

Appendix 9F

Vegetation Sensitivity and Approach to Avoidance of Blanket Bog



1. Methodology

1.1 Approach of Assessment

1.1.1 The following assessment outlines how the design of the Proposed Development has sought to avoid or reduce impacts to very good quality blanket bog habitat.

1.1.2 Sensitive habitats¹ were mapped whilst carrying out National Vegetation Classification (NVC) surveys in 2010/11, where areas were mapped separately with constituent NVC communities and percentage cover values (**Appendix 9B: Phase 1 Habitat and NVC Survey**). Vegetation parcels were identified through analysis of satellite imagery and ground-truthing in the field.

The Development Site was sub-classified into specific areas on a traffic light scale (see **Table 9F-1**); and a sensitivities map (**Figure 9F.1**) was prepared to inform the layout of the Proposed Development with care to minimise habitats with the highest sensitivity.

- Areas containing higher percentage cover of M17a/M1 communities were classed as highly sensitive;
- Areas containing good quality blanket bog but largely drier (M17b type) with lower percentage cover of more sensitive M17a/M1 communities were classed as moderately sensitive;
- Areas containing poorer blanket bog (either modified or dried out through drainage or planting, were classed as lower sensitivity.

Table 9F-1 Vegetation Sensitivity Classification

| Sensitivity sub-classification | Activity level | Phase 1 habitat type | NVC communities | Colour code classification on map |
|--------------------------------|---|--------------------------------------|------------------------------------|-----------------------------------|
| Low | Areas of modified blanket bog where it has previously been drained and planted with conifers, usually with a very high <i>Molinia caerulea</i> content. Also included are areas of shallower soil heath and grassland that have been subject to previous grazing pressures and also some tracts of blander blanket bog with a naturally high <i>M. caerulea</i> content. These are the preferred areas for the siting of wind farm infrastructure where impacts would be of some less significance than on areas of good condition blanket bog. | Wet modified bog Marshy grassland | M17a,b M17mod M25a,b | Green |
| Moderate | Areas with a high concentration of peat cuttings. These can be either small scale, or industrial-scale in the case of the former works to the east of the survey area. Also preferred areas of siting of wind farm infrastructure where impacts would be of lesser significance | Wet modified bog Blanket bog | M17a,b M17mod M19a M25a,b | Yellow |

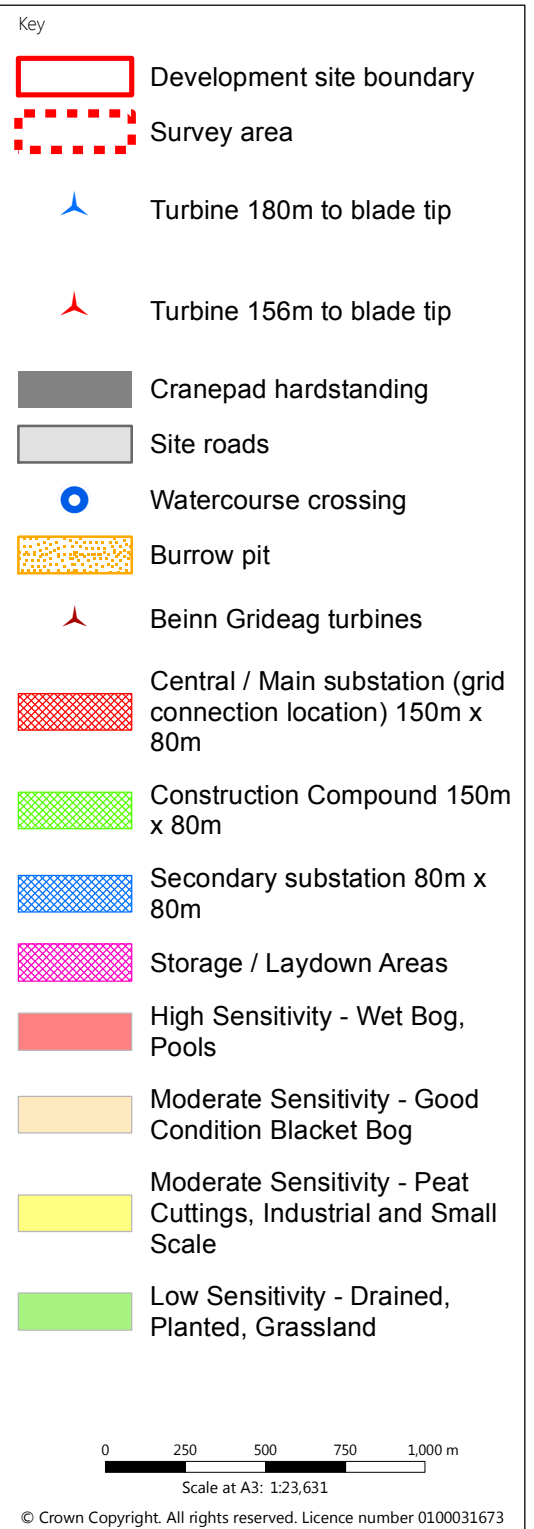
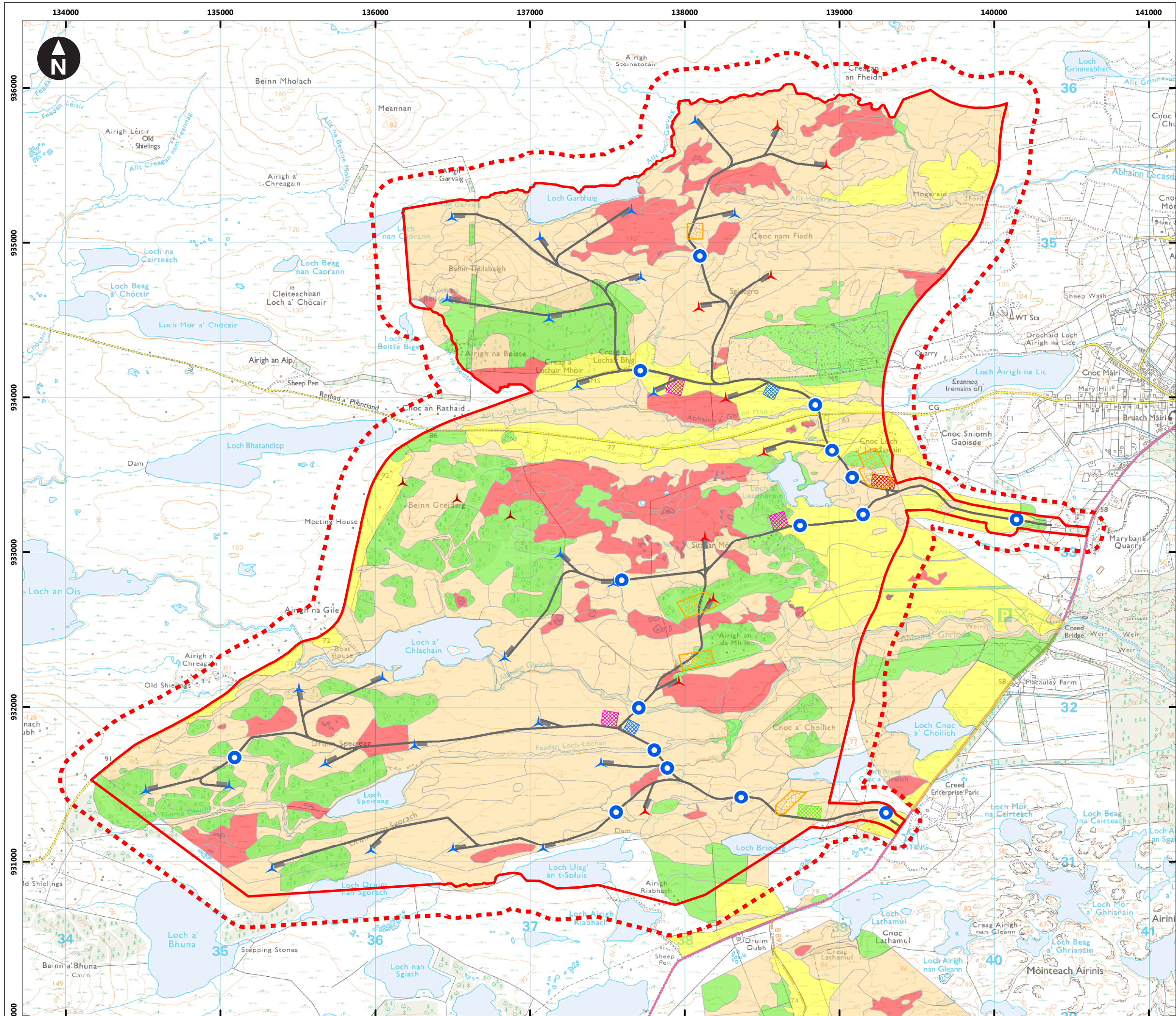
¹ GWDTEs are present across much of the site. An assessment of the hydrological conditions is provided in **Chapter 11: Geology, Hydrology and Hydrogeology**.

| Sensitivity sub-classification | Activity level | Phase 1 habitat type | NVC communities | Colour code classification on map |
|--------------------------------|---|----------------------|--|-----------------------------------|
| | Good condition, predominantly M17b, blanket bog, with or without re-vegetating gully networks. Includes areas with M1 and M17a but usually forming roughly 10% or less of the overall mosaic. Includes more extensive tracts of uniform M17a which does not have a significant amount of hollow/pool habitat and often has a high <i>M. caerulea</i> content. | Blanket bog | (<10%) M1 M3 M17a M17b M19a | Amber |
| High | Applies to areas of blanket bog with a higher proportion of wet hollows and pools, covering more than 10% and sometimes visible on aerial imagery. To be avoided where possible and any impacts here would be of higher significance. | Blanket bog | (>10%) M1 M17a M17b | Red |

Adapted from Stornoway Windfarm ES 2012.

1.2 Habitat Loss Calculations

- 1.2.1 An assessment of land take, comprising direct loss and temporary disturbance of Phase 1 habitats and the vegetation sensitivity classifications presented here are considered in **Appendix 9G: Habitat Loss Calculations**.



Client

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Stornoway Wind Farm
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Chapter 9 Biodiversity
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Figure 9F.1
Sensitivity of vegetation communities

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wood.