

## APPENDIX 7.4: REPORT TO INFORM THE APPROPRIATE ASSESSMENT FOR SACs

### 7.1 Introduction

7.1.1 The Proposed Development crosses two Special Areas of Conservation (SACs) at the northerly extent of the proposed alignment:

- Caithness and Sutherland Peatlands SAC; and
- River Naver SAC.

7.1.2 In line with current guidance<sup>1,2,3</sup> Natura 2000 sites were screened based on proximity to the Proposed Development and potential for connectivity. The location of the Proposed Development and the SACs are shown in **Figure 7.1**.

7.1.3 During consultation for the Proposed Development, Scottish Natural Heritage (SNH) indicated in their Screening Response in November 2018 that *“the construction and operation of this line could result in the loss and or damage of qualifying SAC habitats and supporting habitats, as well as disturbance and potential displacement of otters, Atlantic salmon and freshwater pearl mussels and / or their supporting habitats”*. SNH also commented in their Scoping Opinion response in May 2019 that they *“consider that the EIA should include a Habitat Regulations Appraisal for each Natura site, and if necessary, an Appropriate Assessment should also be undertaken”*.

7.1.4 This report addresses the comments received from SNH and justifies why the Proposed Development is predicted to have no significant effect on the qualifying features of the SACs. The aim of this report is to:

- Describe the SACs;
- Describe potential impacts upon the SACs from the Proposed Development;
- Make an assessment of these potential impacts in relation to the SACs conservation objectives; and
- Conclude whether the Proposed Development would adversely affect the integrity of the SAC qualifying interests.

### 7.2 Alternatives

7.2.1 Alternatives including the ‘do nothing’ scenario, alternative OHL route corridors and alignments have been investigated and are discussed in Chapter 2 of the main EIA report.

### 7.3 Designated Site Descriptions

#### ***Caithness and Sutherland Peatlands SAC***

7.3.1 The Caithness and Sutherlands Peatlands SAC was classified in 2005 and consists of over 140,000 hectares of blanket bog, making it the largest area of intact peatland in northern Scotland and one of the largest recognised conservation sites in the UK. The qualifying habitats for which the site is classified are:

- Acid peat-stained lakes and ponds;
- Blanket bog;
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels;

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<sup>1</sup> European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC

<sup>2</sup> David Tyldesley and Associates (2015) Habitats Regulations Appraisal of Plans: Guidance for Plan-making Bodies in Scotland. Version 3.0. January 2015

<sup>3</sup> Scottish Natural Heritage (2016) Assessing connectivity with Special Protection Areas.

- Depressions on peat substrates;
- Very wet mires often indicated by an unstable 'quaking' surface; and
- Wet heathland with cross-leaved heath.

7.3.2 The site contains several hundred lochs that are part of a large, generally nutrient-poor, drainage system which characterise this part of the northern Highlands. The peatlands form the largest peat mass in the UK and are three times larger than any other peatland area in either Britain or Ireland. The site is important due to the considerable abundance of large continuous areas of *Sphagnum* carpets and hummocks.

7.3.3 The site supports a population of Marsh saxifrage (*Saxifraga hirculus*), a yellow-flowered perennial that requires wet conditions which has declined in distribution due to overgrazing and drainage.

7.3.4 There is extensive habitat suitable for otter (*Lutra lutra*) in the numerous lochs, lochans and headwaters of burns and rivers which is reflected in the presence of a good population, representative of the northern mainland of Scotland.

#### **River Naver SAC**

7.3.5 The River Naver SAC was classified in 2005 due to its internationally important populations of freshwater pearl mussels (*Margaritifera margaritifera*) and Atlantic salmon (*Salmo salar*). The River Naver flows from a large peatland catchment northwards to its mouth on the north coast of Scotland. The site represents the northern extreme for freshwater pearl mussel (FWPM) in the UK. The site supports high quality FWPM populations that include juveniles, indicating recent successful recruitment. FWPM have been recorded throughout much of the length of both the River Naver and its major tributary, the Mallart River, indicating that they can support good populations, despite a history of relatively intensive pearl-fishing.

7.3.6 The site supports a high-quality salmon population and, along with the Rivers Borgie and Thurso, is representative of the northerly part of the species' range in the UK. The full range of Atlantic salmon life-history types return to the river system, with grilse, spring and summer salmon all being present. FWPM are reliant on salmonids as host species, living on the gills of young salmon or brown trout in their first year. Healthy juvenile salmonid populations are an essential requirement for sustaining successful FWPM reproduction. The river has been subject to varying degrees of local human modification in the form of weirs and bank revetment.

#### **7.4 Conservation Objectives**

Conservation objectives for each SAC to avoid the deterioration of the habitats of the qualifying species or significant disturbance to qualifying species are set out in **Table 7-1**.

**Table 7-1: SAC Conservation Objectives**

Caithness and Sutherland Peatlands SAC		River Naver SAC
Qualifying Habitats	Qualifying Species (Marsh saxifrage and otter)	Qualifying Species (Atlantic salmon and FWPM)
Maintain the extent of habitats on the site	Maintain the population of the species as a viable component of the site	Maintain the population of the species, including range of genetic types for salmon, as a viable component of the site
Maintain the distribution of habitats within the site	Maintain the distribution of the species	Maintain the distribution of the species
Maintain the structure and function of each habitat and the processes supported by the habitat	Maintain the distribution and extent of habitats supporting the species	Maintain the distribution and extent of habitats supporting the species

Maintain distribution of typical species of each habitat	Maintain the structure, function and supporting processes of habitats supporting the species	Maintain the structure, function and supporting processes of habitats supporting the species
Maintain viability of typical species as components of the habitat	No significant disturbance to the species	No significant disturbance to the species
No significant disturbance of typical species of the habitat		Maintain the distribution and viability of FWPM host species
		Maintain the structure, function and supporting processes of habitats supporting FWPM host species

## 7.5 Stage 1 Screening

- 7.5.1 Stage 1 Screening is the process which identifies whether effects upon a Natura 2000 site resulting from a proposed project are possible and considers whether these effects are likely to be significant, i.e. they cannot be objectively ruled out. Stage 1 screening assessment is outlined in **Table 7-2** below.

**Table 7-2: Stage 1 Screening Assessment**

Designated Site	Qualifying Habitats / Species	Conservation Status / Date of Last Assessment	Proposed Development	Screening Conclusion
<b>Caithness and Sutherland Peatlands SAC</b>	Blanket bogs	Unfavourable, no change (2017)	<p>A section of the overhead line would oversail approximately 14 m of the SAC. The closest proposed pole position to the SAC is 36 m. No temporary access tracks will be sited within the SAC. The nearest proposed temporary access track to the SAC would be 40 m at its closest point.</p> <p>During protected species surveys, otter spraint was located along the banks of the River Vagastie, 270 m downstream from the SAC and 260 m from the nearest proposed pole location. No breeding locations were identified within 250 m of the Proposed Development.</p>	<p>Potential impacts upon the qualifying species of the SAC resulting from the construction of the Proposed Development include:</p> <ul style="list-style-type: none"> <li>contamination of habitats through oil / chemical spills and / or pollution from surface water run-off during construction;</li> <li>noise and visual disturbance to otters during construction;</li> <li>accidental killing or injury of otters during construction; and</li> <li>contamination of freshwater habitats through oil / chemical spills and / or pollution from surface run-off during construction with associated impacts on habitat condition and prey availability for otters.</li> </ul>
	Depressions on peat substrates	Unfavourable, no change (2017)		
	Otter ( <i>Lutra lutra</i> )	Unfavourable, declining (2011)		
	Natural dystrophic lakes and ponds	Favourable maintained (2004)		
	Northern Atlantic wet heath with cross-leaved heath	Unfavourable, no change (2017)		
	Oligotrophic to mesotrophic standing waters with aquatic vegetation and poor to moderate nutrient levels	Unfavourable, declining (2015)		
	Marsh saxifrage ( <i>Saxifraga hirculus</i> )	Favourable maintained (2017)		
Transition mires and quaking bogs	Favourable declining (2017)			
<b>River Naver SAC</b>	Atlantic salmon ( <i>Salmo salar</i> )	Favourable recovered (2011)	<p>A section of the overhead line would oversail the River Naver at one location. The width of the river at this point is approximately 6 m. As above, the closest proposed pole position to the SAC is 36 m, no temporary access tracks will be sited within the SAC. The nearest proposed temporary access track to the SAC would be 40 m at its closest point.</p> <p>No new watercourse crossing points along the River Naver SAC are required as part of the Proposed Development. Therefore there will be no requirement for instream works which carry a risk of disturbing the stream bed and destabilising the banks of the watercourse.</p>	<p>Potential impacts upon the qualifying species of the SAC resulting from the construction of the Proposed Development include:</p> <ul style="list-style-type: none"> <li>oil / chemical spill pollution events entering freshwater habitats; and</li> <li>silt-laden run-off entering the river and its tributaries.</li> </ul>
	Freshwater pearl mussel ( <i>Margaritifera margaritifera</i> )	Unfavourable no change (2015)		

## 7.6 Impact Avoidance and Mitigation Measures

- 7.6.1 Mitigation has been built into both the project design and proposed construction methods to prevent any significant impacts to the SACs.
- 7.6.2 The Applicant has developed General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs) for construction works that may negatively impact upon habitats and protected species. The SPPs outline the procedures that must be followed where there is a potential for sensitive habitats and protected species to be present. Each SPP outlines the responsibilities of the Applicant and their Contractors, legislative protection for protected species, best practice measures to follow and an approved methodology for carrying out certain mitigation activities. This suite of SPPs has been approved by SNH and would be adopted where relevant to the project.
- 7.6.3 A Construction Environmental Management Plan (CEMP) will be developed by the successful Principle Contractor detailing measures to manage, control and monitor the potential effects of noise, dust, litter, pollution and personnel / vehicular movements. Best practice pollution control measures, with reference to the Scottish Environmental Protection Agency (SEPA) and Control of Substances Hazardous to Health (COSHH) guidelines, will be included in the CEMP. Particular reference will be made to managing handling, storage and use of hazardous chemicals and fuels used during the construction process. A detailed spill response plan will be developed and fully-briefed to all site operatives and forms part of the CEMP.
- 7.6.4 An Ecological Clerk of Works (ECoW) would be appointed, specifically to provide monitoring of construction activities relating to the installation of infrastructure. The ECoW would also identify and monitor sensitive ecological receptors immediately prior to, during and immediately after the construction phase. This would include a detailed pre-construction protected species survey to identify any possible constraints to construction by the presence of protected species. The ECoW will be responsible for adopting specific mitigation measures where necessary to protect breeding and foraging otters, water quality and sensitive habitats during construction.

### ***Measures Specific to Water Quality Management***

It is expected that the following will be included within the CEMP and would ensure the works are undertaken in accordance with good practice guidance:

- In accordance with PPG2 any fuel and chemical storage would be bunded and will not be stored within 50 m of watercourses or waterbodies;
- Fuel deliveries and refuelling would be undertaken by trained staff in a designated area with an impermeable base. All fuel related activities would take place more than 50 m away from any watercourse;
- Emergency spill response kits will be available and maintained during construction works;
- Mechanical plant would be located in designated areas and protected from run-off. Mechanical plant would be well maintained and inspected regularly for leaks;
- Drip trays would be placed under stationary vehicles which could potentially leak fuel / oils;
- Suitable access routes would be chosen which minimise the potential requirement for either new temporary access tracks or for tracking across open land which could contribute to the generation of suspended solids;
- Any temporary construction / storage compounds required would be located remote from any sensitive surface water receptors and will be constructed to manage surface water run-off in accordance with best practice;
- A buffer of 30 m between construction works and watercourses will be implemented;
- Any water contaminated with silt or chemicals would both be discharged directly or indirectly to a watercourse without prior treatment;

- Silt fences, cut-off drains, silt traps and drainage will be used where appropriate to ensure that silt-laden run-off from construction activities does not enter watercourses, groundwater or aquatic waterways that have hydrological connectivity with either SAC;
- Water for temporary site welfare facilities would be brought to site, and foul water would be collected in a tank and collected for offsite disposal at an appropriately licensed facility; and
- The ECoW will have authority to stop any works that are or have potential to impair the water environment.

#### ***Measures Specific to Otters***

7.6.5 Prior to construction commencing a detailed pre-construction protected species survey will be carried out by suitably qualified ecologists to identify any signs of otter within 250 m of proposed works. Should any evidence of breeding holts or shelters for otter be identified, the SPP will be followed to ensure there is no disturbance. Monitoring by the ECoW will be ongoing throughout the construction phase to update pre-construction surveys.

In line with the Applicant's otter SPP, in order to avoid disturbance to and risk of injury to otters, the following measures will be adopted during construction:

- no works will be undertaken within 50 m of waterbodies and watercourses showing signs of regular use of otters during the house of darkness or within 2 hours of sunset / sunrise.
- any temporary exposed pipe system should be capped when staff are off site to prevent otters from gaining access and becoming trapped;
- all exposed trenches or holes should be provided with mammal exit ramps e.g. wooden planks or earth ramps; and
- to limit the risk of collision, the speed limit along access tracks will be limited to 15 mph.

#### ***Measures Specific to Habitats and Notable Plant Species***

7.6.6 No excavations will be undertaken within the SAC boundary and no temporary access tracks will be located within the SAC boundary. Mitigation detailed above in Measures Specific to Water Quality Management, will ensure that safeguards are in place to protect qualifying habitats within the SAC boundary from any potential indirect effects from oil / chemical spills and pollution from silt-laden run-off.

7.6.7 Pre-construction surveys will identify any notable plant species such as Marsh saxifrage that may be growing outwith the boundary of the SAC. Should a marsh saxifrage plants be identified within proximity to proposed pole locations or along temporary access track routes, a suitable work exclusion zone will be implemented and maintained for the duration construction and monitored by the ECoW.

### **7.7 Caithness and Sutherland Peatlands SAC**

#### ***Assessment of Effects***

7.7.1 Potential effects identified in **Table 7-2** on the Caithness and Sutherland Peatlands SAC are discussed in relation to the baseline survey results which are detailed within Chapter 7 of the main EIA report.

#### Contamination of Habitats Through Oil / Chemical Spills and / or Pollution from Surface Water Run-off

7.7.2 Mitigation detailed above in *Measures Specific to Water Quality Management*, will ensure that safeguards are in place to protect qualifying habitats within the SAC boundary from any potential indirect effects from oil / chemical spills and pollution from silt-laden run-off. The likelihood of a major pollution event occurring from the activities required for the construction of the Proposed Development is unlikely due to the safeguarding measures which would be in place. Residual effects on habitats after implementation of appropriate mitigation measures are not considered to be significant.

Noise and visual disturbance to otters during construction:

- 7.7.3 Otters living on rivers can occupy large home territories and can travel 16 km or more at night. Pre-construction surveys identified the presence of otter (spraints and footprints) along several watercourses within the Study Area. It is possible the otter(s) using these watercourses, even though they are not within the SAC, may be individuals that are connected to the SAC. No breeding locations or shelters were identified within 250 m of the Proposed Development. Due to the low occurrence of otter within the area surrounding the Proposed Development, construction related noise and visual disturbance is likely to be localised and limited to otters foraging along watercourses within proximity of the Proposed Development. The disturbance would be short-term and of low magnitude, affecting the species indirectly by disturbing foraging habitat during the installation of poles close to watercourses and ditches throughout the Study Area that otters may use. Effects on otter from disturbance during the construction of the Proposed Development are unlikely to be significant.

Accidental killing or injury of otters:

- 7.7.4 Road collisions is the single biggest source of otter mortality (excluding natural causes) within Scotland. Hot-spots where collisions are most likely are in areas within 100 m of waterbodies that are used by otters. There is a risk to otters colliding with construction vehicles on existing roads and access tracks and any proposed temporary access tracks. To limit the risk of collision, the speed limit along access tracks will be limited to 15 mph. The Applicant's SPP for otter also includes the mitigation to avoid accidental mortality or injury to otters by providing exit ramps in any excavation and capping any pipes to prevent otters from gaining access and becoming trapped. The low occurrence of otter within the area surrounding the Proposed Development, combined with the safeguards put in place to avoid mortality or injury to otters through the Applicant's SPP means that effects on otter from mortality or injury during construction are unlikely to be significant.

Contamination of Freshwater Habitats Through Oil / Chemical Spills and / or Pollution from Surface Run-off with Associated Impacts on Habitat Condition and Prey Availability for Otters.

- 7.7.5 Mitigation detailed above in *Measures Specific to Water Quality Management*, will ensure that safeguards are in place to protect freshwater habitats within the SAC boundary from any potential indirect effects from oil / chemical spills and pollution from silt-laden run-off. The likelihood of a major pollution event occurring from the activities required for the construction of the Proposed Development is unlikely due to the safeguarding measures which would be in place. Residual effects on freshwater habitats, upon which otters rely, after implementation of appropriate mitigation measures are not considered to be significant.

## **7.8 River Naver SAC**

### ***Assessment of Effects***

- 7.8.1 Potential effects identified in **Table 7-2** on the River Naver SAC are discussed in relation to the baseline survey results which are detailed within Chapter 7 of the main EIA report.

Contamination of Freshwater Habitats Through Oil / Chemical Spills and / or Pollution from Surface Water Run-off

- 7.8.2 Mitigation detailed above in *Measures Specific to Water Quality Management*, will ensure that safeguards are in place to protect freshwater habitats within the SAC boundary from any potential indirect effects from oil / chemical spills and pollution from silt-laden run-off. The likelihood of a major pollution event occurring from the activities required for the construction of the Proposed Development is unlikely due to the safeguarding measures which would be in place. Residual effects on freshwater habitats, upon which Atlantic salmon and FWMP and their host species rely, after implementation of appropriate mitigation measures are not considered to be significant.

## 7.9 Conclusions

- 7.9.1 The Proposed Development has the potential to impact the Caithness and Sutherland Peatlands SAC and River Naver SAC through pollution, sedimentation and mortality / disturbance to protected species.
- 7.9.2 The magnitude of pollution or run-off event would need to be high to result in a significant effect on either SAC due to distance between the nearest construction activity and both SACs. Standard pollution prevention measures detailed in a site-specific CEMP would avoid pollution or sedimentation of the SACs. Mitigation measures would manage both the source of the potential impact (trapping any fuel spills to prevent them from leaving the work site etc.) and the impact pathway (avoiding construction works close to watercourses, ensuring access tracks do not act as channels for polluted water etc.). Consequently there would be no significant adverse residual effects to the habitats of the Caithness and Sutherland Peatlands SPA or the freshwater habitats of the River Naver SAC through implementation of appropriate mitigation measures.
- 7.9.3 Due to the low occurrence of otter within proximity to the Proposed Development and the appropriate mitigation in place through the Applicant's SPP, effects from disturbance and mortality / injury during construction are considered unlikely to be significant.
- 7.9.4 No activities associated with the construction of the Proposed Development is likely to have a significant impact on qualifying species of either SAC site. Furthermore, no construction related activities are contrary to the conservation objectives set out for each SAC to safeguard the integrity of each site.