

Renantis UK Limited

The Repowered and Extended Ben Aketil Wind Farm

Additional Information

Design Amendments and Updated Environmental Information

663617







RSK GENERAL NOTES

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Executive Summary

This document is Additional Information (AI) submitted to for the proposed Repowered and Extended Ben Aketil Wind Farm.

Renantis UK Limited (the Applicant) submitted an application for consent for the proposed Repowered and Extended Ben Aketil Wind Farm. The Proposed Development is located on the Isle of Skye, east of Dunvegan at central grid reference: NG318475.

The Applicant is seeking consent to repower the existing Ben Aketil Wind Farm and to add an extension. The Proposed Development would comprise nine new wind turbines in total, of a maximum height of up to 200 m to blade tip. The individual turbine generating capacity is anticipated to be up to 6.6 Megawatts (MW), with the total installed capacity for the development in excess of 50 MW.

The Environmental Impact Assessment Report (EIA Report) accompanied the application for deemed planning consent under Section 36 of the Electricity Act 1989, as submitted to the Scottish Government's Energy Consents Unit in June 2023. This Report includes additional information to be submitted following receipt of consultation responses and discussions with statutory consultees regarding the Proposed Development. This AI contains information responding to a holding objection lodged by SEPA, an objection lodged by The Highland Council, and comments received from NatureScot and Ironside Farrar. It provides additional information and commits to additional mitigation measures, covering ecological and hydrological matters to address the consultation responses received.



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1 INTRODUCTION

Background

- 1.1 This Additional Information (AI) report (hereafter referred to as 'report') contains Additional Information (AI) to the Environmental Impact Assessment Report (EIA Report) for the proposed Repowered and Extended Ben Aketil Windfarm (hereafter referred to as "the Proposed Development"), located at the operational Ben Aketil Wind Farm Site. The Proposed Development Site is situated in the vicinity of the Ben Aketil summit, the A850 and the operational Edinbane Wind Farm, which is due east of the Site. The Applicant is seeking consent to repower the existing Ben Aketil Wind Farm and to add an extension. The Proposed Development would comprise nine turbines in total, of a maximum height of up to 200 m to blade tip. The individual turbine generating capacity is anticipated to be between to up to 6.6 Megawatts (MW), with the total installed capacity for the development in excess of 50 MW.
- 1.2 The EIA Report accompanied the application for deemed planning consent under Section 36 of the Electricity Act 1989, as submitted to the Scottish Government's Energy Consents Unit in June 2023.
- 1.3 The Applicant has chosen to commission this AI to address points made and concerns raised by consultation bodies regarding the Proposed Development in a collated manner.
- 1.4 This report contains information responding to a holding objection lodged by SEPA, an objection lodged by The Highland Council, and comments received from NatureScot and Ironside Farrar. It provides additional information and commits to additional mitigation measures, covering ecological and hydrological matters to address the consultation responses received.

Structure of Report

- 1.5 This report adopts the structure of responding to the key points identified by stakeholders and consultees in their responses to the Proposed Development application. Text taken directly from consultees' responses is presented in italics.
- 1.6 This report is presented in the following sections:
 - Section 2: Ironside Farrar.
 - Section 3: Scottish Environment Protection Agency (SEPA).
 - Section 4: NatureScot.
 - Section 5: The Highland Council.
 - Section 6: Concluding remarks.

EIA team

1.7 The relevant expertise and qualifications of specialists involved in preparing this report are detailed in Table 1.3 of the EIA Report (June 2023), with the exception of changes in the EIA Project Management team, as shown in **Table 1.1**:.



Table 1.1: EIA Project Management team involved in the delivery of the report

Name	Qualifications	Company	Role
EIA Project Mai	nagement and GIS		
Joe Somerville	MA(Hons), MSc MClfA FSA Scot	RSK Environment	EIA Project Director
Spyridonas Angeli	BSc (Hons) MSc	RSK Environment	EIA Project Manager
Debra Lewis	BSc (Hons) FRGS CGeog(GIS)	RSK	Geographic Information Systems (GIS) Lead



2 IRONSIDE FARRAR

2.1 Ironside Farrar (IF), on behalf of the ECU, issued a Stage 1 Checking Report for the Peat Slide Risk Assessment, dated 9 October 2023. The report, which is available on the ECU portal¹, made the following recommendations.

Density of Detailed Peat Probing Surveys

- 2.2 '100m x 100m grid Phase 1 probing across the whole site has not been met along the northern edge of the site mapping sheet 4 and more significantly for much of the southern area within the RLB sheets 5, 7, 8 and 9. Whilst much of this area is not being developed, there is no Phase 1 Probing around the Southern Access Track.'
- 2.3 'Most access tracks do not have 10m offset probing.'
- 2.4 'The recommended 10m x 10m probing grid has not been met on turbine locations and crane pads. Whilst the frequency of probing is not stated in the report, it appears from review of the figures that an approximate 20m cross hair grid has been applied at Turbines and a 20m 30m grid applied over laydown areas. On T2, T4, and T5, the probing grid is offset from the turbine location itself by up to 50m.'
- 2.5 'The recommended 10m x 10m probing grid has not been met at the ancillary infrastructure including the construction compound, battery storage, substation and borrow pits. The Borrow Pit West of T7 has minimal probing, other areas appear to have been probed on an approximate 30m grid.'

- 2.6 In response to the above recommendations, further peat surveys were commissioned to collect additional data through a gap-fill exercise. In advance of the gap-fill survey, Ironside Farrar have reviewed the revised survey mapping, and confirmed via correspondence dated 12 April 2024 that ... the information provided in the developer's response and confirm that the proposals put forward for additional probing are considered reasonable in this instance.
- 2.7 The collated peat depth survey results, which accord as far as possible with the recommendations raised in Stage 1 Checking Report and adopted guidance for peatland survey², are shown in **Figure 2.1**.
- 2.8 It will be noted that in some areas the peat depth survey points are not formed in a neat grid. This has arisen as a result of the staged approach to surveys, with later surveys providing a gap-fill exercise within areas of previously collected data. As previous surveys were not always undertaken on a regular grid, it was not practical to undertake the gap-fill surveys on a regular grid.
- 2.9 The peat slide risk analysis has been updated to take account of the additional peat depth data. It can be confirmed that the additional data have not affected the outcome of the

¹ https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00004552

² Scottish Government, Scottish Natural Heritage & SEPA (2017). Peatland Survey: Guidance on Developments on Peatland.



analysis or any of the detailed assessment areas as previously discussed in the Peat Slide Risk Assessment (PSRA) Report already provided. Updated figures are included in **Appendix 3** of this report.

Use of Undrained Analysis Equation

2.10 'Please provide reasoning behind the use of the undrained analysis equation over the drained analysis equation and whether this is representative of the site scenario i.e. loaded or unloaded conditions.'

- 2.11 Drained analysis is appropriate to soil analysis in situations where pore water can drain from the soil easily and in an unrestricted manner. Undrained analysis is appropriate to soil analysis where pore water is unable to drain out of the soil, such that the rate of loading on the soil is much quicker than the rate at which the pore water is able to drain from the soil.
- 2.12 For coarse-grained materials, such as gravels or sands, drained parameters are the most suitable under almost all conditions as the materials have high porosity and high permeability, and pore water is able to drain quickly from the sediment mass. For fine-grained materials, such as clays or peat, although the materials have high porosity and consequently a high water content, they have a very low permeability and are generally classed as impermeable or almost impermeable. This means that they are best modelled using undrained analysis as this is much more typical of the likely settings in which these materials will be encountered.
- 2.13 For designed slopes, it is considered to be best practice to calculate short-term stability using undrained analysis and long-term stability using drained analysis, as this takes into account consolidation over time from constructed embankments or similar engineered slopes. Similarly, in locations which have previously undergone landslide, a form of drained analysis is usually the most applicable method as previous failure can leave a situation closer to drained conditions than undrained in addition to the presence of an existing failure plane or weakness (Stark *et al.*, 2005³).
- 2.14 It is questionable whether drained conditions are applicable to peats. Some laboratory testing of peat samples indicates that, under drained conditions, the point of failure is not reached in accordance with the definition of failure in the tests used (Long, 2004⁴).
- 2.15 The situation assessed for the Repowered and Extended Ben Aketil Wind Farm relates to natural and induced instability in natural peat slopes where there is no record and no apparent history of previous landslide. The method used incorporates sufficient precaution, through use of a minimum estimate for shear strength, that additional assessment using the drained analysis equation is not considered necessary, particularly given the debate over the applicability of drained analysis to peats.

³ Stark, T.D., Choi, H., & McCone, S. (2005). Drained shear strength parameters for analysis of landslides. *Journal of Geotechnical and Geoenvironmental Engineering* **131**:575-588.

⁴ Long, M. (2004). *Review of peat strength, peat characterisation and constitutive modelling of peat with reference to landslides.* Department of Civil Engineering, University College Dublin.



Consideration of Distance to Receptor, Slope and Slide Run Out in Assessment

2.16 'Please provide clarification as to whether distance to receptor, slope, slide run out etc. have been considered in the assessment as the calculation of adverse consequence appears to be based purely on the value of the receptor at that cell. Whilst it is noted that run out is considered for the mitigation section, this would normally be considered earlier in the assessment at the consequence stage.'

- 2.17 Potential slide runout is considered, prior to mitigation, within the Detailed Assessment for each area with Moderate risk ranking, including factors such as distance to receptor, slope angles and slope angle variation between the identified 'at risk' cells and the identified receptor, and the nature any slide runout may have in the event that a peat landslide were to occur. The assessment also takes into account the possibility of destabilising otherwise stable peat from upslope of a failure location. The cells are never considered in isolation as this would give an inaccurate picture of the local environment and of the potential slide risk.
- 2.18 Modifying the consequence ratings of downslope cells on the basis of an upslope failure is not considered to be relevant or informative, as this is likely to over-state the consequence of a failure on lower-sensitivity receptors. For any areas where an identified Moderate risk location has the potential to interact with other High or Moderate risk areas downslope, this would also be considered within the Detailed Assessment and would require mitigation or management as appropriate for the location.



3 SCOTTISH ENVIRONMENT PROTECTION AGENCY

3.1 SEPA submitted a **holding objection** for the Proposed Development, requesting that determination be deferred until information was presented by the Applicant in relation to a series of matters. These are identified below.

Information required

10 m Watercourse buffers

3.2 'Based on the information provided, it is unlikely that we would have significant concerns in relation to the impact on the watercourse. However, at this stage only one map has been provided which covers the whole site. Unfortunately, at this scale, it is not possible to determine if the infrastructure encroaches on the 10m buffer zones and we require revised maps to be submitted clearly showing avoidance of the 10m buffer zone.'

Response:

3.3 As requested by SEPA, mapping has been updated to reflect changes in the Site layout and to show 10 m watercourse buffer zones at a scale that is sufficient to identify if infrastructure encroaches on 10 m buffer zones. This is provided in **Figure 3.1**.

Peatland Restoration Proposals

3.4 'The Outline Habitat Management Plan (HMP) identified a peat bog restoration area of 73.5ha. We will require further details of how the quantities of excavated peat will be used in restoration.'

- 3.5 Peatland restoration search areas were initially identified by examining satellite imagery with GIS data. The presence of drainage ditches in combination with National Vegetation Classification (NVC) survey data (which recorded damaged and modified bog in areas adjacent to higher value/better quality bog) informed areas proposed for restoration.
- 3.6 Although the precise details of the re-use measures cannot be confirmed at this stage, the target areas focus on blocking ditches and erosion channels, reprofiling of hagged peat, and measures to encourage revegetation of areas of bare peat. Should the Proposed Development receive consent, after consent is granted a detailed infrastructure design subject to topographical surveys and ground investigations would inform the detailed Peat Management Plan (PMP) and HMP. The detailed plans that would be submitted post-consent to NatureScot and SEPA for review would include the exact details of peatland restoration proposals, and how the exact quantities of excavated peat would be used in restoration.
- 3.7 Suitable target areas identified for restoration have been extended to accommodate the re-use of excavated peat on Site. 106.41 ha of additional areas were identified for restoration on Site, and subsequently incorporated in the revised outline HMP provided



in **Appendix 2**, bringing the total to 179.47 ha. Additional information regarding the revised outline HMP is available within **Section 4** of this report.

Design Amendments

Track associated with the Southern Construction Compound and Turbines 05 and T08, and location of Borrow Pit 2

- 3.8 'We note that the track associated with Turbine 5 encroaches well into the 50m buffer, this track should be moved outwith the buffer unless it is justified and balanced against other sensitive receptors. As we have also raised concerns with the volume of peat excavation associated with the new track to T5 (Section 1.3 of response dated 25 August 2023) it may be that significant changes to the layout are required to ensure there are no unacceptable impacts on both peat and watercourses. This is also true of the track associated with Turbine 8 and the track leading to the construction compound.
- 3.9 'At Turbine 8 it may be that slight changes to the location of the access track would avoid development within the watercourse buffer. For example, locating the spur to come off the main track slightly further south
- 3.10 'At the construction compound, it seems that if the spur were to come off the main track directly west of the compound, this would prevent any encroachment on the watercourse buffers entirely. Comparison of the peat maps indicate there is no deep peat in that area however I appreciate there may be other constraints which have led you to the layout proposed. Further information on this would be useful.
- 3.11 'It is proposed to use micrositing to avoid the areas of deeper peat in borrow pit 2, however, given the significant depths of peat, we do not consider micrositing to be appropriate in this case. We therefore request the positioning of the borrow area to be **modified** to avoid areas where peat depths are greater than 1m'.

Response:

Track associated with Turbine 05 (T05)

- 3.12 Following this response, a new track route to Turbine 5 (T05) has been identified and designed with the intention to avoid watercourse buffers and minimise peat excavation volumes as much as possible. As illustrated on **Figure 3.2**, three different alternative track route options for gaining access to T05 were considered and assessed.
- 3.13 Option 1, as shown in **Figure 3.2**, was selected as it would have the least impact on peat and would require fewer watercourse crossings. Option 1 was also the preferred option from a design perspective, as a site visit confirmed that the terrain is suitable, and no significant cut and fill would be required for the construction of this track. The revised track for gaining access to T05 is shown in **Figures 1.1** and **3.1**.

Track associated with Turbine 08 (T08)

3.14 As requested, the track route leading to T08 has been re-designed to avoid development within the watercourse buffer. The re-designed track is shown in Figure 1 overleaf, and Figures 1.1 and 3.1.



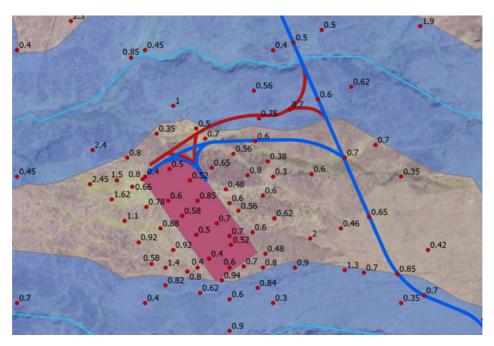


Figure 1: Re-designed track leading to T08 (blue polyline)

Track associated with southern Construction Compound

3.15 As requested, the track route leading to the southern temporary Construction Compound has been re-designed to avoid development within the watercourse buffer. The redesigned track is shown in Figure 2, and **Figures 1.1** and **3.1**.

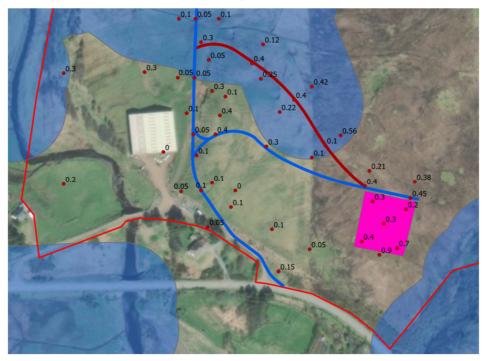


Figure 2: Re-designed track leading to the southern Construction Compound (blue polyline)



Borrow Pit 2 (Northern Borrow Pit)

3.16 Borrow Pit 2 has been **removed** from the revised design that is submitted with this report, as shown in **Figure 1.1**. Borrow Pit 2 no longer forms part of the Proposed Development.

Impacts on Peat

Peat excavation volumes

3.17 'To overcome our objection, we require the total excavation volume of peat to be revisited, with an attempt to further minimise this, particularly in relation to the overall length of track required; modification of the location of borrow pit 2 to avoid deep peat.'

- 3.18 In addition to design amendments, to minimise peat excavation volumes further, several sections of floating track have been proposed for areas previously considered for cut-and-fill track, including; a 355 m section along the new southern track, and 60 m section by T09. The new proposed floating track sections are shown in **Figures 1.1** and **3.1**.
- 3.19 A reduced work corridor width of 12 m (15.5 m used previously) has been used to estimate the peat excavation area for new track being proposed, as this is considered to be more representative of likely excavation areas while still including a sufficient width for construction.
- 3.20 As a result of the design amendments associated with the proposed track (including the introduction of new floating track sections and reduced work corridor), a reduction in peat excavation volumes of **27,479 m³** has been achieved; approximately 36% below what was initially estimated for new and upgraded track from the assessment in the EIA Report (June 2023). Revised peat volumes for track sections are provided in **Table 3.1**.
- 3.21 Although the turbine and crane pad positions have not been revised, additional peat depth data have been gathered for all of the proposed turbines. This allows a revised calculation to be undertaken with a larger dataset, providing a more robust estimate of peat volumes requiring removal for these elements. The revised calculations indicate that a total volume of 19,501 m³ of peat will require excavation to construct the turbines and crane pads. This represents a 24% reduction from the previous estimate. Revised volumes for turbines and crane pads are provided in Table 3.2.
- 3.22 Borrow Pit 2 no longer forms part of the Proposed Development; therefore, peat excavation volumes would be reduced by a further **3,598 m³**. Peat volumes for ancillary infrastructure are provided in **Table 3.3**.
- 3.23 An overall comparison of previous and revised volumes for each infrastructure element is provided in
- 3.24 **Table** 3.4. Overall, the total reduction in excavation volumes achieved through design amendments is **37,123 m³**, equivalent to a 31.6% reduction from the original estimate.
- 3.25 The revised peat re-use calculations are provided in **Table 3.5**, and the revised peat interpolation mapping is shown in the revised PRSA figures in **Appendix 3.3**.



Table 3.1: Peat excavation volumes for new and upgraded access tracks, showing reduction in peat excavation arising from additional depth data and use of floating track.

Scheme Element	Acrotelm (m³)	Catotelm (m³)	Total (m³)	Difference (m³)
New Track between T1 and T9 (original)	6,005	6,725	12,730	0.074
New Track between T1 and T9 (revised)	4,649	5,207	9,856	-2,874
New Track between T1 and T2 (no change)	0	0	0	0
New Track between T2 and T3 (original)	2,519	2,771	5,290	4.405
New Track between T2 and T3 (revised)	1,950	2,145	4,095	-1,195
New Track to T4 (original)	198	257	455	400
New Track to T4 (revised)	153	199	352	-103
New Track to T5 (original)	4,611	6,937	11,548	0.050
New Track to T5 (revised)	3,213	4,383	7,596	-3,952
New Track from T6 to Crofters Track (inc T7) (original)	7,726	7,515	15,241	-3,442
New Track from T6 to Crofters Track (inc T7) (revised)	5,981	5,818	11,799	-3,442
New Track from Crofters Track to T8 (original)	2,683	1,222	3,905	000
New Track from Crofters Track to T8 (revised)	2,077	946	3,023	-882
New Track from T8 to T9 (original)	5,854	4,989	10,843	0.440
New Track from T8 to T9 (revised)	4,532	3,863	8,395	-2,448
New Southern Access Track crossing Caroy River (original)	1,414	1,131	2,545	2.545
New Southern Access Track crossing Caroy River (revised)	0	0	0	-2,545
New Southern Access Track from A863 to Crofters Track (original)	4,125	3,300	7,425	-5,465
New Southern Access Track from A863 to Crofters Track (revised)	1,136	824	1,960	-5,405
Northern Access Junction (deleted – not proposed for modification)	4 20	319	739	-739
Existing Southern Access Track to T7 (original)	647	388	1,035	601
Existing Southern Access Track to T7 (revised)	215	129	344	-691
Existing Southern Access Track by Caroy River (original)	3,535	1571	5,106	0.140
Existing Southern Access Track by Caroy River (revised)	1,359	604	1,963	-3,143
Total (original)	39,737	37,125	76,862	97 470
Total (revised)	25,265	24,118	49,383	-27,479



Table 3.2: Peat excavation volumes for turbines, hardstandings and associated drainage

Scheme Element	Acrotelm (m³)	Catotelm (m³)	Total (m³)	Difference (m³)
Turbine 1 (original)	1,175	926	2,101	F40
Turbine 1 (revised)	979	580	1,559	-542
Turbine 2 (original)	1,616	2,145	3,761	001
Turbine 2 (revised)	1,552	1,308	2,860	-901
Turbine 3 (original)	1,337	1,222	2,559	-1,236
Turbine 3 (revised)	730	593	1,323	-1,230
Turbine 4 (original)	1,433	2,021	3,454	-1,170
Turbine 4 (revised)	1,146	1,138	2,284	-1,170
Turbine 5 (original)	1,528	1,095	2,623	-511
Turbine 5 (revised)	1,273	839	2,112	-511
Turbine 6 (original)	1,433	680	2,113	-291
Turbine 6 (revised)	1,322	500	1,822	-291
Turbine 7 (original)	1,637	2,292	3,929	-826
Turbine 7 (revised)	1,540	1,563	3,103	-020
Turbine 8 (original)	1,215	504	1,719	200
Turbine 8 (revised)	1,091	306	1,397	-322
Turbine 9 (original)	1,433	2,117	3,550	FOO
Turbine 9 (revised)	1,415	1,626	3,041	-509
Total (original)	12,807	13,002	25,809	6 200
Total (revised)	11,048	8,4533	19,501	-6,308

Table 3.3: Peat excavation volumes for other, temporary and permanent infrastructure elements

Scheme Element	Acrotelm (m³)	Catotelm (m³)	Total (m³)	Difference (m³)
Borrow Pit 1 (no change)	4,200	1,470	5,670	0
Borrow Pit 2 (removed)	1,241	2,357	3,598	-3,598
Construction compound south access (no 1) (no change)	293	176	469	0
Main Construction Compound (no 2) (no change)	1,332	599	1,931	0
Compound no 3 (no change)	0	0	0	0
Compound no 4 (no change)	0	0	0	0
Compound no 5 (no change)	0	0	0	0
Compound no 6 (no change)	0	0	0	0



Scheme Element	Acrotelm (m³)	Catotelm (m³)	Total (m³)	Difference (m³)
Substation Repower (no change)	999	899	1,898	0
Substation Extension (no change)	815	530	1,345	0
BESS	187	75	262	+262
Total (original)	8,880	6,031	14,911	-3,336
Total (revised)	7,826	3,749	11,575	-3,330

Table 3.4: Summary of combined peat excavation volumes for all proposed infrastructure

Scheme Element	Acrotelm (m³)	Catotelm (m³)	Total (m³)	Difference (m³)
All tracks (original)	39,737	37,125	76,862	07.470
All tracks (revised)	25,265	24,118	49,383	-27,479
All turbine infrastructure (original)	12,807	13,002	25,809	0.000
All turbine infrastructure (revised)	11,048	8,453	19,501	-6,308
All other infrastructure (original)	8,880	6,031	14,911	0.000
All other infrastructure (revised)	7,826	3,749	11,575	-3,336
Total (original)	61,424	56,158	117,582	07.400
Total (revised)	44,139	36,320	80,459	-37,123

Table 3.5: Revised peat re-use calculations

Reuse option	Acrotelm (m³)	Catotelm (m ³)	Total (m ³)	Difference (m³)
Dressing-off edges of turbine hardstandings (no change)	3,600	400	4,000	0
New access track verge reinstatement (original)	7,500	0	7,500	7,300
New access track verge reinstatement (revised)	14,800	0	14,800	7,300
Existing access track verge reinstatement (original)	3,600	0	3,600	000
Existing access track verge reinstatement (revised)	4,500	0	4,500	900
Floating track verge reinstatement (original)	2,200	0	2,200	800
Floating track verge reinstatement (revised)	3,000	0	3,000	800
Construction compounds and substation (original)	6,400	700	7,100	0
Borrow pit restoration (original)	24,700	24,700	49,400	20.200
Borrow pit restoration (revised)	10,000	1,200	11,200	-38,200
Peatland restoration (original)	13,500	30,400	43,900	1 700
Peatland restoration (revised)	3,600	38,600	42,200	-1,700



Reuse option	Acrotelm (m ³)	Catotelm (m ³)	Total (m³)	Difference (m³)
Total (original)	61,500	56,200	117,700	00.000
Total (revised)	45,900	40,900	86,800	-30,900

3.26 In their email dated 8th November 2024, SEPA advises a precautionary approach to reuse of 38,600 m³ of catotelmic peat in restoration initiatives. We acknowledge this advice and will ensure that all suitable options for minimising excavation of catotelmic peat and suitable reuse in peatland restoration are considered during the construction phase, should the Proposed Development be given consent. Best practice in this area is continually evolving to make use of new technologies and restoration techniques and these would be reviewed as part of the development of the construction phase Peat Management Plan.

Further and Regulatory Advice

3.27 We acknowledge the further and regulatory advice and regulatory advice provided in SEPA's response.



4 NATURESCOT

- 4.1 NatureScot submitted a response dated 01 December 2023, containing **comments and advice** for the ECU and Applicant, including in relation to peatland habitats, ornithology, protected species and biodiversity enhancement.
- 4.2 Below are provided concise responses to the key points made in this document where they are most pertinent to the application.
- 4.3 Further discussion with NatureScot was undertaken on 28 May 2024 in relation to some of the key comments and concerns raised, and the outcome of this further consultation is also referred to where appropriate.

Peatland Habitats

Impacts on Peatland Habitats

Habitat Loss Calculations

4.4 'The Ecology chapter of the EIAR states that direct, indirect, permanent and temporary impacts on the habitat as a result of the development have been considered. A buffer of 10m has been used to create the values summarised in the table below. However later in the document direct and temporary loss have been split. We class both permanent and temporary loss as loss and therefore the assessment should use 33.67ha as the figure in calculating the amount of restoration required.'

Table 1 – blanket bog habitat loss due to infrastructure

Habitat	Direct (ha)	Indirect (ha)	Total (ha)
Blanket bog	<i>5.77</i>	10.60	16.37
Wet modified blanket bog	7.27	10.03	17.30
Total	33.67		

Response:

4.5 NatureScot's comments are noted, and we can confirm that both direct and indirect/temporary losses are considered in determining the extent of restoration to be proposed. However, it is nonetheless true that the 10 m buffer used in the calculation of indirect losses is an arbitrary precautionary value, and that while direct loss under the Proposed Development's footprint is certain, the actual extent of any indirect effects will be variable, and in some cases (dependent on habitat mosaics and varying peat depths for example) and for some types of infrastructure (for example for floating rather than cut and fill tracks) the extents of indirect effects are likely to be considerably lower than the conservative estimates. As such in the context of the precautionary approach taken to

⁵ Section 7.4.7 – EIAR Volume 1

⁶ Section 7.8.40 - EIAR Volume 1

⁷ Extract from Table 7.10 in EIAR Volume 1. However information in Table 7.1.5 – Chapter 7 – Technical Appendix 7.1 Habitats and Vegetation, shows slightly different values



assessing habitat losses it is considered appropriate to highlight this as a qualitative discussion point, given the very extensive requirements for mitigation and compensation that arise based on the result of these precautionary loss calculations.

- 4.6 In respect to NatureScot's footnote regarding the difference in the numbers reported in the Chapter vs. the Technical Appendix (TA), the numbers are fractionally different in the TA (5.76 ha direct loss for blanket bog and 10.57 ha indirect loss) as a product of when in the calculation rounding of the numbers to the nearest two decimal places has been applied. As the impact assessment has been carried out based on the higher number this is not considered to be a constraint to the validity of assessment conclusions.
- 4.7 Note that Table 7.1.5 in the TA reports potential temporary/indirect loss both within 2 m and within 10 m for all habitats recorded. These are not additive, and only the figures for 10 m have been reported for blanket bog habitats in the relevant chapter.

Design of Proposed Development

4.8 'The design of the proposal appears to have considered the most sensitive habitats and the deepest peat in determining where the infrastructure should be located but we advise that there are still opportunities for further improvements which would avoid some of the deep areas of peat, particularly in relation to new tracks.'

Response:

4.9 The design of the Proposed Development has been revisited to further avoid areas of deep peat where possible in the context of other constraints (see **Section 3** of this report, dealing with SEPA consultation comments), and habitat loss calculations have been updated in the context of these changes. Some areas of track over deeper peat will be floated, to minimise the requirements for excavation and hence the direct effects to underlying peat, and this will also reduce the indirect effects associated with excavation and disturbance to peatland habitats surrounding these areas of track. Updated habitat loss calculations have taken account of this, and assessment of indirect loss around areas of track that have been floated has been restricted to 2 m to take account of the mitigation provided by this less invasive construction technique.

Use of existing infrastructure

4.10 'The reuse of the existing tracks is also helpful in reducing impacts from the proposal. However, it is proposed to use both the existing northerly and a partly new access track from the south. The justification for this decision has not been well explained in the EIAR and the implications for impacts on peatland habitats have not been adequately considered in the report.'

- 4.11 The implications for peatland habitats have been adequately considered in the EIA Report; in order to account for any uncertainties, the approach taken to assessing direct and indirect loss to these habitats was highly precautionary.
- 4.12 Habitat loss has been assessed based on the inclusion of both tracks for both construction scenarios. In addition, as it was not known at the time of application exactly



where upgrades to existing track would be taking place (e.g. widening of an equal buffer either side of the existing track, or additional track width added to one side or the other in places) habitat loss calculations used for the assessment did not differentiate existing track in this location from the surrounding habitats. As such, loss calculations were based on the assumption that the entire width of (e.g.) the crofters track to be upgraded was loss of the underlying/surrounding habitat. Consequently, where the crofters track runs through blanket bog this was calculated as a 5.5 m width loss of blanket bog, whereas in reality the majority of the habitat affected is existing track. Where the track overlies areas that were not surveyed, it was further assumed the underlying habitat is bog to give a worst-case scenario for loss of bog in the absence of detailed survey data. However, it is clear from aerial imagery and comparison with adjacent areas for which detailed survey data are not available, that at least some of this habitat is likely to be M6 and MG6 marshy grassland and not blanket bog.

- 4.13 This is clearly not a realistic reflection of actual likely loss. However, it represents a more precautionary approach, which at the time the application was being prepared was considered appropriate to be sure of capturing all potential loss in the context of construction detail uncertainties which still exist in the baseline phase. It also informed estimation of reasonable quantities for restoration proposals, to make sure that sufficient search areas were identified to allow restoration of a considerably greater extent than the area to be lost based on an unlikely to be realised worst-case scenario.
- 4.14 In the context of updated requirements of policy and guidance, this highly precautionary but unrealistic approach is no longer considered appropriate, and so for the updated loss calculations provided in this report, the area of track to be upgraded has been calculated with the existing running width (measured in GIS as an average of 4 m) subtracted. As such loss presented herein represents only the excavation of surrounding habitats required to widen the track to 5.5 m, which is a less precautionary but more proportionate approach given the current requirements for restoration as based on calculations of habitat to be lost. The habitat underlying the track in the area with absent detailed survey data is still treated as bog (totalling 1.86 ha direct and indirect loss) for the updated calculations.
- 4.15 The Proposed Development has been subject to design revisions to address consultee application comments received, particularly those from SEPA and NatureScot as discussed in this report. Habitat losses have therefore been recalculated based on the updated layout, including consideration of existing track, and a reduction in indirect effects associated with the use of floating roads, as described above. Updated habitat loss calculations are presented in **Table** 4.1 overleaf.



Table 4.1: Updated calculations of direct and indirect habitat loss due to proposed infrastructure

Habitat category	Phase 1 Code	Phase 1 Description	NVC Code	Direct Loss (ha)	Indirect Loss (ha)	Total direct loss (ha)	Total indirect loss (ha)	Total loss (ha)
Wet heath (including mosaics)	D2	Wet heath	M15	0.07	0.30	0.25	1.04	1.29
	D6	Wet heath/ acid grassland	M15/U4	0.02	0.05			
	D6	Wet heath/ acid grassland mosaic	M15	0.00	0.01			
	D6	Wet heath/ acid grassland mosaic/ marshy grassland	U4/M23/M15	0.16	0.68			



Habitat category	Phase 1 Code	Phase 1 Description	NVC Code	Direct Loss (ha)	Indirect Loss (ha)	Total direct loss (ha)	Total indirect loss (ha)	Total loss (ha)
	E1.6.1	Blanket bog	M17/(M15/M2/3/6)	0.51	0.39	4.87	9.34	14.21
	E1.6.1	Blanket bog	M17/M15	0.44	0.34			
	E1.6.1	Blanket bog	M17/M19/M15	0.02	0.07			
	E1.6.1	Blanket bog	M17/M19/M15/ M25(5%)	0.69	1.26			
	E1.6.1	Blanket bog	M17/M25/(M15)	1.92	3.04			
	E1.6.1	Blanket bog	M17/M25/M15	0.00	0.08			
	E1.6.1	Blanket bog	M19	0.71	1.18			
Blanket bog (including mosaics)	E1.6.1	Blanket bog/ wet heath	M19/(M15)	0.28	0.29			
,	E1.6.1	Blanket bog	M19/M15	0.10	0.26			
	E1.6.1 (Assumed)	Southern Access Route; area not surveyed		0.13	1.73			
	E1.6.1/ E1.7	Blanket bog/ Wet modified bog	M19/M15	<0.01	<0.01			
	B2.1/ B5 /E1.6.1/ D2	Neutral unimproved grassland/ Marshy grassland/ Blanket bog/ Wet heath	U4/M6/M19/M15	0.05	0.70			



Habitat category	Phase 1 Code	Phase 1 Description	NVC Code	Direct Loss (ha)	Indirect Loss (ha)	Total direct loss (ha)	Total indirect loss (ha)	Total loss (ha)
	E1.7	Wet modified bog	M15	0.14	0.53	4.16	8.30	12.46
	E1.7	Wet modified bog	M15/M10	0.60	0.75			
	E1.7	Wet modified bog	M15/M17	0.05	0.21			
Wet modified bog (including	E1.7	Wet modified bog	M15/M19	1.44	3.00			
mosaics)	E1.7	Wet modified bog	M15/M19/(M6)	0.06	0.17			
	E1.7	Wet modified bog	M17 burnt	0.57	0.84			
	E1.7	Wet modified bog	M17&M15 burnt/(M19)	0.59	0.94			
	E1.7	Wet modified bog	M19	0.17	0.89			
	E1.7/ C1	Wet modified bog/ Continuous bracken	M25/U20	0.00	0.02			
	E1.7/ D2/ B5/ B1.2	Wet modified bog/ Wet heath/ Marshy grassland/ Semi-	M19/M15/U4/ M6/M37	0.54	0.94			



Habitat category	Phase 1 Code	Phase 1 Description	NVC Code	Direct Loss (ha)	Indirect Loss (ha)	Total direct loss (ha)	Total indirect loss (ha)	Total loss (ha)
		improved acid grassland						
Fen	E3.1	Fen - Valley Mire	M9/M10	0.01	0.01	0.03	0.02	0.05
	E3.1	Fen - Valley Mire	M9/M6	0.02	0.01			



4.16 It is important to note, that both the direct and indirect loss of blanket and wet modified bog are reduced by these changes relative to that presented in the EIAR, and the total of direct and indirect loss is now 26.67 ha as summarised in **Table 4.2**. As discussed below, the Applicant commits to restoring an area of peatland that will be substantially greater than the area lost.

Table 4.2: Summary of updated blanket bog habitat loss due to proposed infrastructure

Habitat	Direct (ha)	Indirect (ha)	Total (ha)
Blanket bog	4.87	9.34	14.21
Wet modified blanket bog	4.16	8.30	12.46
Total	26.67		

Construction Scenarios

4.17 'In addition there are two construction scenarios and it is therefore uncertain as to which option will be adopted. The EIAR states that the most precautionary scenario is the one they have used to calculate the impacts but this does not allow us to determine whether the least damaging option for the habitats will be adopted.'

Response:

4.18 The impact assessment did not assess Scenario 1 or Scenario 2, but a third scenario based on the worst case from Scenarios 1 and 2 (i.e. either extended area or extended timeframe) combined (i.e. both an extended area and an extended timeframe). The third scenario assessed in the EIA is therefore worse for disturbance and displacement than either Scenario 1 or 2 in isolation, and allows for either scenario to be taken forward without an increase in effects relative to those predicted by the assessment. As such, the impact assessment was carried out such that whichever scenario is adopted, consultees can have confidence that the impacts will be less than those assessed and presented in the EIAR.

Outline Habitat Management Plan

4.19 'The applicant has stated that they intend to restore 73.5ha® bog (predominantly NVC M19a) to compensate for total losses of 33.67ha of priority peatland habitats. The restoration will focus on re-wetting by blocking ditches in the area to the south of the Rageary Burn. The area of proposed restoration is just over twice the size of the area calculated to be lost to the development. In our opinion, this is not a sufficient amount of restoration in relation to the impact. Our current guidance¹® is that we expect the amount of restoration to be ten times that which is lost. In our view the plan for compensation as a result of the impacts of the development are insufficient.

⁸ Section 7.4.10 - EIAR Volume 1

⁹ Section 7.8.42 - EIAR Volume 1

 $^{^{10}\} https://www.nature.scot/doc/advising-peatland-carbon-rich-soils-and-priority-peatland-habitats-development-management$



4.20 It is also not clear how the restoration area has been calculated, e.g. what buffer areas are associated with the peat dams etc. The area in which works are proposed show extensive drainage and micro-erosion. Identification of which peatland restoration method is to be carried out and where would be useful. While we appreciate this application was prepared prior to our updated guidance being published, our guidance now provides detailed advice on the recommended level of information to include in HMPs, appropriate methods, calculations of footprint. We advise the applicant to refer to this in any future iterations of the HMP.'

- 4.21 At this stage, the HMP submitted with the Section 36 planning application for the Proposed Development is an outline only, providing a statement of intent on part of the Applicant. As such, a precise restoration area has not been provided or calculated at this stage; 73.5 ha was a search area rather than a calculated restoration area. The search area was selected as being suitable for further investigation for restoration potential based on:
 - the apparent presence of drainage ditches which may have the potential to be blocked for the purposes of restoration;
 - identification of adjacent priority peatland; and,
 - proximity to working areas and access tracks.
- 4.22 The latter, along with the use of low pressure vehicles where necessary, is an important consideration (along with topography, slope, ground conditions) in respect to accessibility for plant without causing further damage to adjacent bog and to reduce risk of vehicles becoming stuck, and also to minimise the distance peat has to be transported within the Site from the location from which it was excavated. On the basis of these considerations, a site containing extensive blanket and modified bog may have considerably more limited locations where restoration of this bog is achievable.
- 4.23 Although only a suitable search area was identified based on the above considerations at the application stage. The search area identified is extensively drained and also burned in places, so it is expected that improvement in the quality of the majority of the bog in this area is likely to be achieved if the drying effects of the drainage are halted and reversed, and so it is considered that the potential for successful restoration of the majority of the 73.5ha search area is high, subject to further detailed investigation.
- 4.24 Calculating actual potential rewetted area that will be achieved within search areas will require further detailed investigation by peatland and hydrology specialists. Such further investigation will provide detail as to the ditch blocking technique and type of dams to be used in any given area of restoration within the search area, and likely buffer areas associated with dams (i.e. linear and lateral extent of rewetting) that will be achieved. For the purposes of assessment it has been assumed that the indirect drying effects of excavation may extend to a buffer of 10 m, and so it is considered reasonable to estimate rewetting effects will extend 10 m either side of a blocked area of ditch. However, the linear extent achieved will be a product of the number and chosen location of the drains. It will also depend on factors such as the current condition and effectiveness of the drains, drain spacing, presence of subterranean erosion features such as peat pipes, and topography and slope in different areas of the bog restoration area. Consideration will



also be given to accessibility of proposed restoration areas by vehicles to be used in the restoration, such as excavators, and in relation to consideration regarding transportation of peat within the Site.

- 4.25 In response to NatureScot's comments the Applicant has identified further blanket bog areas within the Site where drainage is evident from satellite imagery and which have reasonable connectivity to tracks or proposed construction areas. These additional areas, totalling 106.41 ha, will also be investigated for their potential for blanket bog restoration and are submitted as a revised outline HMP in **Appendix 2**. As such, 179.9 ha search areas within the Site have been identified as containing potential suitability for bog restoration.
- In response to NatureScot's comment that it expects the amount of restoration to be ten 4.26 times that which is lost, it is noted that the outline HMP (and so the initial search area provided) pre-dated NatureScot's current peatland guidance. The increased search area is around 6.7 times the area of habitat loss. It is understood that that both the NatureScot guidance and wider approaches to biodiversity enhancement in a Scottish context are currently under review. This has been acknowledged by NatureScot in more recent s.36 consultation responses including, for example, Vale of Leven Wind Farm (ECU00003468) dated 22 March 2024. NatureScot recognised that "other stakeholders are working with various approaches or metrics that provide for different levels of restoration than are recommended in our guidance." NatureScot also advised that its current guidance would "evolve as additional information and evidence informs our understanding, including additional outputs from the Peat Expert Advisory Group and a development of a Scottish biodiversity metric." Since then, NatureScot have started the process of developing the new biodiversity metric for Scotland. It is clear that existing guidance is likely to change in the short to medium term.
- 4.27 It is important to ensure there is sufficient flexibility for the habitat management proposals to react to the changes that are anticipated. The Applicant commits to provide an area of peatland restoration and enhancement that is in accordance with guidance that is in place at the time of the preparation of the final HMP. In the event that the 179.9 search area is not sufficient to meet the area required by guidance, the final HMP will provide for off-site restoration and/or delivery of a financial contribution to achieve any shortfall. On the basis that the minimum search area will be 179.9 ha and the Applicant commits to meeting the level of restoration required by guidance at the time of preparing the final HMP, it is clear that the area of peatland restoration to be provided will be substantially greater than the area lost. Taken with the other aims and objectives detailed in the outline HMP, it is considered that the Proposed Development will deliver significant biodiversity enhancement and ensure that the site would be in a demonstrably better state than prior to development.
- 4.28 It is intended that, should the Proposed Development receive consent, the outline HMP will continue to evolve based on comments and advice from consultees throughout the pre-construction period. This is likely to include refinements based on detailed infrastructure design subject to topographical surveys and ground investigations. The detailed plans that will be submitted post-consent to NatureScot, SEPA and The Highland Council (THC) for review will include the exact details of peatland restoration proposals, and how and where the exact quantities of excavated peat will be used in restoration, to



form the finalized PMP and HMP for approval to discharge conditions. However, as outlined above, the Applicant commits to delivering an extent of peatland restoration for compensation and enhancement which is in accordance with guidance which is in place at the time of preparing the final HMP.

Habitat Enhancement

4.29 'Enhancement is also required for this application under NPF4. Our advice on this aspect, noting that it is at the discretion of ECU, is that we would expect enhancement to be in the region of an additional 10% of the baseline assessment of the extent of priority peatland habitat.'

Response:

- 4.30 It is our understanding that on other wind developments currently in the planning system, it has been agreed with NatureScot that 1:10 restoration of priority peatland habitats was sufficient for bog habitats, and that the 10% enhancement need only be applied to the remaining (non-bog) habitats. This is particularly in view of the status of bog as 'irreplaceable habitat', and hence exclusion from BNG metric calculations.
- 4.31 As set out above the Applicant commits to delivery of appropriate compensation and enhancement, which accords with up-to-date guidance, during future ongoing development of the HMP. In calculating the extents to be included in the overall restoration extent in the final HMP, discretion based on professional judgement will be applied in respect to categorisation of habitat mosaics as priority or non-priority peatland habitat, with mosaic habitats containing only a very limited extent of bog habitat not categorised as examples of priority habitat in this context, in order to allow for an approach which is proportionate to the likely impacts.
- 4.32 Further riparian planting in appropriate areas, totalling 22.22 ha, has been included in updated proposals for the outline HMP. This extends the proposals for creation of this habitat within the Site further down the Caroy River in areas identified as targets for riparian planting by Scottish Forestry, along the Aketil Burn, and linking to planting already present along the Caroy River in the south of the Site (see revised outline HMP plan in **Appendix 2**). As no woodland is to be lost for the Proposed Development this solely represents enhancement, and will increase habitat heterogeneity, diversity and connectivity locally, and provide foraging, commuting and shelter habitat for a range of protected species known to be present in the Site and/or the wider area, including otter, bats and fish species. Riparian planting also has a role in nature-based solutions to water and flood risk management, and in carbon capture.

Peatland Restoration

- 4.33 'Aim 1 of the Outline Habitat Management Plan (OHMP) is to enhance peatland habitats. The plan states that there will be ditch blocking, reprofiling of peat haggs and the cessation of burning and livestock management.
- 4.34 We advise that any works carried out for peatland restoration should be done in accordance with the Peatland ACTION Technical Compendium (https://www.nature.scot/doc/peatland- action-technical-compendium). We recommend that proposals within the submitted plan should be reviewed to ensure they align with this



guidance. For example, it is unlikely that the use of geotextile and imported seed would be necessary in most places because there are likely to be sufficient turves available within the site and sufficient seed source locally to allow for colonisation. In addition The Outline Peat Management Plan (OPMP) refers to the re-use of excavated peat in the restoration. This would be a good use of excess turves to cover bare peat and some acrotelm could be used in ditch blocking. However, the volumes quoted in the OPMP appear well in excess of the likely requirements for habitat restoration. If there is excess catotelm this should not be used in restoration or reinstatement plan as it doesn't have sufficient structural integrity. We recommend that this aspect be reviewed in the context of design changes to minimise impacts as well as consideration of where the additional peatland restoration areas will be located.'

Response:

4.35 Noted, and it is confirmed that all proposed works to be carried out for peatland restoration on the Site will follow relevant guidance including (but not limited to) the Peatland Action Technical Compendium, and will be designed in consultation with SEPA and NatureScot as appropriate and detailed in the final PMP and HMP to be provided post-consent for agreement by NatureScot, SEPA and the THC, to discharge any conditions relating to this element.

Bog burning

4.36 'The proposal to stop burning should not be considered 'restoration' as bogs should not be burnt under the Muirburn Code.'

- 4.37 While it is accepted that bogs should not be burned under the Muirburn code, it is noted that (often perhaps inadvertently) this nonetheless does happen. A recently published paper¹¹ suggests that an average of 32% of burning annually in Scotland occurs on deep peat soils, with no reduction in burning on deep peat after the revision of national guidelines (the Muirburn Code) in 2017, which recommended ceasing this practice.
- 4.38 Some areas of blanket bog habitat within the Site, and within areas targeted for restoration, were noted during surveys to have been subject to burning in the past. Management and monitoring under a wind farm HMP for the lifetime of the development provides a mechanism of oversight and will help to prevent accidental burning of blanket bog during the period within which the HMP is in place. This will allow the condition to improve over time even beyond the areas of influence of rewetting measures such as ditch blocking. While not used in calculations for the overall restoration extents to be proposed for the Proposed Development, it is nonetheless the case that a cessation of muirburn around sensitive areas of blanket bog as part of the Proposed Development will be a substantial benefit to the habitats present, and which is intrinsically linked to, and not guaranteed in the absence of, the Proposed Development.

¹¹ Spracklen, B. D., & Spracklen, D. V. (2023). Assessment of peatland burning in Scotland during 1985–2022 using Landsat imagery. Ecological Solutions and Evidence, 4, e12296. https://doi.org/10.1002/26888319.12296



Livestock densities and deer control

4.39 'There is no detail on the current livestock densities and pattern of grazing within this area, as such it is not possible to determine the impact of a revised grazing plan as we have no detail on the current and proposed stocking density. It is stated that there will be no increase in deer control³⁵, even though both roe and red deer are having grazing impacts on the peatland. If stock are reduced and there is no commitment to control deer it is possible that deer will replace the sheep. We recommend that these aspects should be clarified in the final HMP.'

Response:

4.40 Noted. Details of aspects relating to grazing density, including current stocking density and agreements reached with the landowner relating to future grazing, and any proposals for fencing and/or deer control, will be included in the final HMP to be provided post-consent for agreement with NatureScot and the THC, to discharge any conditions relating to this element.

Ornithology

- 4.41 It is noted that while NatureScot have commented on the minor limitations to ornithology survey effort outlined and discussed in the EIAR Ornithology Chapter, they agree that these do not represent a notable constraint to the validity of the data for characterising baseline bird interest at the Proposed Development, and on which to base assessment for the EIAR.
- 4.42 Notwithstanding any potential cumulative impacts to white-tailed eagle population expansion as a consequence of any future further wind farm development in this area (and so outwith the existing baseline and scope of current assessment for the Proposed Development), it is further noted that NatureScot agree with the conclusions of the assessment in respect to the predicted absence of significant impacts of the Proposed Development on the NHZ6 populations of golden eagle and white-tailed eagle.

Mitigation and enhancement

Enhancement measures for eagles

- 4.43 The outline Habitat Management Plan includes measures targeted at eagles. 'Aim 4: Reduction in Attraction Risks for Eagles' proposes to remove carrion within 200m of turbines. We agree that removal of fallen stock and other carrion may be beneficial in reducing the attraction of these areas for eagles, thereby reducing collision risk. However we recommend that the whole turbine envelope should be included rather than a 200m buffer around each turbine (carrion outwith the proposed 200m buffer may still increase eagle collision risk). No details have been provided on how the carrion removal would be achieved in practice, or how it would be maintained in the long- term. In our view, carrion removal should be considered as mitigation rather than enhancement.
- 4.44 Nevertheless, we would welcome consideration of enhancement measures for eagles, given the importance of Skye for both GE and WTE and the potential cumulative impacts arising from wind farm developments. Examples such as the Regional Eagle



Conservation Management Plan in the Monadhliath demonstrate the potential benefits of a large scale collaborative approach. We would be keen to discuss possible objectives and scope of a collaborative eagle conservation and research project with wind farm developers on Skye.

Response:

- 4.45 NatureScot's comments regarding carrion removal are noted. The Applicant confirms details of an appropriate and proportionate carrion search and removal programme to mitigate non-significant collision impacts to eagle species will be included in the HMP produced for approval by NatureScot and THC to discharge conditions, should the Proposed Development receive consent. It will include methods proposed for search and removal, including who this will be carried out by, the area to be searched and the rationale for selection of this area (including any proposals for use of vehicles, and/or drones in areas away from the turbines, as appropriate), and proposed frequency and timing of carcass searches.
- 4.46 The Applicant can confirm that they are keen to participate in and contribute to a strategic approach to eagle conservation on Skye, such as a RECMP, and they are already in discussion with neighbouring developers regarding sharing of ornithology data to allow for a more collaborative approach in this regard. The Applicant will be happy to join any future discussions with NatureScot and other local developers to further this aim.

Protected species

Otter

4.47 Otter sign (spraint) was recorded widely across the watercourses in the Caroy and Red Burn watersheds but occurred at low density. No breeding or resting sites were identified in 2021; the scrub-lined Rageary Burn and Aketil Burn were identified as having potential, but were inaccessible to the surveyors. Camera trapping was carried out at the entrance and exit of the Rageary in 2015 and we agree that, given the proximity of development to this area (including turbines, access roads, borrow pits and construction compounds), it would be advisable for the pre-construction surveys to repeat the camera trapping in order to avoid an offence being committed. We would not anticipate being consulted unless a disturbance license application is necessary.

Response:

4.48 NatureScot's advice in this regard is noted, and pre-construction camera trapping surveys on the Rageary Burn will be included in future species protection plans produced to discharge planning conditions and to inform any licensing requirements.

Bat Species

4.49 Bat activity was recorded across the majority of the site and the majority of the survey period but at relatively low levels. Common pipistrelle was the most frequently recorded species representing 88% of records with Noctule making up the remaining 12%.



- 4.50 The technical report states 'The Site is not within the published usual range of noctule bat; however noctule bat was recorded during the bat activity surveys and the Ecobat tool also includes noctule records (albeit below the recommended 200) within their reference range for within the same geographical region of the Site, and therefore the species is known to be present within the wider area.' The 'region' referenced is Scotland North including Caithness, Sutherland and Orkney.
- 4.51 The nearby wind farms have also reported almost exclusively common pipistrelle. While we are aware of at least two historic unconfirmed reports of Noctule or Leisler's on Skye we are not aware of any confirmed records. We therefore recommend that the sonograms (if still available) be assessed by a bat specialist and, if confirmed, the record be notified to Bat Conservation Trust.

- 4.52 In respect to NatureScot comments regarding the detected calls from Ben Aketil identified by Kaleidoscope as noctule bat calls, further detailed investigation of these was undertaken following receipt of NatureScot's application comments, to clarify the baseline condition at the Proposed Development in the context of this species.
- 4.53 It was noted on further detailed analysis undertaken that the sonograms identified as noctule contained social calls only, with no foraging calls detected, and so are considered most likely to represent calls of common shrews, with which there is considerable overlap in the call pattern of noctule fast trill calls (as per Middleton, 2020¹² and Middleton et al. 2022¹³). The bat impact assessment was subsequently reviewed in-house (in the absence of Ecobat availability) with the calls assigned to noctule removed, to see if this made a notable difference to the predicted effects which it did not.
- 4.54 The EIA did not identify significant residual effects on any bat species. Reinterpretation and removal from the dataset of the calls originally identified as noctules does not change the conclusions of the EIA in this respect.
- 4.55 It is acknowledged that (as stated in the Ecology Chapter) the location of Ben Aketil is outside the known range of noctule bats. However, given that range expansion is not impossible, it is considered that the inclusion of the records as noctule, as identified by Kaleidoscope and manual QA of a sub-sample of the records, represents a precautionary approach, though it is acknowledged that potential confusion species (i.e. common shrew) and uncertainties over the identification could have been considered and included under 'Limitations'.
- 4.56 Further correspondence to communicate the above was undertaken with NatureScot in December 2023, including providing the sonogram sound files as requested for their review and consideration.

¹² Middleton, N. (2020). Is That a Bat? A Guide to Non-Bat Sounds Encountered During Bat Surveys. Pelagic Publishing

¹³ Middleton, N., Froud, A. and French, K. (2022). Social Calls of the Bats of Britain and Ireland. Expanded and Revised Second Edition (Bat Biology and Conservation). Pelagic Publishing.



Bat Risk and Mitigation (reference to noctule removed throughout, in line with above)

- 4.57 The technical report concludes an overall risk assessment of 'Low Site Risk' for common pipistrelle. That is based on the median activity level but there are some turbines and some months where maximum activity levels are 'high'. In Stage 1 of the assessment the Project Size is defined as 'medium' but since the proposed turbines are 200m to blade tip that may understate the risk. The context is important too: there are another 3 built or consented windfarms in this area and a number of new or repowering proposals totalling >100 turbines, all at least 150m to blade tip. Clearly not all may be consented or built but nevertheless it does increase risk to bats.
- 4.58 50m buffers have been included between turbine blade tips and woodland/significant water courses as recommended in our guidance. This has been adjusted to 'allow for a worst-case scenario tree height of 40 m along the edge of the plantation and the Rageary burn in order to maintain the required 50 m stand-off to the blade tips for the lifetime of the development'. It is important that these buffers are maintained including during turbine micro-siting.
- 4.59 A commitment is made in the EIAR that 'mitigation options such as 'feathering' of the turbine blades while idling during periods of potentially higher bat activity will be investigated by the Applicant and implemented where possible/appropriate in the context of the turbine models selected'. Given the high number of consented and proposed turbines in this part of NW Skye and associated uncertainty regarding the risks to bats we recommend that feathering when idling should be applied across the site.

- 4.60 NatureScot's comments are noted. The guidance is ambiguous when it comes to interpretation of the assessment of project size; i.e. the options are 10-40 turbines AND 50-100m in height, or >40 turbines AND over 100m in height. There is no classification option for a smaller number of large turbines and vice versa. If basing the assessment on turbine height alone, it is considered that there will be very few (if any) new commercial-scale wind farms that will fall beneath the threshold of being considered a 'large' project, and defining them all as large may in some cases overstate the risk, and make it difficult to distinguish between different scales of wind farm in terms of their risks to bats related to the number of turbines.
- 4.61 However, it is acknowledged that where such ambiguity exists the more precautionary approach would be to classify the Proposed Development as large for the Stage 1 assessment. Given the low absolute numbers of bat passes recorded, the project location and the habitats present in the area proposed for turbine placement, it is not considered that classification of the Proposed Development as a large scheme would change the outcome of the impact assessment so as to change the predicted significance of effects from not significant to significant. This is particularly so in the context of the worst-case scenario bat stand-off distance which is embedded in scheme design, and which will be included in the CEMP and applied to any turbine micro-siting (overseen by a qualified Environmental Manager) and maintained for the lifetime of the development. The predicted absence of significant effects notwithstanding, the Applicant confirms that the turbine model chosen will have a blade pitch control system which can be automated using SCADA data, to allow feathering when idling, in accordance with guidance.



5 THE HIGHLAND COUNCIL

5.1 Following The Highland Council's decision to **Raise an Objection** to the Section 36 Application for consent for the Proposed Development, the THC's Report of Handling was presented to the North Area Planning Committee (NPAC) at its meeting held on 7 August 2024. Members agreed to uphold the objection decision, and to amend the reasons for objection as listed in the objection letter dated 14 August 2024. Reasons for objection 1 and 2, as amended, have been addressed via the preceding sections of this report.

National Priority Peatland Habitats

Mitigation Hierarchy

Reason for Objection 1

1. The application does not accord with the provisions of Section 36 of the Electricity Act 1989 by virtue of not demonstrating sufficient regard to the desirability of, and failing to reasonably mitigate effects detrimental to, conserving flora and physiographical features of special interest by virtue of failing to demonstrate that the mitigation hierarchy has been adequately applied in respect of national priority peatland habitats and therefore does not accord with the provisions NPF 4 Policy 5a) and HwLDP Policies 67 (Renewable Energy Developments), 28 (Sustainable Design) and 55 (Soils).

Response

- 5.3 To ensure the mitigation hierarchy has been adequately applied for the Proposed Development, in respect of national priority peatland habitats to accord with the relevant national and local policies, the design amendments listed in **Section 3** of this report form part of the Proposed Development. Following recommendations and advice from SEPA via the post-submission consultation letter and correspondence, design amendments avoid constraints associated with hydrological features and priority peatland habitats, as far as practicable.
- The revised design layout, as presented in **Appendix 1**, in conjunction with the revised outline HMP, presented in **Appendix 2**, demonstrate that the mitigation hierarchy has been adopted and that the Proposed Development adequately avoids, mitigates, and compensates for anticipated impacts.

Compensation for Habitat Loses

Reason for Objection 2

2. The application does not accord with the provisions of Section 36 of the Electricity Act 1989 by virtue of not demonstrating sufficient regard to the desirability of, and failing to reasonably mitigate effects detrimental to, conserving flora and physiographical features of special interest by virtue of failing to demonstrate sufficient mitigation and enhancement measures to compensate for priority peatland habitat losses such that the



proposal does not accord with NPF 4 Policy 3b), HwLDP Policies 67 (Renewable Energy Developments), Policy 60 (Other Important Habitats), and 28 (Sustainable Design).

- Additional target areas suitable for restoration and enhancement have been incorporated in a revised outline HMP, which is provided in **Appendix 2**. The additional areas would accommodate the reinstatement of excavated peat on Site, in addition to rewetting of currently degraded and drained areas of peatland habitat, as mitigation, and contribute to the enhancement of biodiversity via the provision riparian woodland planting.
- 5.7 In line with NPF 4, Policy 3b, enhancement measures being proposed for the Proposed Development would provide nature connectivity networks between disconnected habitats, leaving impacted areas in a better state prior to intervention. Riparian woodland planting would increase habitat heterogeneity, diversity and connectivity locally, and provide foraging, commuting and shelter habitat for a range of protected species known to be present in the Site and/or the wider area, including otter, bats and fish species. Riparian planting also has a role in nature-based solutions to water and flood risk management, and in carbon capture.
- 5.8 The Applicant is committed to delivery of appropriate compensation and enhancement, which accords with up-to-date guidance, during future ongoing development of the detailed HMP.



6 CONCLUDING REMARKS

Based on the responses submitted to the application by the consultees identified above, provided below is a summary of the key points included in this report in relation to the particular themes and topics addressed in the EIA.

Planning Policy Context

The Proposed Development requires to be considered against the applicable planning and energy policy framework. The Proposed development is considered to be in accordance with the relevant Development Plan policy as set out in NPF4 and the Highland wide LDP. The Proposed Development is considered to make a valuable contribution to meeting the national targets on electricity generation from renewable sources and meeting net zero. The additional information contained within this report, does not change the overall planning assessment contained within the Planning Statement.

Landscape and Visual Assessment

6.3 The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.

Ecology

- The information in this report updates and provides further context to habitat losses, based on updated infrastructure design and detail in respect to engineering solutions. The updated analysis has not changed the impact assessment and conclusions contained in the EIA Report for the Proposed Development (June 2023) nor does it require any additional mitigation beyond that contained in the EIA Report, though it will be factored into proposed extents for habitat restoration in relation to peatland habitats during ongoing development of the HMP post-consent.
- 6.5 Further search areas for peatland restoration within the Site have been identified and are provided, in combination with a commitment by the Applicant to explore options for off-Site delivery where appropriate.
- 6.6 In respect to other important ecological features, the information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development or require additional mitigation beyond which the EIA Report states.

Ornithology

6.7 The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.



Hydrology, Geology, Hydrogeology, and Peat

- 6.8 Additional peat depth data have been collected to inform this report, leading to updates to the Peat Slide Risk Assessment and Peat Management Plan technical appendices. Some of the updated design elements have reduced the identified impacts on peat. There are no changes to the Peat Slide Risk Assessment findings.
- 6.9 The updated analysis has not changed the impact assessment and conclusions contained in the EIA Report for the Proposed Development (June 2023) nor does it require any additional mitigation beyond that contained in the EIA Report.

Archaeology and Cultural Heritage

6.10 The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.

Traffic and Transport

An assessment of a worst-case scenario has been included in the EIA Report for traffic and transport effects. The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.

Noise

6.12 The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.

Socio-economics, Land Use, Recreation, and Tourism

6.13 The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.

Aviation

6.14 The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.

Climate Change Mitigation

6.15 The modification of the access tracks proposed in this report reduces the potential volume of peat that would be disturbed by the Proposed Development. This would slightly reduce the carbon payback times recorded in Chapter 15 Climate Change of the EIA Report (June 2023). However, the impacts reported within the chapter remain the same.



Other Issues

6.16 The information contained in this report does not change in the impact assessment and conclusions in the EIA Report for the Proposed Development (June 2023) or require additional mitigation beyond which the EIA Report states.

Schedule of Mitigation

6.17 The environmental mitigation included in Chapter 17 of the EIA Report (June 2023) would continue to be committed to by the Applicant.



APPENDIX 1 FIGURES

Figure 1.1: Revised Site Layout

Figure 2.1: Peat Depth Mapping

Figure 3.1: Watercourse Mapping

Figure 3.2: Revised Track Options for Accessing T05



Figure 1.1: Revised Site Layout



Figure 2.1: Peat Depth Mapping



Figure 3.1: Watercourse Mapping



Figure 3.2: Revised Track Options for Accessing T05



APPENDIX 2 REVISED OUTLINE HABITAT MANAGEMENT PLAN AREAS

Figure 4.1: Revised Habitat Management Plan (Aerial)

Figure 4.2: Revised Habitat Management Plan (OS)



Figure 4.1: Revised Habitat Management Plan (Aerial)



Figure 4.2: Revised Habitat Management Plan (OS)



APPENDIX 3 REVISED PEAT SLIDE RISK ASSESSMENT FIGURES

Figure 9.1.1: Slope

Figure 9.1.2: Geomorphology

Figure 9.1.3a: Peat Depth Overview

Figure 9.1.3b: Peat Depth Figure 9.1.4: Likelihood Rating Figure 9.1.5: Consequence Rating Figure 9.1.6: Risk Ranking



Figure 9.1.1: Slope



Figure 9.1.2: Geomorphology



Figure 9.1.3a: Peat Depth Overview



Figure 9.1.3b: Peat Depth



Figure 9.1.4: Likelihood Rating



Figure 9.1.5: Consequence Rating



Figure 9.1.6: Risk Ranking