 1 in 10 year flood risk zone associated with the Burn of Drumblade. It may	The alignment option also crosses an existing 400 kV OHL. Environmental Design All alignments in Section 22 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 22. According to SEPA flood maps, greater than 5% of Alignment 22D is located within the 1 in 10 year flood risk zone associated with the Burn of Drumblade. It may



Topic	Alignment 22A	Alignment 22B	Alignment 22C	Alignment 22D
	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all	Alignment 22B does not pass through any known areas of peatland.	Alignment 22C does not pass through any known areas of peatland.	Alignment 22D does not pass through any known areas of peatland.
	alignment options.	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance
	Alignment 22A requires two angle towers. Proximity	There is an existing network of tracks and roads within 1 km of all alignment options. There is an existing network of tracks and roads with 1 km of all alignment options.		There is an existing network of tracks and roads within 1 km of all alignment options.
	There are no residential properties located within 170 m of	Alignment 22B requires one angle tower.	Alignment 22C requires two angle towers.	Alignment 22D requires one angle tower.
	Alignment 22A.	<u>Proximity</u>	Proximity	<u>Proximity</u>
	There are no wind turbines, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no residential properties located within 170 m of Alignment 22B. There are no residential properties located within 170 m of Alignment 22C.		There are no residential properties located within 170 m of Alignment 22D.
		There are no wind turbines, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no wind turbines, communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are no wind turbines, communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 22A has substantially higher capital costs in comparison to alternative options in Section 22 due to the additional length of line for this option, more than double that of the alternative options. Alignment 22A has substantially higher operational costs with significant lengths through forestry, requiring ongoing maintenance.	The felling costs for Alignment 22B are substantially higher (more than seven times greater) than the lowest cost option (22D). Otherwise there is little difference in costs and the total cost difference is less than 10%. Alignment 22B has similar operational costs associated with inspections as Alignment 22C, with the same number of crossings and similar line length. However, costs associated with managing forestry are substantially higher, with length through forestry more than ten times greater.	There is little difference in capital costs in comparison to the lowest cost option, with a small increase due to an additional angle tower and requirement to cross an additional low voltage line for Alignment 22C. Alignment 22B has similar operational costs associated with inspections as Alignment 22B, with the same number of crossings and similar line length.	Alignment 22D has the lowest estimated capital cost for this section. Alignment 22D is the lowest operational cost option.

Topic	Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
Natural Heritage		Designations The natural heritage designations appraisal for Alignment 23B is the same as Alignment 23A. Protected Species The habitats and their suitability to support Protected Species within	Designations The natural heritage designations appraisal for Alignment 23C is the same as Alignment 23A. Protected Species The habitats and their suitability to support protected species within	Designations The natural heritage designations appraisal for Alignment 23D is the same as Alignment 23A. Protected Species The habitats and their suitability to support protected species within	Designations The natural heritage designations appraisal for Alignment 23E is the same as Alignment 23A. Protected Species The habitats and their suitability to support protected species within	Designations The natural heritage designations appraisal for Alignment 23F is the same as Alignment 23A. Protected Species The habitats and their suitability to support protected species within
	Woodland groups and tree lines are considered suitable habitat to support roosting bats. The edges of wooded areas, as well as the semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats.	 Alignment 23B are largely reflective of those within Alignment 23A, with the following exceptions: A smaller area of coniferous woodland is present in Alignment 23B, decreasing the habitat's suitability for red squirrels and 	Alignment 23C are largely reflective of those within Alignment 23B. Habitats The Habitat appraisal for Alignment 23C is the same as Alignment 23A.	Alignment 23D are largely reflective of those within Alignment 23B. Habitats HABMOS data identifies no Annex I habitats within 100 m.	Route Option 23E are largely reflective of those within Route Option 23F, with the following exception: • A larger area of both broadleaf and coniferous woodland is present in Route Option 23E,	 Route Option 23F are largely reflective of those within Route Option 23D, with the following exception: A smaller area of coniferous woodland is present in Route Option 23F compared to 23D, decreasing the habitat's suitability



Topic Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
The habitats within Alignment 23A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas have the potential to provide suitable habitats for sett creation. Anecdotally, a population of wildcats has been reported at Haremoss. The large conifer woodlands have the potential to support wildcat, pine marten, and red squirrel. The larger watercourses have the potential to support commuting and foraging otters and otter spraint was identified at the Burn of Drumblade. Smaller channels have the potential support water voles. Areas of standing water, slow-flowing field drains, and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles. Larger watercourses have the potential to support migratory salmonids, however, an impassable weir in Keith restricts movement south of the settlement. An impassable dam on the Keithny Burn/Forgue Burn at Glen Dronach limits access upstream of this point. The smaller freshwater burns have the potential to support lamprey species. The varied habitats within Alignment 23A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern. Habitats HABMOS data identifies no Annex I habitats within 100 m. The NWSS identified wet woodland, upland mixed deciduous woodland within 100 m. Woodland listed in the AWI is	pine marten; as well as bat species to a more limited degree. Habitats The Habitat appraisal for Alignment 23B is the same as Alignment 23A. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 23B is the same as Alignment 23A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 23A, with the exception that Alignment 23B is not located within the catchment of River Deveron – Huntly to Turriff SEPA DWPA for surface water.	BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 23C is the same as Alignment 23A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 23C is the same as Alignment 23B.	The NWSS identified wet woodland and upland birchwood within 100 m. Woodland listed in the AWI is present and includes Category 2b LEPO woodland and not considered irreplaceable. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 23D is the same as Alignment 23A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 23D is similar to Alignment 23C, however there are SW abstractions within 1 km.	increasing the habitat's suitability for red squirrels, pine marten and bat species. Habitats The Habitat appraisal for Alignment 23C. BNG There is no unavoidable irreplaceable habitat present within this Route Option. Therefore, no BUs were calculated for this option. Ornithology The ornithology appraisal for Alignment 23E is the same as Alignment 23A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 23E is the same as Alignment 23C.	for red squirrels and pine marten; as well as bat species to a more limited degree. Habitats The Habitat appraisal for Alignment 23F is the same as Alignment 23D. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 23F is the same as Alignment 23A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 23F is the same as Alignment 23D.

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Topic	Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
	present and includes Category 2a ancient woodland of semi-natural origin. The remaining woodland listed in the AWI is Category 2b LEPO woodland and not considered irreplaceable.					
	The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.					
	BNG					
	There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.					
	Ornithology					
	Limited difference between alignment options are considered for Target Species. However, the RSPB have advised that common cranes have bred in the nearby surrounding area in recent years. These birds, along with a very small number of other pairs in northeast Scotland, represent the entirety of this species' breeding population in Scotland. Based on this information, a programme of surveys was undertaken over the course of the 2023 breeding season, however none were observed indicating that the habitats are not used by locally occurring birds.					
	Hydrology, Geology and Hydrogeology Alignment 23A cross Keithny Burn / Forgue Burn (ID:23170). It also crosses the Burn of Tullo (ID:23164). It is underlain by Southern Highland Group low productivity aquifers, where small amounts of groundwater may be present in the near surface weathered zone or in secondary fractures. A small part of Alignment 23A is located					
	within the catchment of River Deveron – Huntly to Turriff, which is a designated SEPA DWPA for surface water. It is also entirely located within SW DWPA River Deveron, which supplies Turriff WTW.					



Topic	Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
	According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.					
Cultural Heritage	Designations There are no World Heritage Sites, GDLs, or Inventory Battlefields within 1 km. There is one Scheduled Monument within 1 km: • Hare Stone, stone circle (SM338), 175 m south. The stone circle is visually linked with other stone circles to the north and east. The alignment option passes to the north of the stone circle and therefore would impact on its visual relationship with the other stone circles. These direct impacts through changes within its setting may lead to significant effects. Within 100 m of the alignment option there are two SMR entries consisting of a cairn and a findspot of a carved stone ball. Direct physical impacts on these SMR entries can be avoided through micrositing Assets Within 1 km, there is one Category A, four Category B, and one Category C Listed Building. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. Due to distances and intervening topography impacts are not likely to lead to significant effects on Frendraught House (LB9449) and Colonel Shand's Monument (LB9447). Impacts to Placemill, watermill (LB9464), Drumblair House (LB9467) are likely to lead to significant effects.	Designations The cultural heritage designations appraisal for Alignment 23B is similar to Alignment 23A, with the exception that the SMR entries within 100 m vary slightly, and instead of a cairn, Alignment 23B is within 100 m of a saw mill. Assets The cultural heritage assets appraisal for Alignment 23B is the same as Alignment 23A.	There are no World Heritage Sites, GDLs, or Inventory Battlefields within 1 km. There is one Scheduled Monument within 1 km: Pitglassie, stone circle (SM38), 600 m southeast. The stone circle is visually linked with other stone circles to the west, northeast, and southeast. The alignment option passes to the west and northwest of the stone circle and would impact on its visual relationship with the stone circle located 2.1 km to the west. These direct impacts through changes within its setting may lead to significant effects. Within 100 m of Alignment 23C there are three SMR entries, consisting of a boundary stone, rig and furrow, and a structure. Assets The cultural heritage assets appraisal for Alignment 23C is the same as Alignment 23A.	Designations The cultural heritage designations appraisal for Alignment 23D is similar to Alignment 23C, with the exception that there are four SMR entries within 100 m, including a prehistoric hut circle, post-medieval building and boundary stone, and a monument. Assets Within 100 m, there is one Category B Listed Building, Colonel Shand's Monument (LB9447). Direct physical impacts would be avoided through micrositing. Within 1 km, there is one Category A, two Category B and one Category C Listed Buildings. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. Due to distances and intervening topography impacts are not likely to lead to significant effects on Drumblair Lodge (LB9467). Impacts through changes to the setting of Frendraught House (LB9449), Templeland Farm House (LB9446), and Colonel Shand's Monument (LB9447) have the potential to lead to significant effects.	Designations The cultural heritage designations appraisal for Alignment 23E is similar to Alignment 23C, with the exception that there are six SMR entries within 100 m, including a boundary stone, hut circle, building, rig and furrow, and a structure. Assets The cultural heritage assets appraisal for Alignment 23E is the same as Alignment 23A.	Designations The cultural heritage designations appraisal for Alignment 23F is similar to Alignment 23C, with the exception that there are four SMR entries consisting of cottages, post medieval buildings, a boundary stone, and a war monument. Assets The cultural heritage assets appraisal for Alignment 23F is similar to Alignment 23D.



Topic	Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
Landscape and Visual	Landscape Designations Alignment 23A is located 1 km south of the Deveron Valley SLA, and the alignment option follows the SLA boundary for over 6 km. Although the alignment option is outside the SLA.	Landscape Designations The landscape designation appraisal for Alignment 23B is the same as Alignment 23A. Landscape Character	Landscape Designations The landscape designation appraisal for Alignment 23C is similar to Alignment 23A, with the exception that it follows the Deveron Valley SLA boundary for only 3 km.	Landscape Designations The landscape designation appraisal for Alignment 23D is similar to that of Alignment 23A. Landscape Character	Landscape Designations The landscape designation appraisal for Alignment 23E is the same as Alignment 23A. Landscape Character	Landscape Designations The landscape designation appraisal for Alignment 23F is the same as Alignment 23A. Landscape Character
	alignment option is outside the SLA designation, it is likely to be visible from it and therefore it may slightly extend the influence and adverse impact of OHL infrastructure on the designation. Landscape Character Alignment 23A is located in the Farmed Rolling Ridges and Hills LCT 19 with smoothly rounded ridges, broad open hill tops and numerous yet insignificant watercourses cutting narrow valleys. In Section 23, the landscape does not have a distinct grain, as it is divided by numerous irregular hillocks that create varied dips and ridges, interspersed with woodland blocks. Alignment 23A travels east across the local wooded summit of Bogcoup (crossing it above 220m AOD), then northeast over hummocky terrain, including the local summit south of Hillhead of Drumblair (234m AOD) to just south of Hillhead of Tollo. It skirts north around the summit of Feith Hill then a straight run northeast to the Section break at Haremoss Loch, just south of the Hill of Carlingcraig summit (192m AOD). Alignment 23A runs against the grain of the landscape and crosses through several blocks of woodland, including Bogcoup. Visual	Landscape Character Alignment 23B follows the same alignment as Alignment 23A apart from a short diversion between Whin Burn and Hillhead of Tollo to skirt just south of the Hillhead of Drumblair summit, bringing it closer to Haremoss. Alignment 23B cuts through a similar amount of woodland as Alignment 23A, although it skirts around one small block of woodland and local highpoint just south of the Hillhead of Drumblair. Visual Alignment 23B follows the same alignment as Alignment 23A apart from a short diversion to skirt just south of the Hillhead of Drumblair summit, bringing it closer to Haremoss. The alignment is pushed closer to properties at Haremosss and South Tollo but avoids crossing the wooded summit of Hillhead of Drumblair. Alignment 23B would require four angle towers.	that it follows the Deveron Valley SLA boundary for only 3 km. Landscape Character Alignment 23C follows the same alignment as Alignment 23A to Whin Burn but then turns southeast to cross through woodland below Haremoss and Reids Well, across the northern flank of Hill of Denmoss (just below the 233m AOD summit) then into woodland just south of Croft of Feith Hill. It then turns northeast past Floors Farm and Carlincraig to join Alignment 23A at Haremoss Loch. The alignment east of Hill of Denmoss follows the landscape contours slightly more closely than Alignments 23A or 23B, although it cuts through slightly more coniferous woodland. Visual Alignment 23C follows the same alignment as Alignment 23A to Whin Burn but then turns southeast to cross rising ground across Drumblair Wood and the northern flank of Hill of Denmoss (just below the 233m AOD summit) then into woodland just south of Croft of Feith Hill. It then turns northeast to join Alignment 23A at Haremoss Loch. The alignment passes through more woodland but a similar number of properties as alignments 23A and 23B.	Alignment 23D slightly separates from the existing 275 kV OHL to travel southeast between Frendraught. It then turns northeast and travels in a straight line between Brae of Largue and Largue before joining Alignment 23C on higher ground, north of the summit of Hill of Denmoss. Alignment 23D is less backdropped by woodland than alignment options further north, until it reaches Croft of Feith Hill. Visual Alignment 23D is less well backdropped by woodland than the alignments further north in Section 23, until it reaches Croft of Feith Hill. Alignment 23D results in the partial 'boxing in' of the property at Mains of Frendraught and passes in close proximity to the concentration of properties at Largue.	Alignment 23E follows the same alignment as Alignment 23C along its entire length with the exception of the start – it skirts south of the wooded summit of Bogcoup rather than directly over it. The alignment retains more woodland over the summit of Bogcoup, remaining in parallel to the existing 275kv OHL for slightly longer and backdropped by woodland. It also follows the landscape contours more closely around Bogcoup, avoiding the local summit. Visual Alignment 23E follows the same alignment as Alignment 23C along its entire length with the exception of the start – it skirts south of the wooded summit of Bogcoup rather than directly over it, allowing tree canopies to be retained and avoiding the highest ground. It also removes the angle tower in proximity to Frendraught House and moves it adjacent to the existing 275kv OHL.	Alignment 23F parallels the existing 275kv OHL, but at an offset of 150 m – 350 m south. It skirts the flank of Hill of Comisty and Gallows Hill, before cutting between Colyne and Colyne Cottage to cross the existing OHL east of Mains of Frendraught. It then joins Alignment 23D at Templeland. Alignment 23F is less backdropped by woodland than alignments passing through Bogcoup, although the local wooded summits of Hill of Comisty and Gallows Hill provide some screening of tower bases. The short section of alignment to Gallows Hill follows the grain of the landscape then runs against it for the remainder of the alignment. Visual Alignment 23F results in the 'boxing in' of Colyne Cottage (with an angle tower in close proximity), and the partial 'boxing in' of Mains of Frendraught. It would also result in the crossing of the existing 275kv OHL with associated angle /tension towers in close proximity to Mains of Frendraught.
	Alignment 23A travels east across the local wooded summit of Bogcoup (229m AOD), then northeast over Hillhead of Drumblair (234m AOD) to south of Hillhead of Tollo. It skirts north around the summit of Feith Hill then a straight run northeast to Haremoss Loch, just	Ali	properties as alignments 23A and 23B. Alignment 23C would require four angle towers.			



Topic	Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
	south of the Hill of Carlingcraig summit (192m AOD). Properties are concentrated along the Burn of Frendraught, Drumblair/ Burn of Templeland, Haremoss/ South Tollo and Carlincraig. With Alignment 23A crossing local summits, the visibility of the OHL at these locations would be increased, although numerous woodland blocks in the area would provide some screening. Alignment 23A would require two angle towers, in close proximity to the properties.					
Land Use	Agriculture Alignment 23A passes through Class 3.2 land for the majority of its length. The alignment passes through a small pocket of Class 3.1 land which is considered to be prime agricultural land. Forestry Alignment 23A passes through areas of mixed age commercial forestry and through areas of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 23A is 13.94 ha, comprising 2.20 ha broadleaved woodland and 11.74 ha coniferous woodland. Of this, 5.35 ha is restock (young trees) and 0.02 ha is felled. Recreation Alignment 23A does not pass over core paths, long-distance routes or cycle routes, however commercial highland sports are known to occur within it.	Agriculture The agriculture appraisal for Alignment 23B is the same as Alignment 23A. Forestry Alignment 23B passes through areas of mixed age commercial forestry and through areas of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 23B is 12.77 ha, comprising 1.52 ha broadleaved woodland and 11.25 ha coniferous woodland. Of this, 7.68 ha is restock (young trees) and 0.02 ha is felled. Recreation The recreation appraisal for Alignment 23B is the same as Alignment 23A.	Agriculture The agriculture appraisal for Alignment 23C is the same as Alignment 23A. Forestry Alignment 23C passes through areas of mixed age commercial forestry and through areas of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 23C is 23.79 ha, comprising 1.58 ha broadleaved woodland and 22.21 ha coniferous woodland. Of this, 15.59 ha is restock (young trees) and 0.02 ha is felled. Recreation The recreation appraisal for Alignment 23C is the same as Alignment 23A.	Agriculture The agriculture appraisal for Alignment 23D is the same as Alignment 23A. Forestry Alignment 23D passes through areas of mixed age commercial forestry and through areas of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 23D is 16.54 ha, comprising 2.29 ha broadleaved woodland and 15.25 ha coniferous woodland. Of this, 9.14 ha is restock (young trees). Recreation The recreation appraisal for Alignment 23D is the same as Alignment 23A.	Agriculture The agriculture appraisal for Alignment 23E is the same as Alignment 23A. Forestry Alignment 23E passes through areas of mixed age commercial forestry and small areas of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 23E is 21.25 ha, comprising 1.71 ha broadleaved woodland and 19.54 ha coniferous woodland. Of this, 15.6 ha is restock (young trees). Recreation The recreation appraisal for Alignment 23E is the same as Alignment 23A.	Agriculture Alignment 23F passes through Class 3.2 land for the majority of its length. Forestry Alignment 23F passes through areas of mixed age commercial forestry and through small areas of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 23F is 12.54 ha, comprising 1.18 ha broadleaved woodland and 11.36 ha coniferous woodland. Of this, 9.15 ha is restock (young trees). Recreation The recreation appraisal for Alignment 23F is similar to Alignment 23A, however no commercial highland sports are known to take place in the area.
Planning	No consented planning applications lie within 500 m of Alignment 23A.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse and garage (APP/2023/0055). Approximately 500 m south.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse and garage (APP/2023/0055). Approximately 500 m south.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse and garage (APP/2023/0055). Approximately 200 m northwest.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse and garage (APP/2023/0055). Approximately 300 m south.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse and garage (APP/2023/0055). Approximately 200 m northwest.



Topic	Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
		 Erection of a dwellinghouse and garage (APP/2023/0006). Approximately 500 m south. Conversion of an agricultural building to form a dwellinghouse (APP/2021/2193). Approximately 350 m south. 	 Erection of a dwellinghouse and garage (APP/2023/0006). Approximately 500 m south. Erection of a dwellinghouse (APP/2019/2373). Approximately 400 m south. 	 Erection of a dwellinghouse and garage (APP/2023/0006). Approximately 200 m northwest. Erection of a dwellinghouse (APP/2019/2373). Approximately 300 m north. 	Erection of a dwellinghouse and garage (APP/2023/0006). Approximately 300 m south.	 Erection of a dwellinghouse and garage (APP/2023/0006). Approximately 200 m northwest. Erection of a dwellinghouse (APP/2019/2373). Approximately 400 m south.
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 23A crosses the B9001, four minor roads, two local roads and one restricted local access road. Environmental Design Less than 25% of Alignment 23A is at elevations above 200 m. The maximum elevation is 233 m and is unlikely to	Alignment 23B crosses the B9001, four minor roads, two local roads and two restricted local access roads. Environmental Design Less than 25% of Alignment 23B is at elevations above 200 m. The maximum elevation is 223 m and is	Alignment 23C crosses the B9001, three minor roads, two local roads and one restricted local access road. Environmental Design Less than 25% of Alignment 23C is at elevations above 200 m. The maximum elevation is 223 m and is	Alignment 23D crosses the B9001, four minor roads, one local road and two restricted local access roads. Environmental Design Less than 25% of Alignment 23D is at elevations above 200 m. The maximum elevation is 216 m and is	Alignment 23E crosses the B9001, three minor roads, two local roads and one restricted local access road. Alignment 23E also crosses an existing 400 kV OHL. Environmental Design Less than 25% of Alignment 23E is at	Alignment 23F crosses the B9001, six minor roads, one local road and two restricted local access roads. Alignment 23F also crosses an existing 400 kV OHL. Environmental Design Less than 25% of Alignment 23F is at
	cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated	unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated	unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated	unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated	elevations above 200 m. The maximum elevation is 216 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric	elevations above 200 m. The maximum elevation is 216 m and is unlikely to cause a significant issue. The alignment is more than 10 km from coastal areas so atmospheric
	land within Section 23. According to SEPA flood maps, less than	land within Section 23. According to SEPA flood maps, less	land within Section 23. According to SEPA flood maps, less	land within Section 23. According to SEPA flood maps, less	pollution is not a concern. There are no reports of contaminated	pollution is not a concern. There are no reports of contaminated
	5% of Alignment 23A is located within the 1 in 10 year flood risk zone.	than 5% of Alignment 23B is located within the 1 in 10 year flood risk zone.	than 2% of Alignment 23C is located within the 1 in 10 year flood risk zone.	than 5% of Alignment 23D is located within the 1 in 10 year flood risk zone.	land within Section 23. According to SEPA flood maps, less	land within Section 23. According to SEPA flood maps, less
	Ground Conditions Alignment 23A contains a maximum	Ground Conditions Alignment 23B contains a maximum	Ground Conditions Alignment 23C contains a maximum	Ground Conditions Alignment 23D contains a maximum	than 2% of Alignment 23E is located within the 1 in 10 year flood risk zone.	than 2% of Alignment 23F is located within the 1 in 10 year flood risk zone.
	slope of 24 degrees. The alignment passes through an area of sloped terrain to the north of Drumblair Wood. This could pose construction challenges and	slope of 29 degrees. The alignment passes through an area of sloped terrain to the north of Drumblair Wood. This could pose construction	slope of 30 degrees. The alignment passes through an area of sloped terrain to the north of Drumblair Wood. This could pose construction	slope of 14 degrees. This is for less than a single span length so is not a significant issue. Alignment 23D does not pass through	Ground Conditions Alignment 23E contains a maximum slope of 31 degrees. The alignment passes through an area of sloped terrain to the north of Drumblair Wood. This could pose construction challenges and may limit where towers can be positioned and	Ground Conditions Alignment 23F contains a maximum slope of 19 degrees. This is for less than a single span length so is not a
	may limit where towers can be positioned and constructed. Alignment 23A does not pass through any known areas of peatland.	challenges and may limit where towers can be positioned and constructed. Alignment 23B does not pass through	challenges and may limit where towers can be positioned and constructed. Alignment 23C does not pass through	any known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment.		significant issue. Alignment 23F does not pass through any known areas of peatland.
	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options.	any known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment	any known areas of peatland. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment	and roads within 1 km of all alignment options. Alignment 23D requires four angle towers.	constructed. Alignment 23E does not pass through any known areas of peatland. Construction and Maintenance	Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 23F requires six angle
	Alignment 23A requires two angle towers.	options. Alignment 23B requires four angle towers.	options. Alignment 23C requires four angle towers.		There is an existing network of tracks and roads within 1 km of all alignment options.	towers.



Topic	Alignment 23A	Alignment 23B	Alignment 23C	Alignment 23D	Alignment 23E	Alignment 23F
	<u>Proximity</u>	Proximity	<u>Proximity</u>	<u>Proximity</u>	Alignment 23E requires four angle	<u>Proximity</u>
	There are two residential properties located within 170 m of Alignment 23A. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. There are no communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are two residential properties located within 170 m of Alignment 23B. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. There are no communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are two residential properties located within 170 m of Alignment 23C. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. There are no communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are two residential properties located within 170 m of Alignment 23D. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. There are no communication masts, urban areas or metallic pipelines that will impact on the alignment option.	towers. Proximity There is one residential property located within 170 m of Alignment 23E. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. There are no communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are five residential properties located within 170 m of Alignment 23F. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. Alignment 23F also crosses within 300 m of a small 5 kW turbine with 5.5 m rotor diameter. There are no communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 23A has the lowest estimated capital cost for this section. Alignment 23A, 23B, 23E and 23F have similar estimated operational costs, greater than 120% of the lowest cost option.	Alignment 23B is only marginally more than the capital cost for the lowest cost option, with roughly 1% difference in total capital cost estimates. Alignment 23A, 23B, 23E and 23F have similar estimated operational costs, greater than 120% of the lowest cost option.	Alignment 23C has significant estimated forestry costs, more than double than for the lowest cost option. Despite this, it is within 120% of the lowest capital cost option. Despite being the longest length, Alignments 23C and 23D provide the lowest operational cost estimates due to shorter length through forestry.	Similar to Alignment 23C, Alignment 23D has significant forestry costs but is within 120% of the lowest cost option. Despite being the longest length, Alignments 23C and 23D provide the lowest operational cost estimates due to shorter length through forestry.	Alignment 23E has the highest estimated capital cost for this section, over 120% of the lowest cost option. Although it avoids a section of forestry in comparison to Alignment 23C, the total line length is greater, leading to additional costs for towers, conductors and access tracks. Alignment 23E has the highest estimated operational cost, with the same number of crossings as Alignments 23A, 23B and 23F and in addition a greater length through forestry.	Alignment 23F is just over 120% of the lowest estimated capital cost option, due to the extended length and additional angle towers in comparison with the other options. Alignment 23A, 23B, 23E and 23F have similar estimated operational costs, greater than 120% of the lowest cost option.

Topic	Alignment 24A	Alignment 24B	Alignment 24C	Alignment 24D
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	There are no statutory designated sites within 10 km	There are no statutory designated sites within 10 km (20 km	There are no statutory designated sites within 10 km (20 km	Within 10 km of Alignment 24D lies Gight Woods SSSI.
	(20 km for geese and osprey) of Alignment 24A.	for geese and osprey) of Alignment 24B.	for geese and osprey) of Alignment 24C.	There is a non-statutory Buglife B-Line across Section 24.
	There is a non-statutory Buglife B-Line across Section 24.	There is a non-statutory Buglife B-Line across Section 24.	There is a non-statutory Buglife B-Line across Section 24.	Protected Species
	Protected Species	Protected Species	Protected Species	The habitats and their suitability to support protected
	Wooded areas within Alignment 24A are largely limited to	The habitats and their suitability to support protected species	The habitats and their suitability to support protected species	species within Alignment 24D are largely reflective of
	broadleaf trees in the Burn of Gask's riparian zone,	within Alignment 24B are largely reflective of those within	within Alignment 24C are largely reflective of those within	those within Alignment 24C, with the following
	hedgerows, and individual trees. These have the potential	Alignment 24A, with the following exception:	Alignment 24A, with the following exception:	exception:



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Topic Alignment 24A		Alignment 24B	Alignment 24C	Alignment 24D
well as the semi-natural have the potential to sup activities for bats. The habitats within Aligni land, have the potential to dry wooded areas and ur potential to provide suita. The habitats in Alignmen for wildcats, red squirrel at the larger watercourses commuting and foraging potential support water water of standing water, so natural channels have the amphibian populations. Undedgerows, tree lines and habitat for reptiles. Larger watercourses have migratory salmonids, how restricts movement south dam on the Keithny Burn limits access upstream of burns have the potential. The varied habitats within potential to support a wide invertebrate assemblage, concern. Habitats HABMOS data identified to within 100 m: H91AO — Old sessile The NWSS identified low within 100 m. No woodla within 100 m. The carbon and peatland the presence of any irreption m. BNG There is no unavoidable in the presence of the support and peatland the presence of any irreption m.	have the potential to support otters. Smaller channels have the oles. Slow-flowing field drains, and expotential to support breeding Unmaintained field margins, di wooded areas may provide The potential to support wever, an impassable weir in Keith for of the settlement. An impassable /Forgue Burn at Glen Dronach fithis point. The smaller freshwater to support lamprey species. Alignment 24A have the deterrestrial and aquatic including species of conservation	A smaller area of woodland is present within 100 m of Alignment 24B, decreasing the habitat's suitability for bat species. Habitats HABMOS data identified no Annex I habitat within 100 m. No woodland listed in the AWI is present within 100 m. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 24B is the same as Alignment 24A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 24B is the same as Alignment 24B is the same as Alignment 24A.	A larger area of woodland is present in Alignment 24C, increasing the habitat's suitability for bat species. Habitats HABMOS data identifies the same Annex I habitat within Alignment 24C and Alignment 24A. The NWSS identified upland birchwood and wet woodland within 100 m. Woodland listed in the AWI is present within 100 m and includes Category 2a ancient woodland of seminatural origin, located c.88 m from the alignment, and is considered irreplaceable habitat. The remaining woodland is Category 2b LEPO woodland. The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 24C is the same as Alignment 24A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 24C is similar to Alignment 24A, with the following exceptions: A smaller area of Alignment 24C is located within SW DWPA River Deveron (Muiresk Intake). According to SW abstraction data, there are no water abstractions within 1 km.	 A smaller area of woodland is present in Alignment 24D, decreasing the habitat's suitability for bat species. However the woodland area in Alignment 24D is still greater than Alignment 24A and 24B. Habitats HABMOS data identified the following Annex I habitats within 100 m: H91AO - Old sessile oak woods H918O - Tilio-Acerion forests The NWSS identified upland birchwood and lowland mixed deciduous woodland within 100 m. Woodland listed in the AWI is present and includes Category 2a ancient woodland of semi-natural origin, located c.88 m from the alignment, and is considered irreplaceable habitat. The remaining woodland is Category 2b LEPO woodland. The carbon and peatland map of Scotland identified no Class 1 or Class 2 peat within 100 m. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for Alignment 24D is the same as Alignment 24A. Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for Alignment 24D is the same as Alignment 24D.



Topic	Alignment 24A	Alignment 24B	Alignment 24C	Alignment 24D
	There is limited suitability of the habitats in Section 24 to support important populations of Target Species. Hydrology, Geology and Hydrogeology Alignment 24A crosses Burn of Turriff (ID 23162). It is underlain by Southern Highland Group low productivity aquifers, where small amounts of groundwater may be present in the near surface weathered zone or in secondary fractures. It is also underlain by Middle Old Red Sandstone, a moderately productive aquifer, that locally yields small amounts of groundwater. Alignment 24A is located within the catchment of Burn Turriff, which is a designated SEPA DWPA for surface water. Alignment 24A is also located within a SW DWPA River Deveron (Muiresk Intake), which supplies Turriff WTW. According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.			
Cultural Heritage	Designations Within 1 km of Alignment 24A lies Hatton Castle GDL. There is potential for direct impacts through changes to the setting of this GDL, as the setting includes views from the surrounding ridges and high points in the landscape. Assets Within 1 km, there are five Category C Listed Buildings. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. Due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations The cultural heritage designations appraisal for Alignment 24B is the same as 24A. Assets The cultural heritage assets appraisal for Alignment 24B is similar to Alignment 24A with the following exception: • Within 1 km, there are four Category C Listed Buildings.	 Designations The cultural heritage designations appraisal for Alignment 24C is similar to Alignment 24A, with the following exception: Within 1 km, there is a Scheduled Monument, Corrydown, stone circle (SM16). The stone circle is visually linked with other stone circles to the west, southwest, and northwest. The alignment option passes to the north and northwest of the stone circle and may impact on its visual relationship with the stone circle located 3.8 km to the west. Assets The cultural heritage assets appraisal for Alignment 24C is similar to Alignment 24A with the following exception: Within 1 km, there is one Category B, and two Category C Listed Buildings. 	 Designations The cultural heritage designations appraisal for Alignment 24D is similar to Alignment 24C, with the following exceptions: Corrydown, stone circle (SM16) is located in closer proximity to Alignment 24D. An OHL on this alignment option may impact on its visual relationship with stone circles located 4.3 km to the west, 2.3 km to the southwest, and 2 km to the south. There are two SMR entries within 100 m. These consist of rig and furrow, and a farm. Direct physical impacts can be avoided through micrositing. Assets The cultural heritage assets appraisal for Alignment 24D is the same as Alignment 24C.
Landscape and Visual	Landscape Designations Alignment 24A crosses the Deveron Valley SLA, leaving the SLA after 3 km at Southend. This alignment option therefore introduces OHL infrastructure into an area of the SLA currently unaffected by transmission infrastructure.	Landscape Designations The landscape designation appraisal for Alignment 24B is largely similar to Alignment 24A, although it has a slightly shorter crossing of the Deveron Valley SLA.	Landscape Designations Alignment 24C is located 1.5 to 2 km southeast of the Deveron Valley SLA. Whilst the alignment is located outside the Deveron Valley SLA, the top of the towers may be visible,	Landscape Designations The landscape designation appraisal for Alignment 24D is very similar to Alignment 24C, however it is located over 2 km southeast of the Deveron Valley SLA.



Topic	Alignment 24A	Alignment 24B	Alignment 24C	Alignment 24D
	At the western end, Alignment 24A is located in the Farmed Rolling Ridges and Hills LCT (19) characterised by smoothly rounded ridges, broad open hill tops, small water courses cutting narrow valleys, and numerous irregular hillocks interspersed with woodland blocks, resulting in an indistinct landscape grain. At the eastern end, Alignment 24A is located within the Farmed and Wooded River Valleys LCT (32), an area that includes the River Deveron, abutted by farmland and aligned through a relatively broad valley strongly contained by rolling hills. It is overlooked by well settled hill slopes, mixed woodland and quiet roads and paths giving a sense of seclusion. Visual Alignment 24A is located on fairly high ground, and across a more open, exposed landscape. This makes it prominent from a considerable number of receptors at Turriff.	 Landscape Character The landscape character appraisal for Alignment 24B is largely similar to Alignment 24A with the following exceptions: Alignment 24B remains on lower ground until it reaches Bogside, where it rises on slightly higher ground around Tods Fauld, increasing exposure from surrounding settled hillsides, including Turriff. Visual The visual appraisal for Alignment 24B is largely similar to that of Alignment 24A. 	however it is unlikely to compromise the key characteristics or qualities of the designation. Landscape Character The landscape character appraisal for Alignment 24C is largely similar to Alignment 24B with the following exceptions: • Alignment 24C takes a more easterly alignment, enabling a slightly lower lying alignment. • Alignment 24C may be more exposed across the open landscape southwest of Braefoot and further east at Silverwells. • Alignment 24C may intrude into the more intimate enclosed landscape around Nethermill. Visual Alignment 24C passes a number of scattered properties. It would be clearly visible from the A947 but would be much less prominent in views from Turriff.	 Landscape Character The landscape character appraisal for Alignment 24D is largely similar to Alignment 24C with the following exceptions: Alignment 24D intrudes into pockets of attractive, enclosed stream valleys north of Nethermill, where a small concentration of properties are nestled amongst small deciduous blocks of ancient woodland around the Burn of Howemill and Den of Woodhead. Visual Alignment 24D would pass in close proximity to a number of properties, including a small concentration of properties around Nethermill, Woodhead and Burn of Howemill. It would be clearly visible from the A947 but would be much less prominent in views from Turriff.
Land Use	Alignment 24A passes through Class 3.2 land for the majority of its length. The alignment passes through a small pockets of Class 3.1 prime agricultural land which is land capable of producing consistently high yields of a narrow range of crops and / or moderate yields of a wider range. Forestry Alignment 24A passes through edge of an isolated island of commercial forestry and through a small area of lowland mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 24A is 0.70 ha, comprising 0.29 ha broadleaved woodland and 0.41 ha coniferous woodland. Recreation Alignment 24A does not pass over core paths, long-distance routes, cycle routes or areas known for highland commercial sports.	Agriculture The agriculture appraisal for Alignment 24B is the same as Alignment 24A. Forestry Alignment 24B does not interact with any woodland types. Recreation The recreation appraisal for Alignment 24B is the same as Alignment 24A.	Agriculture Alignment 24C passes through Class 3.2 land for the majority of its length. The alignment also passes through a Section of Class 3.1 land. Forestry Alignment 24C passes through an area of mixed age native riparian scrub woodland. The estimated area of commercial woodland that would be impacted by Alignment 24C is 1.01 ha broadleaved woodland. Recreation The recreation appraisal for Alignment 24C is the same as Alignment 24A.	Agriculture The agriculture appraisal for Alignment 24D is the same as Alignment 24C. Forestry Alignment 24D passes through an area of mixed age commercial forestry and through nearly native woodland. The estimated area of commercial woodland that would be impacted by Alignment 24D is 2.91 ha, comprising 0.62 ha broadleaved woodland and 2.29 ha coniferous woodland. Of this, 0.21 ha is restock (young trees). Recreation The recreation appraisal for Alignment 24D is the same as Alignment 24A.
Planning	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse (APP/2022/0686). Approximately 150 m south.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse (APP/2022/0686). Approximately 150 m south.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse (APP/2020/2002). Approximately 200 m southeast.	Within 500 m lies the following consented planning applications: • Erection of a dwellinghouse (APP/2020/2002). Approximately 100 m west.



Topic	Alignment 24A	Alignment 24B	Alignment 24C	Alignment 24D
	Formation of a public access footpath (APP/2021/2643). Within the alignment.	Formation of a public access footpath (APP/2021/2643) Within the alignment.	The following applications are known to the planning system but not yet consented:	Erection of a dwellinghouse (APP/2020/2165). Approximately 250 m southeast.
	Erection of a dwellinghouse (APP/2023/0683). Approximately 250 m north.	Erection of a dwellinghouse (APP/2023/0683). Approximately 250 m north.	 Erection of a poultry shed, muck shed, feed silos and associated works (APP/2024/0363). Within the 	Erection of a dwellinghouse (APP/2020/1812). Approximately 300 m southeast.
	The following application is known to the planning system but not yet consented:	The following applications are known to the planning system but not yet consented:	alignment.Erection of a dwellinghouse (APP/2024/0418).	The following applications are known to the planning system but not yet consented:
	Erection of a wind turbine and associated infrastructure (APP/2023/1968). Within the alignment.	Erection of a wind turbine and associated infrastructure (APP/2023/1968). Within the alignment.	Approximately 300 m north.	Erection of a dwellinghouse (APP/2024/0418). Approximately 400 m northwest.
		Erection of a poultry shed, muck shed, feed silos and associated works (APP/2024/0363). Approximately. 500 m east.		
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 24A crosses the A947, two minor roads and one restricted local access road.	Alignment 24B crosses the A947, two minor roads and two restricted local access roads.	Alignment 24C crosses the A947, four minor roads and one restricted local access road.	Alignment 24D crosses the A947 and five minor roads. Environmental Design
	Environmental Design	Environmental Design	Environmental Design	All alignments in Section 24 remain below 200 m
	All alignments in Section 24 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 24 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 24 remain below 200 m elevation, which is not considered challenging.	elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so
	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	atmospheric pollution is not a concern. There are no reports of contaminated land within
	There are no reports of contaminated land within	There are no reports of contaminated land within Section 24.	There are no reports of contaminated land within Section 24.	Section 24.
	Section 24. According to SEPA flood maps, greater than 5% of Alignment 24A is located within the 1 in 10 year flood risk zone. Where all alignments cross the Burn of Turriff, the flood risk area is approaching 360 m wide so it may be necessary to locate a tower within the flood risk zone. There are also some flood risk areas around Burn of Colp	According to SEPA flood maps, greater than 5% of Alignment 24B is located within the 1 in 10 year flood risk zone. Where all alignments cross the Burn of Turriff, the flood risk area is approaching 360 m wide so it may be necessary to locate a tower within the flood risk zone. There are also some flood risk areas around Burn of Colp and Idoch Water.	According to SEPA flood maps, less than 5% of Alignment 24C is located within the 1 in 10 year flood risk zone. Where all alignments cross the Burn of Turriff, the flood risk area is approaching 360 m wide so it may be necessary to locate a tower within the flood risk zone. There are also some flood risk areas around Burn of Colp and Idoch Water.	According to SEPA flood maps, greater than 5% of Alignment 24D is located within the 1 in 10 year flood risk zone. Where all alignments cross the Burn of Turriff, the flood risk area is approaching 360 m wide so it may be necessary to locate a tower within the flood risk zone. There are also some flood risk areas around Burn of Colp, Idoch Water and River Ythan branch.
	and Idoch Water.	Ground Conditions Alignment 24B contains a maximum slope of 15 degrees	Ground Conditions Alignment 24C contains a maximum slope of 32 degrees.	Ground Conditions
	Ground Conditions	which is not a concern.	The steepest slopes occur where the alignment crosses the	Alignment 24D contains a maximum slope of 32 degrees.
	Alignment 24A contains a maximum slope of 26 degrees. This is for less than a single span length so is not a significant issue.	Alignment 24B does not pass through any known areas of peatland.	A947, however due to the change in elevation across the road it may be possible to avoid siting a tower on the steeper slopes.	The steepest slopes occur where the alignment crosses the A947, however due to the change in elevation across the road it may be possible to avoid siting a tower on the
	Alignment 24A does not pass through any known areas of peatland.	Construction and Maintenance There is an existing network of tracks and roads within 1 km	Alignment 24C does not pass through any known areas of	steeper slopes. Alignment 24D does not pass through any known areas
	Construction and Maintenance	of all alignment options.	Construction and Maintenance	of peatland.
	There is an existing network of tracks and roads within	Alignment 24B requires five angle towers.	There is an existing network of tracks and roads within 1 km	Construction and Maintenance
	1 km of all alignment options.	<u>Proximity</u>	of all alignment options.	There is an existing network of tracks and roads within
	Alignment 24A requires five angle towers.	There are two residential properties located within 170 m of Alignment 24B.	Alignment 24C requires three angle towers.	1 km of all alignment options. Alignment 24D requires three angle towers.
		There are four existing wind turbines located within 300 m. The closest is 54 m away. There are two consented wind		



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Topic	Alignment 24A	Alignment 24B	Alignment 24C	Alignment 24D
	Proximity There are three residential properties located within 170 m of Alignment 24A. There are five existing wind turbines located within 300 m. The closest is 104 m away. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is just over 3 x rotor diameter away. There are no known communication masts or metallic pipelines that will impact on the alignment option. Alignment 24A passes close to the town of Turriff.	turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. Alignment 24B crosses the largest number of fixed links, and could potentially have interference issues on the Braehad to Turriff fixed link as the alignment is almost parallel with the link as it crosses it. There are no known metallic pipelines that will impact on the alignment option. Alignment 24B passes close to the town of Turriff.	Proximity There are five residential properties located within 170 m of Alignment 24C. There is one existing wind turbine located 247 m from the alignment option. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity There are three residential properties located within 170 m of Alignment 24D. There are two consented wind turbines located within 300 m of the alignment option. Based on the proposed 82 m rotor diameter, the alignment is more than 3 x rotor diameter away. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 24A is the highest estimated capital cost for this section. Although it has the least crossings in comparison to other options, it has the greatest line length and number of angle towers, with higher costs than the tension towers. Alignment 24A has the lowest estimated operational cost.	Alignment 24B has no forestry costs expected. It has a longer line length than the cheapest option but total cost differential is low at less than 10%. Alignment 24B has no forestry costs but has an additional low votage crossing, with inspection costs for cable sealing ends increasing operational cost to greater than 120% of the lowest cost option.	Alignment 24C has the lowest estimated capital cost for this section. Alignments 24C and 24D both have double the number of low voltage crossings in comparison to Alignment 24A, significantly increasing operational cost.	Alignment 24D has the same number of angle towers and similar forestry costs to Alignment 24C. The increase in cost is due to an additional 1 km line length, increasing material costs and need for additional access tracks. Alignments 24C and 24D both have double the number of low voltage crossings in comparison to Alignment 24A, significantly increasing operational cost.

the alignment. There are also residential and farm buildings. These have the potential to support roosting bats. The edges of wooded areas, as well as the semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment 25A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas and unmaintained field margins have the potential to provide suitable habitats for sett creation. The habitats in Alignment 25A are considered sub optimal for red squirrel decreasing the habitat's suitability for bat species. Habitats The Habitat's suitability for bat species. Habitats The Habitat appraisal for Alignment 25A. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology There is limited witability of bat species. Habitats Habitats The Habitats Habitats Habitats The Habitats The Habitats in Alignment 25C is the same as Alignment 25A. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology There is limited witability of the habitats in Section 25 to support irreplace.	Topic	Alignment 25A	Alignment 25B	Alignment 25C
osprey) of Alignment 25A is Gight Woods SSSI. There is a non-statutory Buglife B-Line across Section 25A. The habitats and their suitability to support protected species within Alignment 25A with the following exception: Wooded areas within Alignment 25A are largely limited to hedgerows/treelines and individual trees, other than three conifer groups in the alignment. There are also residential and farm buildings. These have the potential to support roosting bats. The edges of wooded areas, as well as the semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment 25A including agricultural land, have the potential to support foraging badgers. The dry wooded areas and unmaintained field margins have the potential to provide suitable habitats for sett creation. The habitats in Alignment 25A are considered sub optimal for red squirrel Protected Species The habitats and their suitability to support protected species within Alignment 25A, with the following exception: A smaller area of woodland/hedgerows/treelines is present in Alignment 25B, decreasing the habitats suitability for bat species. Habitats The habitats within Alignment 25A, with the following exception: A smaller area of woodland/hedgerows/treelines is present in Alignment 25B, decreasing the habitats suitability for bat species. Habitats The Habitat appraisal for Alignment 25A including agricultural land, have the potential to support foraging badgers. The dry wooded areas, as well as the potential to support foraging badgers. The dry wooded areas and unmaintained field margins have the potential to provide suitable habitats for set creation. The habitats in Alignment 25A are considered sub optimal for red squirrel Protected Species The habitats and their suitability to support fortone within Alignment 25A, with the following exception: A smaller area of woodland/hedgerows/treelines is present in Alignment 25B. Babitats The Habitat appraisal for	Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
I and nine marten.	ivaturar nemage	The only statutory designated sites within 10 km (20 km for geese and osprey) of Alignment 25A is Gight Woods SSSI. There is a non-statutory Buglife B-Line across Section 25A. Protected Species Wooded areas within Alignment 25A are largely limited to hedgerows/treelines and individual trees, other than three conifer groups in the alignment. There are also residential and farm buildings. These have the potential to support roosting bats. The edges of wooded areas, as well as the semi-natural habitats and watercourses also have the potential to support commuting and foraging activities for bats. The habitats within Alignment 25A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas and unmaintained field margins have the potential to provide suitable habitats for sett creation.	The Designation appraisal for Alignment 25B is the same as 25A. Protected Species The habitats and their suitability to support protected species within Alignment 25B are largely reflective of those within Alignment 25A, with the following exception: • A smaller area of woodland/hedgerows/treelines is present in Alignment 25B, decreasing the habitat's suitability for bat species. Habitats The Habitat appraisal for Alignment 25B is the same as Alignment 25A. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.	The Designation appraisal for Alignment 25C is the same as 25A. Protected Species The habitats and their suitability to support protected species within Alignment 25C are largely reflective of those within Alignment 25A, with the following exception: • A smaller area of woodland/hedgerows/treelines is present in Alignment 25C, decreasing the habitat's suitability for bat species. Habitats The Habitat appraisal for Alignment 25C is the same as Alignment 25A. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.



Topic	Alignment 25A	Alignment 25B	Alignment 25C
	The larger watercourses have the potential to support commuting and	Hydrology, Geology, Hydrogeology	Hydrology, Geology, Hydrogeology
	forgaing otters. Smaller channels have the notential support water voles	The Hydrology, Geology, Hydrogeology appraisal for Alignment 25B is the same	The Hydrology, Geology, Hydrogeology appraisal for Alignment 25C is similar to
	Areas of standing water, slow-flowing field drains, and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles.	as Alignment 25A.	 Alignment 25A, with the following exceptions: Alignment 25A is not located within a SW DWPA.
	Larger watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species.		
	The varied habitats within Alignment 25A have the potential to support a wide terrestrial and aquatic invertebrate assemblages, including species of conservation concern.		
	<u>Habitats</u>		
	HABMOS data identified no Annex I habitats within 100 m.		
	No woodland listed in the AWI is present within 100 m.		
	The carbon and peatland map of Scotland did not indicate the presence of any irreplaceable peatland habitat within 100 m.		
	BNG		
	There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.		
	Ornithology		
	There is limited suitability of the habitats in Section 25 to support important populations of Target Species.		
	Hydrology, Geology and Hydrogeology		
	Alignment 25A crosses Burn of Turriff (ID 23162) and Idoch Water (ID: 23161). It is underlain by Middle Old Red Sandstone and Lower Old Red Sandstone, moderately productive aquifers. It is also underlain by the Southern Highland Group, a low productivity aquifer.		
	Alignment 25A is located within the catchment of Burn Turriff, which is a designated SEPA DWPA for surface water. Alignment 25A is also located within a SW DWPA.		
	According to Aberdeenshire Council data, there are Private Water Supplies within 1 km.		
	According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.		
Cultural	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
Heritage	Within 1 km of Alignment 25A lies Hatton Castle GDL. There is potential for direct impacts through changes within the setting of this GDL, as the setting	The cultural heritage designations appraisal for Alignment 25B is similar to Alignment 25A with the following exception:	The cultural heritage designations appraisal for Alignment 25C is similar to Alignment 25A with the following exception:
	includes views from the surrounding ridges and high points in the landscape.	SMR entries include a cairn and a farmstead.	SMR entries include a cairn and two farmsteads.



Topic	Alignment 25A	Alignment 25B	Alignment 25C
	Within 1 km of the alignment there are two SMR entries, a cairn and cottages. Direct physical impacts can be avoided by micro siting of the alignment. Assets Within 1 km, there is one Category B Listed Building. There is the potential for direct impacts through changes to the setting of the Listed Building, which has the potential to lead to significant effects.	Assets The cultural heritage assets appraisal for Alignment 25B is the same as Alignment 25A.	Assets The cultural heritage assets appraisal for Alignment 25C is similar to Alignment 24A with the following exception: The Category C Listed Building is located further from the alignment and therefore this alignment is unlikely to have significant effects on the Listed Building.
Landscape and Visual	Landscape Designations Deveron Valley SLA is 2 km from Alignment 25A. Whilst there may be some intervisibility that may lead to adverse impacts, it is very unlikely to alter any of the key characteristics or qualities of the SLA. Landscape Character Alignment 25A is located in Undulating Agricultural Heartland and Farmed and Wooded River Valleys LCT. The alignment is prominent on the ridgeline above the valley of Idoch Water. The crossings of Idoch Water and roads west of Little Idoch are very awkward across this attractive, more intimate valley. Visual Alignment 25A is prominent on the ridgeline above Idoch Water, increasing its visibility from Turriff. It would also be closely visible from scattered residential properties throughout the valley, as well as from the A947 and local roads.	 Landscape Designations The landscape designation appraisal for Alignment 25B is the same as Alignment 25A. Landscape Character The landscape character appraisal for Alignment 25B is largely similar to Alignment 25A with the following exceptions: Alignment 25B requires an additional angle tower to take it south of Little Idoch, crossing the Idoch Water sooner and in a more prominent location in the valley. This alignment would be very prominent in the more intimate landscape at this point. Visual The visual appraisal for Alignment 25B is largely similar to that of Alignment 25A, with the following exceptions: The alignment requires an additional angle tower and is in a more prominent location in Idoch Water valley, it would be closely visible from scattered residential properties throughout the valley, as well as from the A947 and local roads. It would also be visible from Turriff, despite sitting lower down in the landscape. 	Landscape Designations The landscape designation appraisal for Alignment 25C is the same as Alignment 25A. Landscape Character The landscape character appraisal for Alignment 25C is largely similar to Alignment 25A with the following exceptions: • Alignment 25C provides a slightly more sympathetic and less awkward crossing of the Idoch Water and its valley and follows landscape grain slightly more closely. Visual The visual appraisal for Alignment 25C is largely similar to that of Alignment 25A, with the following exceptions: • This alignment sits lower down in the landscape than the other options, making it slightly less visible from Turriff. It passes a similar number of properties as the other two alignments but in slightly less close proximity to some. It would remain clearly visible from the A947 and local roads.
Land Use	Alignment 25A passes through Class 3.2 land for the majority of its length, except north of the B9170 where it passes through Class 3.1 prime agricultural land. LCA Class 3.1 is land capable of producing consistently high yields of a narrow range of crops and / or moderate yields of a wider range. Forestry Alignment 25A passes through areas of commercial forestry and through a small area of mixed broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 25A is 3.22 ha, comprising 0.61 ha broadleaved woodland and 2.61 ha coniferous woodland. Of this, 0.38 ha is restock (young trees) and 1.53 ha is felled.	Agriculture Alignment 25B passes through Class 3.2 land for the majority of its length. North of the B9170, the alignment option passes a small pocket of Class 3.1 land, however this is likely to be avoidable. Forestry Alignment 25B passes through an area of mixed age commercial forestry and has no impact on broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 25B is 2.61 ha coniferous woodland. Of this, 0.38 ha is restock (young trees) and 1.53 ha is felled. Recreation The recreation appraisal for Alignment 25B is the same as Alignment 25A.	Alignment 25C passes through Class 3.2 land for the majority of its length. Forestry Alignment 25C passes through areas of mixed age commercial forestry and no broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 25C is 1.96 ha coniferous woodland. Of this, 0.38 ha is restock (young trees) and 1.43 ha is felled. Recreation Alignment 25C does not pass over core paths, long-distance routes, cycle routes or areas known for highland commercial sports.



Topic	Alignment 25A	Alignment 25B	Alignment 25C
	Recreation Alignment 25A runs over a core path at the B9170 and National Cycle Route One. The alignment does not pass over areas known for commercial highland sports.		
Planning	 Within 500 m lies the following consented planning applications: Formation of a public access footpath and footbridge (APP/2019/1221) approximately. 100 m north. The following application is known to the planning system but not yet consented: Proposal of application notice for 'National Development for Electrical Transmission Infrastructure Comprising Transition Joint Bays, Underground Cable Circuits Within a Cable Corridor, Substation and Ancillary Works' (ENQ/2023/0739). Within the alignment. Erection of a single 225 kW wind turbine and associated infrastructure (APP/2024/0508). Within the alignment. Erection of a dwellinghouse (APP/2024/0117). Approximately 500 m north. 	The planning appraisal for Alignment 25B is the same as Alignment 25A.	The planning appraisal for Alignment 25C is the same as Alignment 25A.
Engineering	Infrastructure Crossings Alignment 25A crosses the B9170, three minor roads and two restricted local access roads. Environmental Design All alignments in Section 25 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 25. According to SEPA flood maps, greater than 5% of Alignment 25A is located within the 1 in 10 year flood risk zone, mainly adjacent to the Idoch Water. Ground Conditions Alignment 25A contains a maximum slope of 23 degrees. This is for less than a single span length so is not a significant issue. All alignments in Section 25 cross small pockets of Class 1 peatland but it should be possible to microsite tower locations out of these areas. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 25A requires five angle towers.	Infrastructure Crossings Alignment 25B crosses the B9170, two minor roads and three restricted local access roads. Environmental Design All alignments in Section 25 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 25. According to SEPA flood maps, less than 5% of Alignment 25B is located within the 1 in 10 year flood risk zone, mainly adjacent to the Idoch Water. Ground Conditions Alignment 25B contains a maximum slope of 17 degrees which is not a concern. All alignments in Section 25 cross small pockets of Class 1 peatland but it should be possible to microsite tower locations out of these areas. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 25B requires six angle towers. Proximity	Infrastructure Crossings Alignment 25C crosses the B9170, two minor roads, one local road and one restricted local access road. Environmental Design All alignments in Section 25 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 25. According to SEPA flood maps, less than 5% of Alignment 25C is located within the 1 in 10 year flood risk zone, mainly adjacent to the Idoch Water. Ground Conditions Alignment 25B contains a maximum slope of 20 degrees which is not a concern. All alignments in Section 25 cross small pockets of Class 1 peatland but it should be possible to microsite tower locations out of these areas. Construction and Maintenance There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 25C requires four angle towers. Proximity



Topic	Alignment 25A	Alignment 25B	Alignment 25C
	Proximity There are seven residential properties located within 170 m of Alignment 25A. All of the alignment options in Section 25 pass close to an approved wind turbine at Wagglehill, Boghead, with 29.1 m rotor diameter. The planning application was approved in 2015 but has not yet been constructed, therefore it is considered likely the planning consent has now lapsed. Alignment 25A also crosses the 300 m buffer for three existing wind turbines. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	All of the alignment options in Section 25 pass close to an approved wind turbine at Wagglehill, Boghead, with 29.1 m rotor diameter. The planning application was approved in 2015 but has not yet been constructed, therefore it is considered likely the planning consent has now lapsed. Alignment 25B also crosses the 300 m buffer for three existing wind turbines. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	All of the alignment options in Section 25 pass close to an approved wind turbine at Wagglehill, Boghead, with 29.1 m rotor diameter. The planning application was approved in 2015 but has not yet been constructed, therefore it is considered likely the planning consent has now lapsed. Alignment 25C also crosses the 300 m buffer for two existing wind turbines. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.
Economic	Alignment 25A is close in cost to the lowest capital cost option. Alignment 25A has the lowest estimated operational cost for this section.	Alignment 25B is the highest capital cost option for this Section but only approximately 3% higher than the lowest cost option. The slight cost increase is due to the requirement for additional angle towers. Alignment 25B is close to 120% of the lowest operational cost option, with an additional low voltage crossing leading to increased operational costs for inspections of cable sealing ends.	Alignment 25C has the lowest estimated capital cost for this section. Alignment 25C is similar in operational cost to Alignment 25A.

Topic	Alignment 26A	Alignment 26B	Alignment 26C	Alignment 26D
Topic Natural Heritage	Designations Alignment 26A lies within 10 km of Turclossie Moss SSSI/SAC, Gight Woods SSSI and Tore of Troup SSSI. It lies within 20 km of Loch of Strathberg SPA/Ramsar and Ythan Estuary and Meikle Loch SPA/Ramsar, however it contains limited suitable habitat for wintering geese associated with these. There is a non-statutory Buglife B-Line in the area. Protected Species Wooded areas and a small number of residential and/ or farm buildings have the potential to support roosting bats within Alignment 26A. The wooded areas, hedges, semi-natural habitats and watercourses have the potential to support commuting and foraging activities for bats.	Designations The natural heritage designations appraisal for Alignment 26B is the same as Alignment 26A. Protected Species The habitats and their suitability to support Protected Species within Alignment 26B are largely reflective of those within Alignment 26A, with the following exceptions: • A larger area of woodland/hedgerows/treelines is present in Alignment 26B, increasing the habitat's suitability for bat species. Habitats	Alignment 26C Designations The natural heritage designations appraisal for Alignment 26C is the same as Alignment 26A. Protected Species The habitats and their suitability to support Protected Species within Alignment 26C are largely reflective of those within Alignment 26A, with the following exceptions: Badger activity was identified along field boundaries within 100 m for 26C and 26D, north of Upperton; and A small area of woodland/hedgerows/treelines is present in Alignment 26C, decreasing the habitat's	Designations The natural heritage designations appraisal for Alignment 26D is the same as Alignment 26A. Protected Species The habitats and their suitability to support Protected Species within Alignment 26D are largely reflective of those within Alignment 26C. Habitats The Habitat appraisal for Alignment 26D is the same as Alignment 26A. BNG The BNG appraisal for Alignment 26D is the same as
	The habitats within Alignment 26A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas, scrub, and unmaintained field margins have the potential to provide suitable habitats for sett creation. The habitats in Alignment 26A are considered sub optimal for wildcats, red squirrel and pine marten.	The Habitat appraisal for Alignment 26B is the same as Alignment 26A. BNG The BNG appraisal for Alignment 26B is the same as Alignment 26A.	suitability for bat species. Habitats The Habitat appraisal for Alignment 26C is the same as Alignment 26A.	Alignment 26A. Ornithology The ornithology appraisal for Alignment 26D is the same as Alignment 26A.



Topic	Alignment 26A	Alignment 26B	Alignment 26C	Alignment 26D
	The larger burns, drains and watercourses have the potential to	Ornithology	BNG	Hydrology, Geology, Hydrogeology
	support commuting and foraging otters. Smaller channels have the potential support water voles.	The ornithology appraisal for Alignment 26B is the same as Alignment 26A.	The BNG appraisal for Alignment 26C is the same as Alignment 26A.	The Hydrology, Geology, Hydrogeology appraisal for Alignment 26D is the same as Alignment 26A.
	Areas of standing water, slow-flowing field drains, and natural channels have the potential to support breeding amphibian	Hydrology, Geology, Hydrogeology	Ornithology	
	populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles.	The Hydrology, Geology, Hydrogeology appraisal for Alignment 26B is the same as Alignment 26A.	The ornithology appraisal for Alignment 26C is the same as Alignment 26A.	
	Larger watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to		Hydrology, Geology, Hydrogeology The Hydrology, Geology, Hydrogeology appraisal for	
	support lamprey species.		Alignment 26C is the same as Alignment 26A.	
	The varied habitats within Alignment 23A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.			
	<u>Habitats</u>			
	HABMOS data identified no Annex I habitat within 100 m.			
	Woodland listed in the AWI is present within 100 m but comprises Category 2b LEPO woodland, which is not considered irreplaceable.			
	The carbon and peatland map of Scotland identified no Class 1 or Class 2 peat within 100 m.			
	BNG			
	There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.			
	Ornithology			
	There is limited suitability of the habitats in Section 26 to support important populations of Target Species.			
	Hydrology, Geology and Hydrogeology			
	Alignment 26A crosses Little Water / Black Burn (ID 23237) and South Ugie Water – New Deer to Stuartfield (ID23230). It is underlain by Southern Highland Group and unnamed igneous intrusion (Ordovician to Silurian) low productivity aquifers, where small amounts of groundwater may be present in the near surface weathered zone or in secondary fractures.			
	Alignment 26A is not located within any SEPA DWPA for surface water. The northern extent of the alignment option is located within a SW DWPA of River Ugie, which supplies Forehill WTW.			
	According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.			



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Topic	Alignment 26A	Alignment 26B	Alignment 26C	Alignment 26D
Cultural Heritage	Designations Within 100 m of Alignment 26A there are two SMR entries, consisting of a findspot of arrowheads and a mansion house. Direct physical impacts are not anticipated. Assets Within 1 km, there are two Category C Listed Buildings. There is the potential for direct impacts through changes to the setting of both the Listed Buildings. Due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations There are no World Heritage Sites, GDLs, Scheduled Monuments, Inventory Battlefields or SMR entries within 1 km of Alignment 26B. Assets Within 1 km there is one Category B Listed Building. There is potential for direct impacts through changes to the setting of the Listed Building, and as the important views are to the north and east, these impacts have the potential to lead to significant effects.	Designations The cultural heritage designations appraisal for Alignment 26C is the same as Alignment 26A. Assets The cultural heritage assets appraisal for Alignment 26C is the same as Alignment 26A.	Designations The cultural heritage designations appraisal for Alignment 26D is the same as Alignment 26B. Assets The cultural heritage assets appraisal for Alignment 26D is the same as Alignment 26B.
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas, or Wild Land Areas within 10 km of the alignment. There are no SLAs located within 5 km of the alignment. Landscape Character Alignment 26A is located in the very open and gently rolling intensively farmed agricultural landscape of the Undulating Agricultural Heartland (LCT20). There is not a distinctive grain to the landscape, having instead gentle undulations throughout. Visual Within Alignment 26A, there is a relatively dense scatter of individual residential properties across the landscape with a slight concentration at the eastern end between Pundlecroft and Craigmill, and south at New Deer. This alignment would be clearly visible across the panoramic views from the Culsh Monument viewpoint to the north of New Deer. There are generally long views across the whole of the area and Alignment 26A would be visible from the road network and from the Formartine & Buchan Way to the east.	Landscape Designations The Landscape Designations appraisal for Alignment 26B is the same as Alignment 26A. Landscape Character The landscape character appraisal for Alignment 26B is the same as Alignment 26A. Visual Alignment 26B passes a similar spread of properties as 26A, although it is less close to the concentration of properties between Pundlecroft and Craigmill. It passes closer to properties at New Deer. It is also located in closer proximity to, and on higher ground in front of, the Culsh monument, slightly increasing its prominence from this designated viewing point.	Landscape Designations The Landscape Designations appraisal for Alignment 26C is the same as Alignment 26A. Landscape Character The landscape character appraisal for Alignment 26C is the same as Alignment 26A. Visual Alignment 26C passes a similar spread of properties as Alignments 26A and 26B, although it cuts slightly closer to property boundaries at the western end. Careful placement of angle towers would be required for this alignment option.	Landscape Designations The Landscape Designations appraisal for Alignment 26D is the same as Alignment 26A. Landscape Character The landscape character appraisal for Alignment 26D is the same as Alignment 26A. Visual The visual appraisal for Alignment 26D is similar to Alignment 26C in the western end, and Alignment 26B in the eastern end.
Land Use	Agriculture Alignment 26A passes through Class 3.2 land for the majority of its length as well as LCA Class 3.1 prime agricultural land. Forestry Alignment 26A passes through mature commercially stocked conifer shelter woodland and a small island of broadleaved shelterwood. The estimated area of commercial woodland that would be impacted by Alignment 26A is 0.77 ha, comprising 0.35 ha broadleaved woodland and 0.42 ha coniferous woodland.	Agriculture The agriculture appraisal for Alignment 26B is the same as Alignment 26A. Forestry Alignment 26B passes through mature felled commercial forestry and a small island of broadleaved shelterwood. The estimated area of commercial woodland that would be impacted by Alignment 26B is 3.02 ha, comprising 0.35 ha broadleaved woodland and 2.67 ha coniferous woodland. Of this, 2.67 ha is felled.	Agriculture The agriculture appraisal for Alignment 26C is the same as Alignment 26A. Forestry Alignment 26C passes through mature commercially stocked conifer shelter woodland and has no impact on broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 26C is 0.42 ha coniferous woodland.	Agriculture Alignment 26D passes through Class 3.2 land for the majority of its length. Forestry Alignment 26D passes through felled commercial forestry and has no impact on broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 26C is 2.67 ha coniferous woodland.



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Topic	Alignment 26A	Alignment 26B	Alignment 26C	Alignment 26D
<u> </u>	Recreation	Recreation	Recreation	Recreation
	Alignment 26A runs near to a core path and National Cycle Route One. The alignment does not pass over areas known for commercial highland sports.	Alignment 26B does not pass over core paths, cycle routes, long-distance routes or areas known for commercial highland sports. The alignment passes near to Culsh Monument, and surrounding walking areas.	The recreation appraisal for Alignment 26C is the same as Alignment 26A.	The recreation appraisal for Alignment 26D is the same as Alignment 26B.
	 Within 500 m lies the following consented planning applications: Erection of a dwellinghouse (APP/2019/1772 Approximately 200 m northeast. Formation of a public access footpath (APP/2019/1089). Within the alignment. Erection of a building for a Cattery (APP/2022/1858). Approximately 100 m south. Change of use from agricultural steading to a dwellinghouse (APP/2022/1384). Approximately 450 m north. The following application is known to the planning system but not yet consented: Proposal of application notice for 'National Development for Electrical Transmission Infrastructure Comprising Transition Joint Bays, Underground Cable Circuits Within a Cable Corridor, Substation and Ancillary Works' (ENQ/2023/0739). Within alignment. 	 Within 500 m lies the following consented planning applications: Erection of a dwellinghouse (APP/2019/1772). Approximately 200 m northeast. Formation of a public access footpath (APP/2019/1089). Within the alignment. Erection of a building for a Cattery (APP/2022/1858). Approximately 250 m northeast. The following application is known to the planning system but not yet consented: Proposal of application notice for 'National Development for Electrical Transmission Infrastructure Comprising Transition Joint Bays, Underground Cable Circuits Within a Cable Corridor, Substation and Ancillary Works' (ENQ/2023/0739). Within alignment. 	 Within 500 m lies the following consented planning applications: Erection of a dwellinghouse (APP/2019/1772). Approximately 200 m northeast. Formation of a public access footpath (APP/2019/1089). Within the alignment. Erection of a building for a Cattery (APP/2022/1858). Approximately 100 m south. Change of use from agricultural steading to a dwellinghouse (APP/2022/1384). Approximately 450 m north. The following application is known to the planning system but not yet consented: Proposal of application notice for 'National Development for Electrical Transmission Infrastructure Comprising Transition Joint Bays, Underground Cable Circuits Within a Cable Corridor, Substation and Ancillary Works' (ENQ/2023/0739). Within alignment. 	 Within 500 m lies the following consented planning applications: Erection of a dwellinghouse (APP/2019/1772). Approximately 200 m northeast. Formation of a public access footpath (APP/2019/1089). Within the alignment. Erection of a building for a Cattery (APP/2022/1858). Approximately 250 m northeast. The following application is known to the planning system but not yet consented: Proposal of application notice for 'National Development for Electrical Transmission Infrastructure Comprising Transition Joint Bays, Underground Cable Circuits Within a Cable Corridor, Substation and Ancillary Works' (ENQ/2023/0739). Within alignment.
Engineering <u>I</u>	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
a t	Alignment 26A crosses the A981, B9170 and B9029. The alignment also crosses four minor roads, two local roads and three restricted local access roads.	Alignment 26B crosses the A981, B9170 and B9029. The alignment also crosses four minor roads, two local roads and two restricted local access roads.	Alignment 26C crosses the A981, B9170 and B9029. The alignment also crosses four minor roads and three restricted local access roads.	Alignment 26D crosses the A981, B9170 and B9029. The alignment also crosses four minor roads and one restricted local access road.
<u> </u>	Environmental Design	<u>Environmental Design</u>	Environmental Design	Environmental Design
	All alignments in Section 26 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 26 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 26 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 26 remain below 200 m elevation, which is not considered challenging.
	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.
r	There are no reports of contaminated land within Section 26.	There are no reports of contaminated land within	There are no reports of contaminated land within	There are no reports of contaminated land within
	According to SEPA flood maps, less than 5% of Alignment 26A is located within the 1 in 10 year flood risk zone.	Section 26. According to SEPA flood maps, less than 5% of	Section 26. According to SEPA flood maps, less than 5% of	Section 26. According to SEPA flood maps, less than 5% of
	Ground Conditions	Alignment 26B is located within the 1 in 10 year flood risk	Alignment 26C is located within the 1 in 10 year flood risk	Alignment 26D is located within the 1 in 10 year flood risk
	Alignment 26A contains a maximum slope of 11 degrees which is not a concern.	zone.	zone.	zone.
	There are no known areas of peatland within Section 26.			



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Topic	Alignment 26A	Alignment 26B	Alignment 26C	Alignment 26D
	Construction and Maintenance	Ground Conditions	Ground Conditions	Ground Conditions
	There is an existing network of tracks and roads within 1 km of all alignment options.	Alignment 26B contains a maximum slope of 16 degrees which is not a concern.	Alignment 26C contains a maximum slope of 8 degrees which is not a concern.	Alignment 26A contains a maximum slope of 15 degrees which is not a concern.
	Alignment 26A requires four angle towers.	There are no known areas of peatland within Section 26.	There are no known areas of peatland within Section 26.	There are no known areas of peatland within Section 26.
	Proximity	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance
	There is one residential property located within 170 m of Alignment 26A.	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.
	There is one wind turbine (rotor diameter 13.1 m) located 186 m	Alignment 26B requires five angle towers.	Alignment 26C requires seven angle towers.	Alignment 26D requires eight angle towers.
	from the alignment option. This is beyond 3 x rotor diameter and is therefore not a constraint. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	Proximity	Proximity	Proximity
		There are three residential properties located within 170 m of Alignment 26B.	There are six residential properties located within 170 m of Alignment 26C.	There are eight residential properties located within 170 m of Alignment 26D.
		There is one wind turbine (rotor diameter 13.1 m) located 186 m from the alignment option. This is beyond 3 x rotor diameter and is therefore not a constraint. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment option.	There are four wind turbines located within 300 m of the alignment option. The closest turbine (rotor diameter 29 m) is located 127 m from the alignment option and is therefore not a constraint. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment	There are four wind turbines located within 300 m of the alignment option. The closest turbine (rotor diameter 29 m) is located 127 m from the alignment option and is therefore not a constraint. There are no known communication masts, urban areas or metallic pipelines that will impact on the alignment
		Option.	option.	option.
Economic	Alignment 26A has the lowest estimated capital cost for this section.	Alignment 26B is only slightly higher capital cost than 26A, with roughly 1% difference in estimated costs.	Alignment 26C has comparatively low capital costs associated with forestry and the least number of crossings of existing low voltage infrastructure. However,	Alignment 26D is close in cost to Alignment 26C, with a lower cost due to shorter line length which is balanced by higher forestry capital cost.
	Alignment 26A is the second highest operational cost option at greater than 120% of Alignment 26C.	Alignment 26B has 50% more low voltage crossings than Alignment 26C, significantly increasing operational costs for inspections to greater than 140% of the lowest cost option.	this is balanced by having the highest line length and overall Alignment 26C has the highest capital cost. Alignment 26C has the lowest operational cost.	Alignment 26D has one more low voltage crossing than Alignment 26C but due to the high number of crossings in this section this increase is less than a 20% increase in operational cost.

Topic	Alignment 27A	Alignment 27B	Alignment 27C	Alignment 27D	Alignment 27E	Alignment 27F	Alignment 27G
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 27A lies within 10 km of Turclossie Moss SSSI/SAC. It lies within 20 km of Loch of Strathberg SPA/Ramsar and Ythan Estuary and	The natural heritage designations appraisal for Alignment 27B is the same as Alignment 27A.	The natural heritage designations appraisal for Alignment 27C is the same as Alignment 27A.	The natural heritage designations appraisal for Alignment 27D is the same as Alignment 27A.	The natural heritage designations appraisal for Alignment 27E is the same as Alignment 27A.	The natural heritage designations appraisal for Alignment 27F is the same as Alignment 27A.	The natural heritage designations appraisal for Alignment 27G is the same as Alignment 27A.
	Meikle Loch SPA/Ramsar, however it contains limited suitable habitat for	Protected Species The habitats and their suitability					
	wintering geese associated with these. There is a non-statutory Buglife B-Line in the area.	to support protected species within Alignment 27B are largely reflective of those	to support protected species within Alignment 27C are largely reflective of those	to support protected species within Alignment 27D are largely reflective of those	to support protected species within Alignment 27E are largely reflective of those	to support protected species within Alignment 27F are	to support protected species within Alignment 27G are largely reflective of those



Topic Alignment 27A Ali	lignment 27B	Alignment 27C	Alignment 27D	Alignment 27E	Alignment 27F	Alignment 27G
Wooded areas and a small number of residential and / or farm buildings have the potential to support roosting bats within Alignment 27A. The wooded areas, hedges, semi-natural habitats and watercourses have the potential to support commuting and foraging activities for bats. The habitats within Alignment 27A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas, scrub, and unmaintained field margins have the potential to provide suitable habitats for sett creation. Badger, wildcats, red squirrels and pine marten are anecdotally reported to be present in the Hill of Dens area. The larger burns, drains and watercourses have the potential to support commuting and foraging otters. Smaller channels have the potential support water voles. Water voles are anecdotally reported to be present along the stream between Hill of Dens and Wind Hill to the north. Areas of standing water, slow-flowing field drains, and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles. Larger watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species. The varied habitats within Alignment 27A have the potential to support a	ithin Alignment 27A, with the billowing exceptions: A larger area of woodland/hedgerows/tree lines is present in Alignment 27B, increasing the habitat's suitability for red squirrels, pine marten and, to a more limited degree, bat species. The alignment option also splits the habitat connectivity between the woodlands at Scroghill and Hill of Dens. abitats the habitats appraisal for lignment 27B is similar to lignment 27A with the billowing exception: Woodland listed in the AWI is present within 100 m, but comprises Category 2b LEPO woodland and is not considered irreplaceable. NG there is no unavoidable replaceable habitat present erefore no BU were alculated for this alignment prion. Inithology the ornithology appraisal for this alignment 27A. Sydrology, Geology, ydrogeology and ydrogeology appraisal for this alignment ydrogeology appraisal for this alignment 27A.	within Alignment 27B, with the following exceptions: • A larger area of woodland/hedgerows/tree lines are present in Alignment 27C. Habitats HABMOS data identified no Annex I habitat within 100 m. No woodland listed in the AWI is present within 100 m. The carbon and peatland map of Scotland identified no Class 1 or Class 2 peat within 100 m. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 27A. Hydrology, Geology. Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is similar to Alignment 27A, with the following exception: • Alignment 27C also crosses a tributary of Ebrie Burn (ID:23240).	within Alignment 27C, with the following exceptions: • A larger area of woodland/hedgerows/tree lines are present in Alignment 27D. Habitats The habitats appraisal for Alignment 27D is the same as Alignment 27C. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 27A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 27C.	within Alignment 27A, with the following exceptions: • A smaller area of woodland/hedgerows/tree lines is present in Alignment 27E. Habitats The habitats appraisal for Alignment 27C is the same as Alignment 27C. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 27A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 27C.	largely reflective of those in Alignment 27D. Habitats The habitats appraisal for Alignment 27F is similar to Alignment 27E with the following exception: The carbon and peatland map of Scotland identifies Class 1 peat within 100 m at Bulwark Moss. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 27A. Hydrology, Geology. Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 27C.	within Alignment 27A, with the following exceptions: • A smaller area of woodland/hedgerows/tree lines is present in Alignment 27G. Habitats The habitats appraisal for Alignment 27G is the same as Alignment 27F. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 27A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 27C.



<u>Habitats</u>			
HABMOS data identified no Annex I habitats within 100 m.			
The NWSS identified lowland mixed deciduous woodland within 100 m.			
The carbon and peatland map of Scotland identified no Class 1 or Class 2 peat within 100 m.			
BNG			
There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.			
<u>Ornithology</u>			
Limited difference between alignment options are considered for Target Species. However, the RSPB have			
advised that common cranes have bred in the nearby surrounding area in recent years. These birds, along with a very small number of other pairs in			
northeast Scotland, represent the entirety of this species' breeding population in Scotland. Based on this			
information, a programme of surveys was undertaken over the course of the 2023 breeding season, however none			
were observed indicating that the habitats are not used by locally occurring birds.			
Consultation with local residents has identified that the area around Hill of Dens, supports pink-footed geese over			
the autumn and winter months. This location may therefore represent a collision hotspot for geese. This area is located approximately 17 km from Loch			
of Strathbeg SPA which is designated for its important populations of over wintering greylag and pink-footed			
geese (amongst other things) whose foraging range can be up to 20 km.			
Therefore, geese which occur in this area could be part of the SPA population.			



Topic	Alignment 27A	Alignment 27B	Alignment 27C	Alignment 27D	Alignment 27E	Alignment 27F	Alignment 27G
	Hydrology, Geology and Hydrogeology Alignment 27A crosses the South Ugie Water – New Deer to Stuartfield (ID23230) waterbody. It is underlain by Southern Highland Group, unnamed igneous intrusion (Ordovician to Silurian) and Argyll Group, low productivity aquifers where small amounts of groundwater may be present in the near surface weathered zone or in secondary fractures. Alignment 27A is not located within any SEPA DWPA for surface water, however it is within SW DWPA of River Ugie, which supplies Forehill Water Treatment Works. According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.						
Cultural Heritage	 Designations There are two Scheduled Monuments within 1 km: Clackriach Castle (SM534), 215 m south; Parkhouse Hill stone circle (Aikey Brae) (SM2), 650 m northeast. Direct impacts through changes to their settings may occur for both Scheduled Monuments. There is one SMR entry within 100 m, which is a well. Direct physical impacts can be avoided through micrositing. Assets Within 1 km, there are five Category B and two Category C Listed Buildings. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. Due to distances 	Designations The cultural heritage designations appraisal for this alignment option is similar to Alignment 27A with the following exceptions: Clackriach Castle is the only Scheduled Monument within 1 km; There are two SMR entries within 100 m, the well, and a cairn. Assets The cultural heritage assets appraisal for this alignment option is similar to Alignment 27A, with the following exception: There is the potential for significant effects to the	 Designations The cultural heritage designations appraisal for this alignment option is similar to Alignment 27A with the following exceptions: Clackriach Castle is located approx. 150 m east; There is a single SMR entry within 100 m, North Kirkhill, arrowhead. No direct physical impacts are anticipated. Assets The cultural heritage assets appraisal for this alignment option is similar to Alignment 27B, with the following exception: 	 Designations The cultural heritage designations appraisal for this alignment option is similar to Alignment 27A with the following exceptions: Clackriach Castle is located approx. 515 m northeast; There are three SMR entries within 100 m, including two arrowhead findspots, and a prehistoric burial cairn. Direct physical impacts are possible to the burial cairn, but may be avoided through micrositing. Assets The cultural heritage assets appraisal for this alignment 	Designations The cultural heritage designations appraisal for this alignment option is the same as Alignment 27D. Assets The cultural heritage assets appraisal for Alignment 27E is the same as Alignment 27D.	Designations There is a single SMR entry within 100 m, which is an arrowhead findspot. No impacts are anticipated as the artefact has been removed. Assets There are no Conservation Areas, Listed Buildings, or Noninventory GDLs within 1 km.	Designations The cultural heritage designations appraisal for this alignment option is the same as Alignment 27F. Assets There are no Conservation Areas, Listed Buildings, or Non- inventory GDLs within 1 km.



Topic	Alignment 27A	Alignment 27B	Alignment 27C	Alignment 27D	Alignment 27E	Alignment 27F	Alignment 27G
	and intervening topography, impacts are not likely to lead to significant effects for the majority. However, for North Windhill Farm, Maud Hospital and Lodge, Maud Hospital, there is the potential for significant effects.	setting of for Maud Hospital and Lodge, Maud Hospital.	Within 1 km, there are three Category B and two Category C Listed Buildings.	option is similar to Alignment 27B, with the following exception: • Within 1 km, there are two Category B and one Category C Listed Buildings.			
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas, or Wild Land Areas within 10 km of the alignment option. There are no SLAs located within 5 km of the alignment option. Landscape Character Alignment 27A is located in the very open and gently rolling intensively farmed agricultural landscape of the Undulating Agricultural Heartland (LCT20) to Maud. From Maud the character changes to the Farmland and Wooded Policies (LCT 21) landscape which is also characterised by intensive agriculture, but more noticeably rolling with numerous hills and local high points. It follows the local topography to a degree, largely avoiding the summits of localised high points, but running on higher ground than Alignments 27D to 27G. Visual Within Alignment 27A, there is a relatively dense scatter of individual residential properties throughout the area, with a concentration at Maud, Watermill of Bruxie and Stuartfield. This alignment would be clearly visible and intrusive in views from these areas of concentration, from the local road network, and from the Formartine and Buchan Way.	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 27A. Landscape Character The landscape character appraisal for Alignment 27B is similar to Alignment 27B heads southeast sooner and across higher ground. It crosses just east of Castle Hill summit at 151 m AOD and between Wind Hill and just east of the Hill of Dens summit (168 m AOD). The alignment then drops down to the Section break at Mains of Crichie. Alignment 27B remains on slightly lower ground until Burnside of Benwells then crosses up on to higher ground and the upper slopes of Castle Hill, and across the wooded summits of Wind Hill/ Scrog Hill, against the local topography. It runs on higher ground across a more strongly undulating landscape than Alignments 27C to 27G. Visual The visual appraisal for this alignment option is similar to Alignment 27A with the	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 27A. Landscape Character Alignment 27C follows Alignment 27A to the west of Mains of Clackriach then heads southeast in an almost straight line to the Section break at Jock's Hill. The alignment passes southwest of West Frostybrae, across a local high point above 140 m AOD, and over undulating ground to the Section break at Jock's Hill, sitting at around 150 m AOD. Alignment 27C avoids the higher ground of Alignment 27B and runs across slightly more gently rolling ground to Jock's Hill. However, it still passes over some local high points, against the local topography, including the summit of Jock's Hill at 150 m AOD. Visual The visual appraisal for this alignment option is similar to Alignment 27A with the following exceptions:	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 27A. Landscape Character Alignment 27D follows Alignment 27A to Littlehill, just south of Maud then heads southeast over higher ground to the southwest of West Frostybrae (above 140 m AOD), between Kirkhill and North Kirkhill, and on to the east of Little Kirkhill and back up onto higher ground just west of the summit at Jock's Hill in woodland. Alignment 27D runs across more gently rolling ground to Jock's Hill compared to Alignments 27A and 27B but passes over more localised high points than Alignment 27C does, including at Jock's Hill, Little Kirkhill and West Frostybrae against the local topography. Visual Within Alignment 27D, there is a scattering of residential properties throughout, although a concentration between Backhill of Clackriach,	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 27A. Landscape Character Alignment 27E follows Alignment 27D to Kirkhill, then turns south to past west of Little Kirkhill to stay on lower ground west of Jock's Hill and the Section break. Alignment 27E crosses slightly fewer localised high points than Alignment 27D and finishes on slightly lower ground in woodland to the west of West Bruntbrae. Visual The visual appraisal for this alignment option is similar to Alignment 27D with the following exceptions: • Alignment 27E runs closer to concentrations of properties between Backhill of Clackriach and Kirkhill.	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 27A. Landscape Character Alignment 27F Heads south towards Gowkhill then turns southeast between Drymuir and Denbrae to Bulwark Croft. Continues to the west of Kirkhill then turns sharply east to join Alignment 27D to the southeast of Little Kirkhill into woodland at Bruntbrae. Alignment 27F remains on generally lower, less undulating ground than the other options, although cuts through slightly more woodland at Bulwark Moss and West Bruntbrae. Visual The visual appraisal for this alignment option is similar to Alignment 27D with the following exceptions: There is a scattering of properties throughout the alignment option, with a concentration at Backhill of Clackriach and Kirkhill. Alignment 27F is located further from the edge of	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 27A. Landscape Character Alignment 27F to just south of Kirkhill but continues southeast to the Section break west of West Bruntbrae to stay on lower ground west of Jock's Hill. Alignment 27G takes a straighter, more southerly alignment that avoids most of the localised highpoints, remaining on generally lower, less undulating ground than the other options. It does, however, cut through woodland at Bulwark Moss and at West Bruntbrae. Visual The visual appraisal for this alignment option is similar to Alignment 27F, with the following exceptions: Alignment 27G is located furthest from properties at Maud.
		following exceptions: There are slightly fewer residential properties	Alignment 27C is located on higher ground, which increases its visibility and local prominence. There	Kirkhill and Bruntbrae to the south. There will be close views of the alignment option south		Maud. Alignment 27F is located on predominantly lower ground	



Topic	Alignment 27A	Alignment 27B	Alignment 27C	Alignment 27D	Alignment 27E	Alignment 27F	Alignment 27G
		immediately adjacent to Alignment 27B, but it is located on higher ground, which increases its visibility, making it prominent locally around the Hill of Dens. There will be close views south from Maud, and west from Stuartfield.	will be close views of the alignment option from Maud.	from Maud. Its location on higher ground increases its visibility and local prominence, although woodland at Bruntbrae provides some limited screening for properties to the east.		until the very eastern end, when it rises onto higher ground towards Jock's Hill.	
Land Use	Agriculture This alignment option passes through Class 3.2 land for the majority of its length. It also passes through unavoidable Class 3.1 land east of Littlemill, which is considered prime agricultural land. Forestry Alignment 27A avoids interaction with commercial forestry. Recreation This alignment option passes over a core path south of Maud, The Formartine and Buchan Way and National Cycle Route One.	Agriculture The agriculture appraisal for this alignment option is the same as Alignment 27A. Forestry Alignment 27B passes through and close to areas of mature commercial forestry and has no impact on broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 27B is 3.24 ha coniferous woodland, of which 0.09 ha is restock (young trees) and 1.40 ha is felled. Recreation The recreation appraisal for this alignment option is the same as Alignment 27A.	Agriculture The agriculture appraisal for this alignment option is the same as Alignment 27A. Forestry Alignment 27C passes through the edge of mature commercial forestry and passes through a small island of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 27C is 0.97 ha, comprising 0.93 ha broadleaved woodland and 0.04 ha coniferous woodland. Recreation The recreation appraisal for this alignment option is the same as Alignment 27A.	Agriculture The agriculture appraisal for this alignment option is the same as Alignment 27A. Forestry Alignment 27D passes through an area of mixed age commercial forestry and passes through a small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 27D is 2.76 ha, comprising 0.53 ha broadleaved woodland and 2.23 ha coniferous woodland. Of this, 2.23 ha is restock (young trees). Recreation The recreation appraisal for this alignment option is the same as Alignment 27A.	Agriculture The agriculture appraisal for this alignment option is the same as Alignment 27A. Forestry Alignment 27E avoids all interaction with commercial forestry. Recreation The recreation appraisal for this alignment option is the same as Alignment 27A.	Agriculture Alignments 27F passes through Class 3.2 land for the majority of its length. Forestry Alignment 27F passes through the edge of mixed age commercial forestry and passes through a small island of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 27F is 3.65 ha, comprising ha broadleaved woodland and 3.12 ha coniferous woodland. Of this, 2.95 ha is restock (young trees). Recreation The recreation appraisal for this alignment option is the same as Alignment 27A.	Agriculture The agriculture appraisal for this alignment option is the same as Alignment 27F. Forestry Alignment 27G passes the edge of commercial forestry. The estimated area of commercial woodland that would be impacted by Alignment 27G is 0.18 ha coniferous woodland. Recreation The recreation appraisal for this alignment option is the same as Alignment 27A.
Planning	 Within 500 m lie the following consented planning applications: Erection of a dwellinghouse (APP/2023/1172). Approximately 250 m north. Formation of a public access footpath (APP/2019/0252). Consented 14/03/19. Within alignment. 	Within 500 m lie the following consented planning applications: • Conversion of an agricultural building to form a dwellinghouse (APP/2023/1243). Approximately 350 m north.	Within 500 m lie the following consented planning applications: • Erection of a dwellinghouse (APP/2023/1172) Approximately 250 m north. • Formation of a public access footpath	Within 500 m lie the following consented planning applications: • Erection of a dwellinghouse (APP/2023/1172) Approximately 250 m north. • Formation of a public access footpath	Within 500 m lie the following consented planning applications: • Erection of a dwellinghouse (APP/2023/1172). Approximately 250 m north. • Formation of a public access footpath	Within 500 m lie the following consented planning applications: • Erection of a dwellinghouse (APP/2019/1573). Approximately 450 m south. • Erection of a dwellinghouse	The planning appraisal for Alignment 27G is similar to Alignment 27F, with the following exception: Erection of Dwellinghouse (APP/2024/0667). Within LOD.



Topic	Alignment 27A	Alignment 27B	Alignment 27C	Alignment 27D	Alignment 27E	Alignment 27F	Alignment 27G
	 Erection of a dwellinghouse (APP/2022/0643). Approximately 350 m. south. Erection of a dwellinghouse (APP/2022/1558). Approximately 350 north. Erection of a dwellinghouse (APP/2020/0742) Approximately. 350 m north. Erection of a dwellinghouse (APP/2022/1714) Approximately. 200 m northeast. Erection of a dwellinghouse (APP/2021/2063) Approximately 500 m north. Erection of a dwellinghouse (APP/2021/2057) Approximately 500 m north. Erection of a dwellinghouse (APP/2021/2062) Approximately 500 m north. Erection of Dwellinghouse (APP/2023/1172). Approximately 130 m north. Conversion of an agricultural building to form a dwellinghouse (APP/2023/1243). Approximately 50 m south. Erection of five dwellinghouses and associated infrastructure (APP/2022/2119). Approximately 500 m north. 	 Erection of a dwellinghouse (APP/2023/1172). Approximately 250 m north. Formation of a public access footpath (APP/2019/0252). Within alignment. Erection of a dwellinghouse (APP/2022/0643) Approximately 350 m south. Erection of a dwellinghouse (APP/2022/1558). Approximately 350 m north. 	(APP/2019/0252) Within the alignment. • Erection of a dwellinghouse (APP/2022/0643) Approximately 350 m south. • Erection of a dwellinghouse (APP/2022/1558) Approximately 350 m north.	(APP/2019/0252). Within the alignment. • Erection of a dwellinghouse (APP/2022/0643). Approximately 350 m south. • Erection of a dwellinghouse (APP/2022/1558). Approximately 350 m north.	(APP/2019/0252). Within the alignment. • Erection of a dwellinghouse (APP/2022/0643). Approximately 350 m south. • Erection of a dwellinghouse (APP/2022/1558). Approximately 350 m north. • Erection of Dwellinghouse (APP/2024/0667). Approximately 50 m south.	(APP/2021/2693). Approximately 450 m south. The following applications are known to the planning system but are awaiting a decision: • Erection of Dwellinghouse (APP/2024/0667). Approximately 70 m west. • Erection of Dwellinghouse (APP/2024/0667). Approximately 50 m west.	
Engineering	Infrastructure Crossings Alignment 27A crosses the B9106, five minor roads and two restricted local access roads. The alignment also crosses two National Grid Transmission gas pipelines. An AC interference study may be required where the alignment crosses these pipelines.	Infrastructure Crossings Alignment 27B crosses the B9106, three minor roads and one restricted local access road. The alignment also crosses two National Grid Transmission gas pipelines. An AC interference study may be required where the alignment crosses these pipelines.	Infrastructure Crossings Alignment 27C crosses the B9106 and three minor roads. The alignment also crosses two National Grid Transmission gas pipelines. An AC interference study may be required where the alignment crosses these pipelines.	Infrastructure Crossings Alignment 27D crosses the B9106, two minor roads and two restricted local access roads. The alignment also crosses two National Grid Transmission gas pipelines. An AC interference study may be required where the alignment crosses these pipelines.	Infrastructure Crossings Alignment 27E crosses the B9106, two minor roads and three restricted local access roads. The alignment also crosses two National Grid Transmission gas pipelines. An AC interference study may be required where the alignment crosses these pipelines.	Infrastructure Crossings Alignment 27F crosses the B9106, one minor road, one local road and three restricted local access roads. The alignment also crosses two National Grid Transmission gas pipelines. An AC interference study may be required where the alignment crosses these pipelines.	Infrastructure Crossings Alignment 27G crosses the B9106, one minor road, one local road and three restricted local access roads. The alignment also crosses two National Grid Transmission gas pipelines. An AC interference study may be required where the alignment crosses these pipelines.



TRANSMISSIC	D N						
	Environmental Design	Environmental Design	Environmental Design	Environmental Design	Environmental Design	Environmental Design	Environmental Design
	All alignments in Section 27 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from	All alignments in Section 27 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 27 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 27 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 27 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 27 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 27 remain below 200 m elevation, which is not considered challenging.
	coastal areas so atmospheric pollution is not a concern. There are no reports of contaminated land within Section 27.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.
	According to SEPA flood maps, less than 2% of Alignment 27A is located within the 1 in 10 year flood risk zone.	There are no reports of contaminated land within Section 27.	There are no reports of contaminated land within Section 27.	There are no reports of contaminated land within Section 27.	There are no reports of contaminated land within Section 27.	There are no reports of contaminated land within Section 27.	There are no reports of contaminated land within Section 27.
	Ground Conditions Alignment 27A contains a maximum slope of 21 degrees which is not a	According to SEPA flood maps, less than 2% of Alignment 27B is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 5% of Alignment 27C is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 5% of Alignment 27D is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 2% of Alignment 27E is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 5% of Alignment 27F is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 5% of Alignment 27G is located within the 1 in 10 year flood risk zone.
	concern.	Ground Conditions	Ground Conditions				
	There are no known areas of peatland within Alignment 27A.	Alignment 27B contains a maximum slope of 21 degrees	Alignment 27C contains a maximum slope of 12 degrees	Alignment 27D contains a maximum slope of 14 degrees	Alignment 27E contains a maximum slope of 11 degrees	Alignment 27F contains a maximum slope of 14 degrees	Alignment 27G contains a maximum slope of 8 degrees
	Construction and Maintenance	which is not a concern.	which is not a concern.				
	There is an existing network of tracks and roads within 1 km of all alignment options.	There are no known areas of peatland within Alignment 27B.	There are no known areas of peatland within Alignment 27C.	There are no known areas of peatland within Alignment 27D.	There are no known areas of peatland within Alignment 27E.	Alignment 27F crosses a small pocket of Class 1 peatland, but it should be possible to	Alignment 27G crosses a small pocket of Class 1 peatland, but it should be possible to
	Alignment 27A requires two angle towers.	Construction and Maintenance There is an existing network of	Construction and Maintenance There is an existing network of	Construction and Maintenance There is an existing network of	Construction and Maintenance There is an existing network of	microsite tower locations out of this area.	microsite tower locations out of this area.
	<u>Proximity</u>	tracks and roads within 1 km of all alignment options.	tracks and roads within 1 km of all alignment options.	tracks and roads within 1 km of all alignment options.	tracks and roads within 1 km of all alignment options.	Construction and Maintenance	Construction and Maintenance
	There are five residential properties located within 170 m of Alignment 27A.	Alignment 27B requires four angle towers.	Alignment 27C requires one angle tower.	Alignment 27D requires two angle towers.	Alignment 27E requires two angle towers.	There is an existing network of tracks and roads within 1 km of all alignment options.	There is an existing network of tracks and roads within 1 km of all alignment options.
	There is one wind turbine located 191 m from the alignment option. This is beyond 3 x rotor diameter and is	Proximity There are two residential properties located within 170 m	Proximity There are three residential properties located within 170 m	Proximity There are two residential properties located within 170 m	Proximity There are four residential properties located within 170 m	Alignment 27F requires four angle towers.	Alignment 27G requires three angle towers.
	therefore not a constraint.	of Alignment 27B.	of Alignment 27C.	of Alignment 27D.	of Alignment 27E.	<u>Proximity</u>	<u>Proximity</u>
	All alignment options in Section 27 cross two National Grid Transmission gas pipelines.	All alignment options in Section 27 cross two National Grid Transmission gas pipelines.	There is one wind turbine (9.8 m rotor diameter) located 166 m from the alignment	There is one wind turbine (10.2 m rotor diameter) located 273 m from the alignment	There is one wind turbine (10.2 m rotor diameter) located 171 m from the alignment	There are four residential properties located within 170 m of Alignment 27F.	There are four residential properties located within 170 m of Alignment 27G.
	There are no known communication masts that will impact on the alignment option. The alignment passes close to the settlements of Maud and Stuartfield.	There are no known wind turbines or communication masts that will impact on the	option. This is beyond 3 x rotor diameter and is therefore not a constraint.	option. This is beyond 3 x rotor diameter and is therefore not a constraint.	option. This is beyond 3 x rotor diameter and is therefore not a constraint.	There are three wind turbines within 300 m of the alignment option. The closest turbine (44 m rotor diameter) is located	There are two wind turbines within 300 m of the alignment option. The closest turbine (44 m rotor diameter) is located
	and craditions.	alignment option. The alignment passes close to the settlements of Maud and	All alignment options in Section 27 cross two National Grid Transmission gas pipelines.	All alignment options in Section 27 cross two National Grid Transmission gas pipelines.	All alignment options in Section 27 cross two National Grid Transmission gas pipelines.	150 m from the alignment option. This is beyond 3 x rotor diameter and is therefore not a	150 m from the alignment option. This is beyond 3 x rotor diameter and is therefore not a
		Stuartfield.	There are no known	There are no known	There are no known	constraint.	constraint.

impact on the alignment

communication masts that will

impact on the alignment

communication masts that will

impact on the alignment

communication masts that will



Topic	Alignment 27A	Alignment 27B	Alignment 27C	Alignment 27D	Alignment 27E	Alignment 27F	Alignment 27G
			option. The alignment passes close to the settlement of Maud.	option. The alignment passes close to the settlement of Maud.	option. The alignment passes close to the settlement of Maud.	All alignment options in Section 27 cross two National Grid Transmission gas pipelines.	All alignment options in Section 27 cross two National Grid Transmission gas pipelines.
						There are no known communication masts or urban areas that will impact on the alignment option.	There are no known communication masts or urban areas that will impact on the alignment option.
Economic	Alignment 27A is roughly 50% longer than the lowest cost option (27G), substantially increasing the capital cost to greater than 140% of the lowest cost option. It also has more than triple the number of low voltage crossings, increasing capital costs of diversions. Alignment 27A has the highest operational cost with almost four times the number of low voltage crossings than Alignment 27G, significantly increasing the cost of inspections. The operational cost of this option is greater than 140% of the lowest cost option.	Alignment 27B is the highest cost option, similar in length to Alignment 27A but with more angle towers required, with greater capital cost than tension towers. Alignment 27B also has higher forestry costs, with no forestry costs required for Alignment 27A. Operational costs are significant for Alignment 27B, with almost triple the number of low voltage crossings than Alignment 27G and a greater line length, increasing inspection requirements. The operational cost of this option is greater than 140% of the lowest cost option.	Alignment 27C has the median capital cost for alignments in Section 27, remaining below the 120% of the lowest cost option. Alignments 27C and 27D have almost double the number of low voltage crossings than Alignment 27G. The operational cost of this option is greater than 140% of the lowest cost option.	Alignment 27D has comparatively high forestry costs for this section, but remains within 120% of the lowest cost option. Alignments 27C and 27D have almost double the number of low voltage crossings than Alignment 27G. The operational cost of this option is greater than 140% of the lowest cost option.	Capital costs for Alignment 27E are less than 5% greater than the lowest cost option (27G). It is slightly longer than Alignment 27G but this is balanced by expecting no forestry capital costs for this option. Alignments 27E and 27F have almost 50% more low voltage crossings than Alignment 27G. The operational cost of this option is greater than 140% of the lowest cost option.	Alignment 27F is similar in length to Alignment 27C but requires additional angle towers and substantially higher forestry costs. Alignments 27E and 27F have almost 50% more low voltage crossings than Alignment 27G. The operational cost of this option is greater than 140% of the lowest cost option.	Alignment 27G has the lowest estimated capital cost for this section. Alignment 27G has the lowest estimated operational cost for this section.

Section 28

Topic	Alignment 28A	Alignment 28B	Alignment 28C	Alignment 28D	Alignment 28E	Alignment 28F	Alignment 28G
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 28A lies within 10 km of Rora Moss SSSI, however there is no hydrological connection with the raised bog for which it is designated. Alignment 28A lies within 20 km of Loch of Strathbeg SPA/Ramsar and Ythan Estuary and Meikle Loch SPA/Ramsar, however it contains limited suitable habitat for wintering geese associated with these. There is a non-statutory Buglife B-Line in the	The natural heritage designations appraisal for Alignment 28B is the same as Alignment 28A. Protected Species The habitats and their suitability to support protected species within Alignment 28B	The natural heritage designations appraisal for Alignment 28C is the same as Alignment 28A. Protected Species The habitats and their suitability to support protected species within Alignment 28C	The natural heritage designations appraisal for Alignment 28D is the same as Alignment 28A. Protected Species The habitats and their suitability to support protected species within Alignment 28D	The natural heritage designations appraisal for Alignment 28E is the same as Alignment 28A. Protected Species The habitats and their suitability to support protected species within Alignment 27E	The natural heritage designations appraisal for Alignment 28F is the same as Alignment 28A. Protected Species The habitats and their suitability to support protected species within Alignment 28F	The natural heritage designations appraisal for Alignment 28G is the same as Alignment 28A. Protected Species The habitats and their suitability to support protected species within Alignment 28G
	area.	are largely reflective of those within Alignment 28A, with the following exceptions:	are largely reflective of those within Alignment 28A, with the following exceptions:	are largely reflective of those within Alignment 28C, with the following exceptions:	are largely reflective of those in Alignment 27D, with the following exceptions:	are largely reflective of those within Alignment 28D.	are largely reflective of those within Alignment 28E, with the following exceptions:



Protected Species

Mature woodland groups, tree lines, private and / or farm buildings have the potential to support roosting bats within Alignment 28A. The edges of wooded areas, semi-natural habitats and watercourses have the potential to support commuting and foraging activities for bats. Crichie Estate is anecdotally reported to support populations of bats.

The habitats within Alignment 28A, including agricultural land, have the potential to support foraging badgers. The dry wooded areas, scrub, and unmaintained field margins have the potential to provide suitable habitats for sett creation.

The sheltered areas in and around Crichie Wood have the potential to support wildcat, pine marten and red squirrel. Red squirrels are anecdotally reported around Crichie House and Crichie Estate. Sheds, workshops and woodstores within Mains of Crichie present potential denning opportunities for pine marten.

The larger watercourses have the potential to support commuting and foraging otters. Otters are anecdotally reported to inhabit the habitats around Crichie House. Smaller channels have the potential support water voles.

Areas of standing water, slow-flowing field drains, and natural channels have the potential to support breeding amphibian populations. Unmaintained field margins, hedgerows, tree lines and wooded areas may provide habitat for reptiles.

Larger watercourses have the potential to support migratory salmonids. The smaller freshwater burns have the potential to support lamprey species.

The varied habitats within Alignment 28A have the potential to support a wide terrestrial and aquatic invertebrate assemblage, including species of conservation concern.

 A slightly smaller area of woodland is present in Alignment 28B, decreasing the habitat's suitability for red squirrels, pine martens and bat species.

Habitats

The habitats appraisal for Alignment 28B is similar to Alignment 28A with the following exception:

- The Annex I habitat is likely to be unavoidable as it spans the alignment option.
- Woodland listed in the AWI is present within 100 m, but comprises Category 2b LEPO woodland and is not considered irreplaceable.

BNG

There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.

<u>Ornithology</u>

The ornithology appraisal for this alignment option is the same as Alignment 28A.

<u>Hydrology, Geology,</u> <u>Hydrogeology</u>

The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 28A. By crossing additional mixed woodlands at Trefynie and Jock's Hill in the west, a larger area of woodland is present in Alignment 28C, increasing habitat suitability for red squirrels, pine martens and bat species.

<u>Habitats</u>

HABMOS data identified no Annex I habitat within 100 m.

NWSS identified wet woodland and lowland mixed deciduous woodland within 100 m.

Woodland listed in the AWI is present within 100 m, but comprises Category 2b LEPO woodland and is not considered irreplaceable.

The carbon and peatland map of Scotland identified no Class 1 or Class 2 peat within 100 m.

BNG

There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.

Ornithology

The ornithology appraisal for this alignment option is the same as Alignment 28A.

<u>Hydrology, Geology,</u> <u>Hydrogeology</u>

The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 28A.

 A smaller area of woodland is present in Alignment 28D, decreasing the habitat suitability for red squirrels, pine martens and bat species (although the habitat suitability is still higher than Alignment 28A and 28B).

Habitats

The habitats appraisal for Alignment 28D is the same as Alignment 28C.

<u>BNG</u>

There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.

Ornithology

The ornithology appraisal for this alignment option is the same as Alignment 28A.

Hydrology, Geology, Hydrogeology

The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 28A.

- A smaller area of woodland is present in Alignment 28E, decreasing the habitat suitability for red squirrels, pine martens, and bat species.
- The majority of Alignment 28E's habitats comprise open, agricultural land, with the southern end crossing close to the end of the Crichie Wood, reducing the impacts of habitat fragmentation.

Habitats

The habitats appraisal for Alignment 28E is similar to Alignment 28C, with the following exception:

 The NWSS identified lowland mixed deciduous woodland only within 100 m.

BNG

There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.

Ornithology

The ornithology appraisal for this alignment option is the same as Alignment 28A.

<u>Hydrology, Geology,</u> <u>Hydrogeology</u>

The hydrology, geology and hydrogeology appraisal for this alignment option is similar to Alignment 28A, with the following exception:

There are no potential SEPA abstractions within 1 km.

Habitats

The habitats appraisal for Alignment 28F is the same as Alignment 28C.

BNG

There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.

Ornithology

The ornithology appraisal for this alignment option is the same as Alignment 28A.

<u>Hydrology, Geology,</u> <u>Hydrogeology</u>

The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 28A.

A larger area of woodland is present in Alignment 28G, including conifer woodland at the western end at Bruntbrae, increasing the habitat suitability for red squirrels, pine martens and bat species.

Habitats

The habitats appraisal for Alignment 28G is the same as Alignment 28E.

BNG

There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.

Ornithology

The ornithology appraisal for this alignment option is the same as Alignment 28A.

Hydrology, Geology, Hydrogeology

The hydrology, geology and hydrogeology appraisal for this alignment option is similar to Alignment 28E, with the following exception:

 It also crosses a tributary of Ebrie Burn (ID:23240).



<u>Habitats</u>			
HABMOS data identified the following Annex I habitat within 100 m:			
H91EO – Alluvial forests			
The NWSS identified lowland mixed deciduous woodland within 100 m.			
The carbon and peatland map of Scotland identified no Class 1 or Class 2 peat within 100 m.			
BNG			
There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option.			
<u>Ornithology</u>			
There is limited suitability of the habitats in Section 28 to support important populations			
of Target Species. However, the RSPB has advised that common cranes have bred in nearby surrounding area in recent years.			
These birds, along with a small number of other pairs in northeast Scotland, represent			
the entirety of this species' breeding			
population in Scotland. Based on this information, a programme of surveys was			
undertaken in this area, over the course of			
the 2023 breeding season. However, no			
common cranes were observed in this			
Section during the surveys, indicating that			
the habitats are not used by locally occurring birds.			
Consultation with local residents has identified that the area around Hill of Dens,			
supports pink-footed geese over the Autumn			
and Winter months. This location may			
therefore represent a collision hotspot for			
geese. This area is located approximately			
17 km from Loch of Strathbeg SPA which is			
designated for its important populations of			
over wintering greylag and pink-footed			
geese (amongst other things) whose			
foraging range can be up to 20 km.			
Therefore, geese which occur in this area			
could be part of the SPA population.			
Hydrology, Geology and Hydrogeology			
Alignment 28A crosses the Crichie Burn (ID:			



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Topic	Alignment 28A	Alignment 28B	Alignment 28C	Alignment 28D	Alignment 28E	Alignment 28F	Alignment 28G
	23227). It is underlain by unnamed igneous intrusion (Ordovician to Silurian) and Argyll Group, low productivity aquifers where small amounts of groundwater may be present in the near surface weathered zone or in secondary fractures. Alignment 28A is not located within any SEPA DWPA for surface water, however it is within SW DWPA of River Ugie, which supplies Forehill WTW. According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are water abstractions with 1 km. According to SEPA abstraction data, there are potential water abstractions within 1 km.						
Cultural Heritage	Designations There are no cultural heritage designations within 1 km. Assets Within 1 km there are three Category B Listed Buildings. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. Due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations There are two SMR entries within 100 m, consisting of a holy well and prisoner of war working camp. Direct physical impacts may be avoided through micrositing. Assets Within 1 km there are two Category B Listed Buildings. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. Due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations There is one SMR entry within 100 m, a cairn. Direct physical impacts may be avoided through micrositing. Assets Within 1 km there is one Category B Listed Building. There is the potential for direct impacts through changes to the setting of the Listed Building. Due to distances, impacts are not likely to lead to significant effects.	Designations There are four SMR entries within 100 m, consisting of a farmstead, rig and furrow, a holy well and a prisoner of war working camp. Direct physical impacts may be avoided through micrositing. Assets Within 1 km there are two Category B Listed Buildings. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. Due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations There is a single SMR entry within 100 m, which is a building. Direct physical impacts may be avoided through micrositing. Assets Within 1 km there is one Category B Listed Building. There is the potential for direct impacts through changes to the setting of the Listed Building. Due to distances and intervening topography impacts are not likely to lead to significant effects.	Designations The cultural heritage designations appraisal for this alignment option is the same as Alignment 28A. Assets The cultural heritage assets appraisal for this alignment option is the same as Alignment 28A. Alignment 28A.	Designations The cultural heritage designations appraisal for this alignment option is the same as Alignment 28A. Assets The cultural heritage assets appraisal for this alignment option is the same as Alignment 28E.
Landscape and Visual	Landscape Designations There are no National Parks, National Scenic Areas, or Wild Land Areas within 10 km of the alignment option. There are no SLAs located within 5 km of the alignment option. Landscape Character Alignment 28A is located within the Farmland and Wooded Policies LCT (21)	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 28A. Landscape Character The landscape character appraisal for Alignment 28B is	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 28A. Landscape Character Similar to Alignment 28A and 28B, Alignment 28C is located	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 28A. Landscape Character The landscape character appraisal for Alignment 28D is	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 28A. Landscape Character Alignment 28E is located within the Farmland and	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 28A. Landscape Character The landscape character appraisal for Alignment 28F is	Landscape Designations The Landscape Designations appraisal for this alignment option is the same as Alignment 28A. Landscape Character Alignment 28E is located within the Farmland and



Topic	Alignment 28A	Alignment 28B	Alignment 28C	Alignment 28D	Alignment 28E	Alignment 28F	Alignment 28G
	distinctive rolling landscape with numerous hills and local high points. Alignment 28A is a very short alignment and is located on lower, flatter ground, running reasonably with the landscape grain but cuts through some small blocks of deciduous woodland. Visual Alignment 28A would be very closely visible from the south of Stuartfield, as well as from densely scattered properties around Crichie.	However, it is located on lower, flatter ground reasonably with the landscape grain, but it cuts through some small blocks of deciduous woodland within an attractive local landscape. Visual The visual appraisal for this alignment option is the same as Alignment 28A.	Wooded Policies LCT. This alignment option runs against the grain of the landscape across more attractive undulating ground around the lower slopes of Hill of Coynach. It avoids the deciduous woodland and attractive local landscape around Moans of Crichie. Visual Alignment 28C would be visible from the south of Stuartfield, as well as from numerous scattered properties along its length.	Alignment 28D runs against the grain of the landscape from the summit of Jock's Hill, across undulating ground but avoids the local highpoint and woodland block at Trefynie. However, it cuts through the woodland of Crichie Wood as well as attractive landscape and woodland blocks around Mains of Crichie. Visual The visual appraisal for this alignment option is the same as Alignment 28C.	Alignment 28E runs from the summit of Jock's Hill across a slightly less attractive, less rolling, and more uniform landscape than alignments further north. It creates sharp angles in/ out to parallel the existing 400 kV OHL but enables the OHL infrastructure to be better contained into a similar location in the landscape. It does, however, also cross the local summit of Coynach Hill. Visual Alignment 28E would be visible from numerous densely scattered properties. It also results in the 'boxing in' of three properties around Upper Smithy Croft and another three at North Auchtylair. The alignment crosses the local high point of Coynach Hill, increasing its visibility in the local landscape.	but it is slightly more direct out of Jock's Hill and therefore staying on the summit for longer. Visual The visual appraisal for this alignment option is the same as Alignment 28C.	Alignment 28G runs across lower ground, avoiding the summit of Jock's Hill, and across a slightly less attractive, more uniform landscape than the other options. It also enables the OHL infrastructure to be better contained into a similar location in the landscape. It also goes on to avoid crossing the higher ground and local summit of Coynach Hill. Visual Alignment 28G would be visible from numerous scattered properties. It also results in the 'Boxing in' of three properties around Upper Smithy Croft and another three at North Auchtylair.
Land Use	Agriculture Alignment 28A passes through Class 3.2 land which is unavoidable. It does not pass	Agriculture Alignment 28B passes through Class 3.2 land which is	Agriculture Alignment 28C passes through Class 3.2 land for the majority	Agriculture Alignment 28D passes through Class 3.2 land, and potentially	Agriculture Alignment 28E passes through Class 3.1 land around Upper	Agriculture Alignment 28F passes through Class 3.2 land, and potentially	Agriculture Alignment 28G passes through Class 3.2 and Class 3.1 land
	through any prime agricultural land.	unavoidable.	of its length which is unavoidable, and an area of	Class 3.1 land at Upper Crichie and south of Mains of Crichie,	Crichie, West Crichie and north of Kinnadie which is	avoidable Class 3.1 land south of Mains of Crichie. Class 3.1	around West Crichie and north of Kinnadie, both of which are
	Forestry	<u>Forestry</u>	Class 3.1 land around	however, this may be	unavoidable. Class 3.1 land is	land is considered prime	unavoidable, Class 3.1 land is
	Alignment 28A passes through and close to small areas of mixed age commercial	Alignment 28B passes through areas of mature commercial	Woodside Croft which is also unavoidable. Class 3.1 land is	avoidable. Class 3.1 land is considered prime agricultural	considered prime agricultural land.	agricultural land.	considered prime agricultural land.
	forestry and areas of broadleaved woodland.	forestry and areas of broadleaved woodland.	considered prime agricultural land.	land.	<u>Forestry</u>	Forestry Alignment 28F passes through	<u>Forestry</u>
	The estimated area of commercial woodland that would be impacted by Alignment 28A is 2.25 ha, comprising 1.55 ha broadleaved	The estimated area of commercial woodland that	<u>Forestry</u>	Forestry Alignment 28D passes through	Alignment 28E passes close to areas of mature commercial	areas of mature commercial forestry and areas of	Alignment 28G passes through areas of mixed age
	woodland and 0.70 ha coniferous woodland. Of this, 0.19 ha is restock (young trees).	would be impacted by Alignment 28B is 3.43 ha,	Alignment 28C passes through areas of mature commercial	areas of mature commercial forestry and areas of	forestry and close to an area of broadleaved woodland.	broadleaved woodland. The estimated area of	commercial forestry and close to an area of broadleaved
	Recreation	comprising 1.99 ha	forestry and small islands of broadleaved woodland and	broadleaved woodland.	The estimated area of	commercial woodland that	woodland.
	There are no known recreational activities or	broadleaved woodland and 1.44 ha coniferous woodland.	shelterwood.	The estimated area of commercial woodland that	commercial woodland that would be impacted by	would be impacted by Alignment 28F is 3.22 ha,	The estimated area of commercial woodland that
	receptors in close proximity to the alignment option.		The estimated area of	would be impacted by	Alignment 28F is 2.27 ha,	comprising 1.78 ha	would be impacted by
	Option.		commercial woodland that would be impacted by	Alignment 28D is 3.22 ha, comprising 1.78 ha	comprising 0.07 ha broadleaved woodland and	broadleaved woodland and 1.44 ha coniferous woodland.	Alignment 28G is 9.16 ha, comprising 1.29 ha



Topic	Alignment 28A	Alignment 28B	Alignment 28C	Alignment 28D	Alignment 28E	Alignment 28F	Alignment 28G
		Of this, 0.20 ha is restock (young trees) and 0.88 ha is felled. Recreation There are no known recreational activities or receptors in close proximity to the alignment option.	Alignment 28C is 3.75 ha, comprising 0.90 ha broadleaved woodland and 2.85 ha coniferous woodland. Of this, 0.84 ha is restock (young trees). Recreation There are no known recreational activities or receptors in close proximity to the alignment option.	broadleaved woodland and 1.44 ha coniferous woodland. Of this, 0.20 ha is restock (young trees) and 0.88 ha is felled. Recreation There are no known recreational activities or receptors in close proximity to the alignment option.	2.20 ha coniferous woodland. Of this, 0.40 ha is restock (young trees). Recreation There are no known recreational activities or receptors in close proximity to the alignment option.	Of this, 0.20 ha is restock (young trees) and 0.88 ha is felled. Recreation There are no known recreational activities or receptors in close proximity to the alignment option.	broadleaved woodland and 7.87 ha coniferous woodland. Of this, 5.21 ha is restock (young trees). Recreation There are no known recreational activities or receptors in close proximity to the alignment option.
Planning	There are no known consented planning applications within 500 m.	There are no known consented planning applications within 500 m.	There are no known consented planning applications within 500 m.	There are no known consented planning applications within 500 m.	Within 500 m lies the following consented planning application: • Formation of Onshore Landfall Point, Laying of underground cable and erection of substation (APP/2023/1454). Within Alignment.	There are no known consented planning applications within 500 m.	Within 500 m lies the following consented planning applications: • Formation of Onshore Landfall Point, Laying of underground cable and erection of substation (APP/2023/1454). Within Alignment. The following applications are known to the planning system but are still awaiting decision: • Erection of a dwellinghouse (APP/2024/0642).
Engineering	Infrastructure Crossings Alignment 28A crosses the B9030 and two minor roads. The alignment also crosses one National Grid Transmission gas pipeline. An AC interference study may be required where the alignment crosses the pipeline. Environmental Design All alignments in Section 28 remain below 200 m elevation, which is not considered challenging. The alignment is more than 10 km from coastal areas so atmospheric pollution is not a concern.	Infrastructure Crossings Alignment 28B crosses the B9030 and two minor roads. The alignment also crosses one National Grid Transmission gas pipeline. An AC interference study may be required where the alignment crosses the pipeline. Environmental Design All alignments in Section 28 remain below 200 m elevation, which is not considered challenging.	Infrastructure Crossings Alignment 28C crosses the B9030 and two minor roads. The alignment also crosses one National Grid Transmission gas pipeline. An AC interference study may be required where the alignment crosses the pipeline. Environmental Design All alignments in Section 28 remain below 200 m elevation, which is not considered challenging.	Infrastructure Crossings Alignment 28D crosses the B9030 and two minor roads. The alignment also crosses one National Grid Transmission gas pipeline. An AC interference study may be required where the alignment crosses the pipeline. Environmental Design All alignments in Section 28 remain below 200 m elevation, which is not considered challenging.	Infrastructure Crossings Alignment 28E crosses the B9030, four minor roads one local road and one restricted local access road. The alignment also crosses one National Grid Transmission gas pipeline. An AC interference study may be required where the alignment crosses the pipeline. Environmental Design All alignments in Section 28 remain below 200 m	Infrastructure Crossings Alignment 28F crosses the B9030 and two minor roads. The alignment also crosses one National Grid Transmission gas pipeline. An AC interference study may be required where the alignment crosses the pipeline. Environmental Design All alignments in Section 28 remain below 200 m elevation, which is not considered challenging.	Infrastructure Crossings Alignment 28G crosses the B9030, four minor roads, two local roads and two restricted local access roads. The alignment also crosses one National Grid Transmission gas pipeline. An AC interference study may be required where the alignment crosses the pipeline. Environmental Design All alignments in Section 28 remain below 200 m



Topic	Alignment 28A	Alignment 28B	Alignment 28C	Alignment 28D	Alignment 28E	Alignment 28F	Alignment 28G
	There are no reports of contaminated land within Section 28.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a	elevation, which is not considered challenging.	The alignment is more than 10 km from coastal areas so atmospheric pollution is not a	elevation, which is not considered challenging.
	According to SEPA flood maps, greater than 5% of Alignment 28A is located within the 1	concern.	concern.	concern.	The alignment is more than 10 km from coastal areas so	concern.	The alignment is more than 10 km from coastal areas so
	in 10 year flood risk zone. It is likely that the areas of higher flood risk could be spanned.	There are no reports of contaminated land within Section 28.	There are no reports of contaminated land within Section 28.	There are no reports of contaminated land within Section 28.	atmospheric pollution is not a concern.	There are no reports of contaminated land within Section 28.	atmospheric pollution is not a concern.
	Ground Conditions Alignment 28A contains a maximum slope of 10 degrees which is not a concern.	According to SEPA flood According to SEPA flood	According to SEPA flood contaminated land within maps, less than 5% of Section 28.	According to SEPA flood maps, less than 2% of	There are no reports of contaminated land within Section 28.		
	There are no known areas of peatland within Section 28.	Alignment 28B is located within the 1 in 10 year flood risk zone.	Alignment 28C is located within the 1 in 10 year flood risk zone.	Alignment 28D is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 5% of	Alignment 28F is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 2% of
	Construction and Maintenance	Ground Conditions	Ground Conditions	Ground Conditions	Alignment 28E is located within the 1 in 10 year flood risk zone.	Ground Conditions	Alignment 28G is located within the 1 in 10 year flood risk zone.
	There is an existing network of tracks and roads within 1 km of all alignment options. Alignment 28A requires three angle towers.	Alignment 28B contains a maximum slope of 11 degrees which is not a concern.	Alignment 28C contains a maximum slope of 15 degrees which is not a concern.	Alignment 28D contains a maximum slope of 16 degrees which is not a concern.	Ground Conditions Alignment 28E contains a	Alignment 28F contains a maximum slope of 16 degrees which is not a concern.	Ground Conditions Alignment 28G contains a
	Proximity	There are no known areas of peatland within Section 28.	There are no known areas of peatland within Section 28.	There are no known areas of peatland within Section 28.	maximum slope of 12 degrees which is not a concern.	There are no known areas of peatland within Section 28.	maximum slope of 10 degrees which is not a concern.
	There are three residential properties located within 170 m of Alignment 28A. There are two wind turbines located within	Construction and Maintenance	Construction and Maintenance	Construction and Maintenance	There are no known areas of peatland within Section 28.	Construction and Maintenance	There are no known areas of peatland within Section 28.
	300 m of Alignment 28A. The closest turbine (rotor diameter 48 m) is located 158 m from	There is an existing network of tracks and roads within 1 km of	There is an existing network of tracks and roads within 1 km of	There is an existing network of tracks and roads within 1 km of	Construction and Maintenance	There is an existing network of tracks and roads within 1 km of	Construction and Maintenance
	the alignment option. Further consideration would be required to ensure the alignment is not microsited any closer to the turbine	all alignment options. Alignment 28B requires two angle towers.	all alignment options. Alignment 28C requires two angle towers.	all alignment options. Alignment 28D requires three angle towers.	There is an existing network of tracks and roads within 1 km of all alignment options.	all alignment options. Alignment 28F requires two angle towers.	There is an existing network of tracks and roads within 1 km of all alignment options.
	location. All alignment options in Section 28 cross	Proximity There are no residential	Proximity There are two residential	Proximity There are no residential	Alignment 28E requires two angle towers.	Proximity There are no residential	Alignment 28G requires two angle towers.
	one National Grid Transmission gas pipeline. There are no known communication masts that will impact on the alignment option.	properties located within 170 m of Alignment 28B.	properties located within 170 m of Alignment 28C.	properties located within 170 m of Alignment 28D.	Proximity There are six residential	properties located within 170 m of Alignment 28F.	Proximity There are eight residential
	The alignment passes close to the settlement of Stuartfield.	There are three wind turbines located within 300 m of Alignment 28B. The closest	There are two wind turbines located within 300 m of Alignment 28C. The closest	There are three wind turbines located within 300 m of Alignment 28D. The closest	properties located within 170 m of Alignment 28E.	There are three wind turbines located within 300 m of Alignment 28F. The closest	properties located within 170 m of Alignment 28G.
		turbine (rotor diameter 48 m) is located 158 m from the alignment option. Further	turbine (rotor diameter 48 m) is located 156 m from the alignment option. Further	turbine (rotor diameter 48 m) is located 158 m from the alignment option. Further	There is one wind turbine located within 300 m of Alignment 28E. The closest turbine (rotor diameter 48 m)	turbine (rotor diameter 48 m) is located 158 m from the alignment option. Further	There is one wind turbine located within 300 m of Alignment 28G. The closest turbine (rotor diameter 48 m)
		consideration would be required to ensure the alignment is not microsited any closer to the turbine	consideration would be required to ensure the alignment is not microsited any closer to the turbine	consideration would be required to ensure the alignment is not microsited any closer to the turbine	is located 193 m from the alignment option and is therefore not a constraint.	consideration would be required to ensure the alignment is not microsited any closer to the turbine	is located 222 m from the alignment option and is therefore not a constraint.
		location.	location.	location.	All alignment options in Section 28 cross one National Grid Transmission gas pipeline.	location.	All alignment options in Section 28 cross one National Grid Transmission gas pipeline.



Topic	Alignment 28A	Alignment 28B	Alignment 28C	Alignment 28D	Alignment 28E	Alignment 28F	Alignment 28G
		All alignment options in Section 28 cross one National Grid Transmission gas pipeline. There are no known communication masts that will impact on the alignment option. The alignment passes close to the settlement of Stuartfield.	All alignment options in Section 28 cross one National Grid Transmission gas pipeline. There are no known communication masts that will impact on the alignment option. The alignment passes close to the settlement of Stuartfield.	All alignment options in Section 28 cross one National Grid Transmission gas pipeline. There are no known communication masts that will impact on the alignment option. The alignment passes close to the settlement of Stuartfield.	There are no known communication masts or urban areas that will impact on the alignment option.	All alignment options in Section 28 cross one National Grid Transmission gas pipeline. There are no known communication masts that will impact on the alignment option. The alignment passes close to the settlement of Stuartfield.	There are no known communication masts or urban areas that will impact on the alignment option.
Economic	Alignment 28A is less than 5% greater in capital cost than the lowest cost option (28B. With similar line length, it is an additional angle tower and low voltage crossing which are the cause of increase. Alignment 28A is similar in length to Alignment 28B but has an additional low voltage crossing. As Alignment 28B has only one low voltage crossing this increase results in a doubling of inspection costs for cable sealing ends and an operational cost greater than 140% of the lowest cost option.	Alignment 28B has the lowest estimated capital cost for this section. Alignment 28B has the lowest estimated operational cost for this section.	Alignment 28C is substantially higher cost than Alignment 28B (greater than 140%), with more than a 70% increase in costs associated with line length and double the number of angle towers required. Similar to Alignment 28A, Alignment 28C has one more low voltage crossing than Alignment 28B, resulting in an operational cost greater than 140% of the lowest cost option.	Alignment 28D is similar in cost to Alignment 28C, with a slightly shorter line length but higher forestry costs. Alignments 28D and 28E have slightly higher operational costs than Option B due to an increased line length, but remain within 120% of the lowest cost option.	Alignment 28E is slightly lower cost than Alignment 28C, with similar line length but less low voltage crossings and a lower cost associated with forestry works. Alignments 28D and 28E have slightly higher operational costs than Alignment 28B due to an increased line length, but remain within 120% of the lowest cost option.	The line length for Alignment 28F is more than double the lowest cost option, with capital costs reflecting this at double the estimated total capital cost. Operational costs for Alignment 28F are significant due to the high number of low voltage crossings, requiring inspections at cable sealing ends.	Alignment 28G has the longest line length, substantially more crossings of existing low voltage infrastructure and a comparatively high forestry cost, creating the highest cost option for this section. Alignment 28G has the highest operational cost, with eight times the number of low voltage crossings that Alignments 28B, 28D and 28E have.

Section 29

Topic	Alignment 29A	Alignment 29B	Alignment 29C	Alignment 29D	Alignment 29E
Natural Heritage	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>	<u>Designations</u>
	Alignment 29A lies within 10 km of Kirkhill SSSI, Rora Moss SSSI (although there is no hydrological connection with the raised bog for which it is designated), Bullers of Buchan Coast SSSI, Buchan Ness to Collieston SAC. Alignment 29A lies within 20 km of Ythan Estuary and Meikle Loch SPA/Ramsar, however it contains limited suitable habitat for wintering geese associated with these. There is a non-statutory Buglife B-Line in the area. Protected Species	The natural heritage designations appraisal for Alignment 29B is the same as Alignment 29A. Protected Species The habitats and their suitability to support protected species within Alignment 29B are largely reflective of those within Alignment 29A, with the following exceptions: • A slightly smaller area of	The natural heritage designations appraisal for Alignment 29C is the same as Alignment 29A. Protected Species The habitats and their suitability to support protected species within Alignment 29C are largely reflective of those within Alignment 29B. Habitats	The natural heritage designations appraisal for Alignment 29D is the same as Alignment 29A. Protected Species The habitats and their suitability to support protected species within Alignment 29D are largely reflective of those within Alignment 29B. Habitats	The natural heritage designations appraisal for Alignment 29E is the same as Alignment 29A. Protected Species The habitats and their suitability to support protected species within Alignment 29E are largely reflective of those within Alignment 29A, with the following exception: • A slightly smaller area of
	Wooded areas, hedgerows, tree lines, and a small number of residential / farm buildings have the potential to support roosting bats within Alignment 29A. The edges of wooded areas, semi-natural habitats and	woodland/hedgerows/treelines is present in Alignment 29B, decreasing the habitat's suitability for bat species.	The habitats appraisal for Alignment 29C is the same as Alignment 29A.	The habitats appraisal for Alignment 29D is the same as Alignment 29A.	woodland/hedgerows/treelines is present in Alignment 29E, decreasing the habitat's suitability for bat species. The area is, however, greater that those



Topic Alignment 29A	A	Alignment 29B	Alignment 29C	Alignment 29D	Alignment 29E
watercourses had and foraging act. The habitats with land, have the potry wooded are have the potent creation. The larger water commuting and the potential supplied amphibian population hedgerows, tree habitat for reptile Larger watercours migratory salmon the potential to the potential to The varied habit potential to supplinvertebrate assoconservation contacts. Habitats HABMOS data in The carbon and Class 1 or Class BNG There is no unawatherefore no BU option. Ornithology There is limited a support importated the potential to support importated and the potential to support importated assoconservation. Ornithology There is limited a support importated and the potential to support importated associated and the potential to support importated and	have the potential to support commuting activities for bats. within Alignment 29A, including agricultural expotential to support foraging badgers. The reas, scrub, and unmaintained field margins intial to provide suitable habitats for sett. Itercourses have the potential to support and foraging otters. Smaller channels have support water voles. Iling water, slow-flowing field drains, and els have the potential to support breeding pulations. Unmaintained field margins, ee lines and wooded areas may provide otiles. Ourses have the potential to support monids. The smaller freshwater burns have to support lamprey species. Ditats within Alignment 29A have the upport a wide terrestrial and aquatic seemblage, including species of	Habitats The habitats appraisal for Alignment 29B is the same as Alignment 29A. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 29A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 29A.	There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 29A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 29A.	There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 29A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is the same as Alignment 29A.	within alignment options 29B, 29C and 29D. Habitats The habitats appraisal for Alignment 29E is the same as Alignment 29A, with the following exception: • Woodland listed in the AWI is present within 100 m, but comprises Category 2b LEPO woodland and is not considered irreplaceable habitat. BNG There is no unavoidable irreplaceable habitat present therefore no BU were calculated for this alignment option. Ornithology The ornithology appraisal for this alignment option is the same as Alignment 29A. Hydrology, Geology, Hydrogeology The hydrology, geology and hydrogeology appraisal for this alignment option is similar to Alignment 29A, with the following exception: • There are potential SEPA abstractions within 1 km.



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Topic	Alignment 29A	Alignment 29B	Alignment 29C	Alignment 29D	Alignment 29E
	Section during the surveys, indicating that the habitats are not used by locally occurring birds. Consultation with local residents has identified that the area around the South Ugie Water, between Stuartfield and Longside, may support pink-footed geese over the Autumn and Winter months. This location may therefore represent a collision hotspot for geese. This area is located approximately 13.5 km from Loch of Strathbeg SPA which is designated for its important populations of over wintering greylag and pink-footed geese (amongst other things) whose foraging range can be up to 20 km. Therefore, geese which occur in this area could be part of the SPA population.				
	Hydrology. Geology and Hydrogeology Alignment 29A crosses Quhomery Burn (ID:23226) and Burn of Ludquharn (ID:23225). It also crosses a tributary of both Burns. It is underlain by unnamed igneous intrusion (Ordovician to Silurian) and Argyll Group, low productivity aquifers where small amounts of groundwater may be present in the near surface weathered zone or in secondary fractures. Alignment 29A is not located within any SEPA DWPA for surface water, however it is within SW DWPA of River Ugie, which supplies Forehill WTW. According to Aberdeenshire Council data, there are Private Water Supplies within 1 km. According to SW abstraction data, there are no water abstractions with 1 km. According to SEPA abstraction data, there are no water abstractions within 1 km.				
Cultural Heritage	Designations There is a single SMR entry within 100 m, consisting of a prehistoric cairn. Direct physical impacts may be avoided through micrositing. Assets Within 1 km there are three Category B Listed Buildings. There is the potential for direct impacts through changes to the setting of all the Listed Buildings. There is potential for significant effects on Inverquhomery, Group of Three Dovecots (LB9426) and Inverquhomery Steading (LB9425).	Designations There is a single SMR entry within 100 m, consisting of a prehistoric cist. Direct physical impacts may be avoided through micrositing. Assets Within 1 km there is one Category B Listed Building. There is the potential for direct impacts through changes to the setting, however due to distances and intervening topography, impacts are not likely to lead to significant effects.	Designations The cultural heritage designations appraisal for this alignment option is the same as Alignment 29B. Assets The cultural heritage assets appraisal for this alignment option is the same as Alignment 29B.	Designations There are two SMR entries within 100 m, consisting of a prehistoric cist and an axe head findspot. Direct physical impacts may be avoided through micrositing. Assets The cultural heritage assets appraisal for this alignment option is the same as Alignment 29B.	Designations There is a single Scheduled Monument within 1 km: • Easterton of Lenabo, airship station (SM136779). There is the potential for direct impacts through changes to the setting, but due to distances these are unlikely to be significant. Assets Within 1 km there is one Category B, and one Category C Listed Building. There is the potential for direct impacts through changes to the setting, however due to distances and



Topic	Alignment 29A	Alignment 29B	Alignment 29C	Alignment 29D	Alignment 29E
					intervening topography, impacts are not likely to lead to significant effects.
Landscape and	Landscape Designations	Landscape Designations	Landscape Designations	Landscape Designations	Landscape Designations
Visual	The northeast Aberdeenshire Coast SLA is located 5.5 km east of the alignment option at its nearest point. Intervening topography and distance are such that an OHL on this alignment would be unlikely to alter any of the key characteristics or qualities of the designation. Landscape Character Alignment 29A is located predominantly within the Coastal Agricultural Plain - Aberdeeshire LCT (17) characterised by a well settled, gently undulating open landscape where numerous vertical elements, including wind turbines, transmission lines, communication structures and other tall masts are highly visible in this open landscape. Alignment 29A runs against the grain of the landscape albeit a gently rolling one. Visual There is a relatively dense scatter of individual residential properties with concentrations at Millbreck, Yorkieshill, Clola and Nether Kinmundy. Alignment 29A would be clearly visible in views south from Longside, Mintlaw and in views east from Stuartfield. It would also be visible from the road network across the area, albeit seen within the context of existing OHLs.	The Landscape Designations appraisal for this alignment option is the same as Alignment 29A. Landscape Character The landscape character appraisal for Alignment 29B is very similar to Alignment 29A, however it crosses higher ground at Millbreck and Mill Hill and also passes through an attractive, more intimate landscape around Newmill, including woodland blocks. Visual The visual appraisal for Alignment 29B is similar to Alignment 29A however it is located slightly further south of visual receptors at Yorkieshill, Longside and Mintlaw, but pushes closer to Clola and Nether Kinmundy/ Mains of Kinmundy. It would require two angle towers located in close proximity to properties at Newmill.	The Landscape Designations appraisal for this alignment option is the same as Alignment 29A. Landscape Character The landscape character appraisal for Alignment 29C is very similar to Alignment 29B, however at Newmill it continues east, passing north of Newmill and joining Alignment 29A to the north of Invereddie. This alignment option runs against the grain of the landscape and crosses high ground at Millbreck and Mill Hill but then stays on slightly lower ground. The alignment passes through an attractive, more intimate landscape around Newmill, including woodland blocks. Visual The visual appraisal for Alignment 29C is similar to Alignment 29B however it is slightly further from receptors at Nether Kinmundy and Mains of Kinmundy. It would also require two angle towers located in close proximity to properties at Newmill.	The Landscape Designations appraisal for this alignment option is the same as Alignment 29A. Landscape Character The landscape character appraisal for Alignment 29D is very similar to Alignment 29C but follows a more direct line from Millbreck to the south of Newmill to join Alignment 29B. The alignment crosses higher ground at Millbreck and Mill Hill and passes through an attractive, more intimate landscape around Newmill, including woodland blocks. Visual The visual appraisal for Alignment 29D is similar to Alignment 29B however it follows a slightly straighter line between Milbreck and Newmill. This alignment option would avoid angle towers located in close proximity to properties at Newmill.	The Landscape Designations appraisal for this alignment option is the same as Alignment 29A. Landscape Character The landscape character appraisal for Alignment 29E is very similar to Alignment 29D but is located further south and maintains a close parallel with the existing 400 kV OHL until Newton of Ludquharn. It then turns northeast to join alignment 29B west of Inverveddie into Netherton. The alignment crosses higher ground south of Clola and at the Hill of Ludquharn against the grain of the landscape but its location in close parallel to the existing 400 kV OHL helps contain the extent of OHL infrastructure in the landscape. Visual Alignment 29E passes close to concentrations of visual receptors at Clola and Nether Kinmundy, but across an area of less densely scattered properties. It would result in the 'boxing in' of the bungalow at South Braeside of Ludquharn. It would also further 'box-in' the three properties at North Auchtylair which sit in a flat, open landscape with long views. An alignment option here would be highly visible, including the angle towers to 'dog leg' around the properties. The alignment option crosses higher ground south of Clola, and particularly across the Hill of Ludquharn, making it particularly prominent at this point. However, it avoids crossing the higher ground and local
					summit of Coynach Hill.
Land Use	<u>Agriculture</u>	Agriculture	Agriculture	<u>Agriculture</u>	<u>Agriculture</u>
	Alignment 29A passes through Class 3.1 and Class 3.2 land which is unavoidable.	The agriculture appraisal for this alignment option is the same as Alignment 29A.	The agriculture appraisal for this alignment option is the same as Alignment 29A.	The agriculture appraisal for this alignment option is the same as Alignment 29A.	The agriculture appraisal for this alignment option is the same as Alignment 29A.



Topic	Alignment 29A	Alignment 29B	Alignment 29C	Alignment 29D	Alignment 29E
Topic	Forestry Alignment 29A avoids interaction with commercial conifer forestry and passes through a small area of broadleaved shelterwood. The estimated area of commercial woodland that would be impacted by Alignment 29A is 0.78 ha, broadleaved woodland. Recreation There are no known recreational activities or receptors in	Alignment 29B Forestry Alignment 29B avoids interaction with any woodland. Recreation There are no known recreational activities or receptors in close proximity to the alignment option.	Alignment 29C Forestry Alignment 29C avoids interaction with commercial conifer forestry and passes through a small area of broadleaved shelterwood. The estimated area of commercial woodland that would be impacted by Alignment 29C is 0.19 ha, broadleaved woodland.	Forestry Alignment 29D avoids interaction with any woodland. Recreation There are no known recreational activities or receptors in close proximity to the alignment option.	Alignment 29E Forestry Alignment 29E passes the edge of commercial forestry plantation and passes through a small area of broadleaved woodland. The estimated area of commercial woodland that would be impacted by Alignment 29E is 1.16 ha, comprising 0.56 ha broadleaved woodland and 0.61 ha coniferous woodland.
	close proximity to the alignment option.		Recreation There are no known recreational activities or receptors in close proximity to the alignment option.		Recreation There are no known recreational activities or receptors in close proximity to the alignment option.
Planning	 Within 500 m lies the following consented planning applications: Erection of a dwellinghouse (agreement of Matters Specified in Conditions to APP/2017/2135) (APP/2020/2251). Approximately 150 m south. Erection of a dwellinghouse (APP/2021/2655). Approximately 350 m south. Erection of a dwellinghouse (APP/2019/1453). Approximately. 200 m southeast. Erection of a dwellinghouse (APP/2020/1642). Approximately 200 m southeast. Erection of a dwellinghouse (APP/2021/0887). Approximately 100 m south. Formation of a public access footpath (APP/2021/2890). Within alignment. Erection of a dwellinghouse (APP/2022/2167). Approximately 250 m southwest. Formation of Onshore Landfall Point, Laying of underground cable and erection of substation (APP/2023/1454). Within Alignment. The following applications are known to the planning system but are still awaiting decision: Marram Windfarm Installation of Onshore Infrastructure (ENQ/2024/0486). Within the LOD. 	 Within 500 m lies the following consented planning applications: Formation of Onshore Landfall Point, Laying of Underground Cable and Erection of Substation (APP/2023/1454). Within Alignment Erection of a dwellinghouse (APP/2021/2655). Approximately 350 m north. Erection of a dwellinghouse (APP/2019/1453). Approximately 400 m north. Erection of a dwellinghouse (APP/2020/1642 Approximately 400 m north. The following applications are known to the planning system but are still awaiting a decision: Marram Windfarm Installation of Onshore Infrastructure (ENQ/2024/0486). Within the LOD. Erection of Dwellinghouse (APP/2024/0155). Approximately 350 m north. 	 Within 500 m lies the following consented planning applications: Erection of a dwellinghouse (APP/2021/2655). Approximately 350 m north. Erection of a dwellinghouse (APP/2019/1453). Approximately 400 m north. Erection of a dwellinghouse (APP/2020/1642). Approximately 400 m north. Formation of Onshore Landfall Point, Laying of underground cable and erection of substation (APP/2023/1454). Within Alignment. Formation of a public access footpath (APP/2021/2890). Approximately 450 m north. Erection of a dwellinghouse (APP/2022/2167). Approximately 250 m southwest. The following applications are known to the planning system but are still awaiting a decision: Marram Windfarm Installation of Onshore Infrastructure 	The planning appraisal for Alignment 29D is similar to Alignment 29C with the following exceptions: • APP/2021/2890 is not within 500 m. • APP/2022/2167 is not within 500 m.	 Within 500 m lies the following consented planning applications: Formation of Onshore Landfall Point, Laying of underground cable and erection of substation (APP/2023/1454). Within Alignment. The following applications are known to the planning system but are still awaiting a decision: Marram Windfarm Installation of Onshore Infrastructure (ENQ/2024/0486). Within the LOD. Erection of Dwellinghouse (APP/2024/0155). Approx 150 m east.



Topic	Alignment 29A	Alignment 29B	Alignment 29C	Alignment 29D	Alignment 29E
			Erection of Dwellinghouse (APP/2024/0155). Approximately 350 m north.		
Engineering	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings	Infrastructure Crossings
	Alignment 29A crosses the A952, one minor road and three restricted local access roads.	Alignment 29B crosses the A952, one minor road and three restricted local access roads.	Alignment 29C crosses the A952, one minor road, two local roads and two restricted	Alignment 29D crosses the A952, one minor road and three restricted local access roads.	Alignment 29E crosses the A952, five minor roads and one restricted local access road.
	The alignment also crosses three National Grid Transmission gas pipelines which may pose potential construction challenges.	The alignment also crosses one National Grid Transmission gas pipeline which may pose potential construction challenges.	local access roads. The alignment also crosses one National Grid Transmission gas pipeline which may		The alignment also crosses two National Grid Transmission gas pipelines which may pose potential construction challenges.
	Environmental Design	Environmental Design	pose potential construction challenges.	Environmental Design	Environmental Design
	All alignments in Section 29 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 29 remain below 200 m elevation, which is not considered challenging.	Environmental Design All alignments in Section 29 remain below 200 m elevation, which is not considered	All alignments in Section 29 remain below 200 m elevation, which is not considered challenging.	All alignments in Section 29 remain below 200 m elevation, which is not considered challenging.
	Alignment 29A is located within 10 km of the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time.	Alignment 29B is located within 10 km of the coast and will therefore require 'very	challenging. Alignment 29C is located within 10 km of	Alignment 29D is located within 10 km of the coast and will therefore require 'very	Alignment 29E is located within 10 km of the coast and will therefore require 'very heavy'
	All of the alignment options in Section 29 terminate to the west of Peterhead. Peterhead is a high risk site for unexploded ordnance and the surrounding area is known	heavy' pollution insulation levels to offset salt deposition that builds up over time. All of the alignment options in Section 29	the coast and will therefore require 'very heavy' pollution insulation levels to offset salt deposition that builds up over time. All of the alignment options in Section 29 terminate to the west of Peterhead. Peterhead is a high risk site for unexploded	heavy' pollution insulation levels to offset salt deposition that builds up over time. All of the alignment options in Section 29 terminate to the west of Peterhead. Peterhead is a high risk site for unexploded ordnance and the surrounding area is	pollution insulation levels to offset salt deposition that builds up over time. All of the alignment options in Section 29
	to have been targeted by Luftwaffe, therefore additional unexploded ordnance checks should be carried out in this region.	terminate to the west of Peterhead. Peterhead is a high risk site for unexploded ordnance and the surrounding area is			terminate to the west of Peterhead. Peterhead is a high risk site for unexploded ordnance and the surrounding area is
	According to SEPA flood maps, greater than 5% of Alignment 29A is located within the 1 in 10 year flood risk zone.	known to have been targeted by Luftwaffe, therefore additional unexploded ordnance checks should be carried out in this region.	ordnance and the surrounding area is known to have been targeted by Luftwaffe, therefore additional unexploded ordnance	known to have been targeted by Luftwaffe, therefore additional unexploded ordnance checks should be carried out in this region.	known to have been targeted by Luftwaffe, therefore additional unexploded ordnance checks should be carried out in this region.
	Ground Conditions	According to SEPA flood maps, less than 5%	checks should be carried out in this region.	According to SEPA flood maps, less than 5%	According to SEPA flood maps, greater than
	Alignment 29A contains a maximum slope of 10 degrees which is not a concern.	of Alignment 29B is located within the 1 in 10 year flood risk zone.	According to SEPA flood maps, less than 5% of Alignment 29C is located within the 1 in 10 year flood risk zone.	of Alignment 29D is located within the 1 in 10 year flood risk zone.	5% of Alignment 29E is located within the 1 in 10 year flood risk zone.
	There are no known areas of peatland within Section 29.	Ground Conditions	Ground Conditions	Ground Conditions	Ground Conditions
	Construction and Maintenance	Alignment 29B contains a maximum slope of 11 degrees which is not a concern.	Alignment 29C contains a maximum slope of 6 degrees which is not a concern. There are no known areas of peatland	Alignment 29D contains a maximum slope of 11 degrees which is not a concern.	Alignment 29E contains a maximum slope of 8 degrees which is not a concern.
	There is an existing network of tracks and roads within 1 km of all alignment options.	There are no known areas of peatland within Section 29.		There are no known areas of peatland within Section 29.	There are no known areas of peatland within Section 29.
	Alignment 29A requires four angle towers.	Construction and Maintenance	within Section 29.	Construction and Maintenance	Construction and Maintenance
	Proximity	There is an existing network of tracks and	Construction and Maintenance	There is an existing network of tracks and	There is an existing network of tracks and
	There is one residential property located within 170 m of Alignment 29A. There is also one residential property located within 100 m of the alignment, however this property will be acquired as part of the proposed	roads within 1 km of all alignment options. Alignment 29B requires five angle towers.	There is an existing network of tracks and roads within 1 km of all alignment options.	roads within 1 km of all alignment options. Alignment 29D requires three angle towers.	roads within 1 km of all alignment options. Alignment 29E requires six angle towers.
		<u>Proximity</u>	Alignment 29C requires three angle towers.	<u>Proximity</u>	<u>Proximity</u>
	Netherton Hub substation Project and is therefore not a constraint.	There are two residential properties located within 170 m of Alignment 29B. There is also	Proximity There are two residential properties located	There are two residential properties located within 170 m of Alignment 29D. There is also	There are two residential properties located within 100 m of Alignment 29E. One of
		one residential property located within 100 m of the alignment, however this	within 170 m of Alignment 29C. There is also one residential property located within	one residential property located within 100 m of the alignment, however this	these properties is located 98 m from the alignment option. The second property will



Topic	Alignment 29A	Alignment 29B	Alignment 29C	Alignment 29D	Alignment 29E
	The alignment crosses three National Grid Transmission gas pipelines and one medium pressure SGN gas pipeline which may pose potential construction challenges. There are no known wind farms, communication masts or urban areas that will impact on the alignment option.	property will be acquired as part of the proposed Netherton Hub substation Project and is therefore not a constraint. There are two wind turbines located within 300 m of Alignment 29B. The closest turbine (rotor diameter 48 m) is located 175 m from the alignment option. Further consideration would be required to ensure the alignment is not microsited any closer to the turbine location. The alignment crosses one National Grid Transmission gas pipeline and one medium pressure SGN gas pipeline which may pose potential construction challenges. There are no known communication masts or urban areas that will impact on the alignment option.	100 m of the alignment, however this property will be acquired as part of the proposed Netherton Hub substation Project and is therefore not a constraint. There is one wind turbine located within 300 m of Alignment 29C. The turbine (rotor diameter 48 m) is located 160 m from the alignment option. Further consideration would be required to ensure the alignment is not microsited any closer to the turbine location. The alignment crosses one National Grid Transmission gas pipeline and one medium pressure SGN gas pipeline which may pose potential construction challenges. There are no known communication masts or urban areas that will impact on the alignment option.	property will be acquired as part of the proposed Netherton Hub substation Project and is therefore not a constraint. There is one proposed wind turbine located within 300 m of Alignment 29D. The turbine (mast height 15 m) is located 280 m from the alignment option and is therefore not a significant constraint. The alignment crosses one National Grid Transmission gas pipeline and one medium pressure SGN gas pipeline which may pose potential construction challenges. There are no known communication masts or urban areas that will impact on the alignment option.	be acquired as part of the proposed Netherton Hub substation Project and is therefore not a constraint. There is one proposed wind turbine located within 300 m of Alignment 29E. The turbine (mast height 15 m) is located 175 m from the alignment option and is therefore not a significant constraint. The alignment crosses two National Grid Transmission gas pipelines and one medium pressure SGN gas pipeline which may pose potential construction challenges. There are no known communication masts or urban areas that will impact on the alignment option.
Economic	Alignment 29A is the highest cost option but remains comparatively low, less than 10% greater than the lowest capital cost option (29C). Alignments 29A, 29B and 29D all have 40% more low voltage crossings than Alignment 29C and so are just over 140% of the lowest operational cost option. In addition, Alignment 29A has costs for management of tree felling where the line passes through a short length of forestry.	Alignment 29B is only slightly longer than Alignment 29C, which is the lowest cost option, but does not take as straight a route, resulting in an increase in costs where angle towers are required instead of suspension towers. Alignments 29A, 29B and 29D all have 40% more low voltage crossings than Alignment 29C and so are just over 140% of the lowest operational cost option.	Alignment 29C has the lowest estimated capital cost for this section. Alignment 29C has the lowest estimated operational cost for this section.	There is negligible difference in estimated capital cost between Alignment 29D and the lowest option (29C), estimated to be just 1%. This difference in cost is due to requirement for an additional low voltage crossing. Alignments 29A, 29B and 29D all have 40% more low voltage crossings than Alignment 29C and so are just over 140% of the lowest operational cost option.	Alignment 29E is substantially longer than alternative options and has double the number of low voltage crossings, substantially increasing the capital cost for construction of this option. Alignment 29E is the highest operational cost with more than double the number of low voltage crossings.