

Corriegarth 2 Wind Farm

Environmental Impact Assessment Report

Volume 2b - LVIA Figures

January 2021



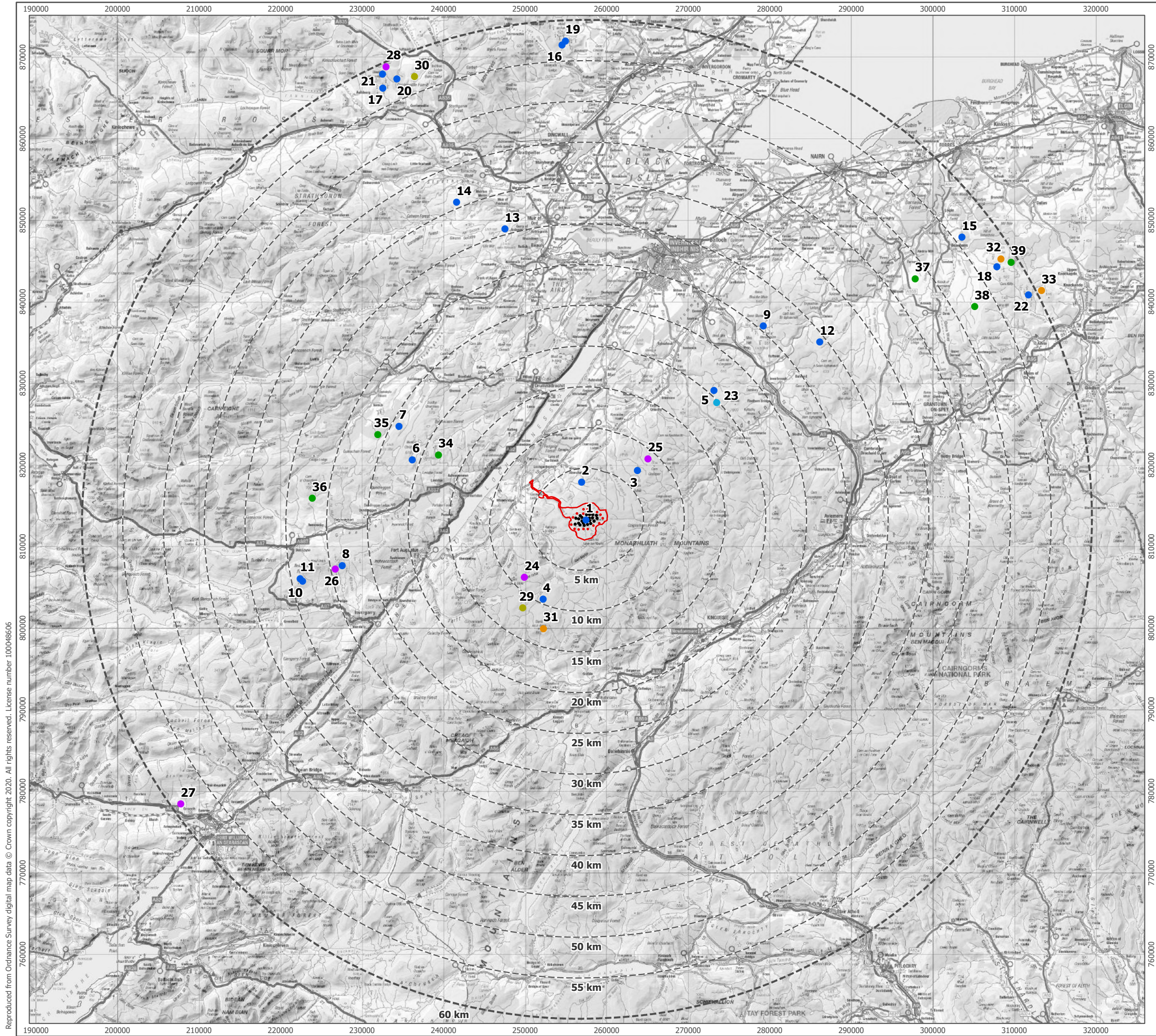
CORRIEGARTH 2 WIND FARM

EIA Report – Volume 2b – LVIA Figures

Chapter 6 – Landscape and Visual Amenity

Figure 6.1	Landscape and Visual Impact Assessment Study Area
Figure 6.2	Comparative Blade Tip Height (120 m & 149.9 m) Zone of Theoretical Visibility (ZTV) Corriegarth and Corriegarth 2
Figure 6.3a	Blade Tip Height (149.9 m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations
Figure 6.3b	Blade Tip Height (149.9 m) Zone of Theoretical Visibility (ZTV) and Visual Receptors
Figure 6.3c	Blade Tip Height (149.9 m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations
Figure 6.4a	Hub Height (83.4 m) Zone of Theoretical Visibility (ZTV) and Viewpoint Locations
Figure 6.4b	Hub Height (83.4 m) Zone of Theoretical Visibility (ZTV) and Visual Receptors
Figure 6.5	Blade Tip Height (149.9 m) and Hub Height (83.4 m) Comparative Zone of Theoretical Visibility (ZTV) and Viewpoint Locations
Figure 6.6a	Landscape Character Types
Figure 6.6b	Landscape Character Types with Blade Tip Height (149.9 m) Zone of Theoretical Visibility (ZTV)
Figure 6.7a	Designated Landscapes and Wild Land Areas
Figure 6.7b	Designated Landscapes and Wild Land Areas with Blade Tip Height (149.9 m) Zone of Theoretical Visibility (ZTV)
Figure 6.8a	Other Wind Farm Developments - 60 km
Figure 6.8b	Other Wind Farm Developments - 40 km
Figure 6.9	Cumulative Zone of Theoretical Visibility (CZTV) - Operational Wind Farms and Corriegarth 2
Figure 6.10	Cumulative Zone of Theoretical Visibility (CZTV) - Operational and Consented Wind Farms and Corriegarth 2
Figure 6.11	Cumulative Zone of Theoretical Visibility (CZTV) - Operational, Consented and Proposed Wind Farms and Corriegarth 2
Figure 6.12	Combined ZTV - Corriegarth 2, Corriegarth, Dunmaglass and Aberarder
Figure 6.13	Combined ZTV - Corriegarth 2, Corriegarth, Stronelairg and Dell
Figure 6.14	Combined ZTV - Corriegarth 2, Corriegarth, Farr and Kyllachy
Figure 6.15	Combined ZTV - Corriegarth 2, Corriegarth, Beinneun, Beinneun Extension, Millennium and Millennium South
Figure 6.16	Combined ZTV - Corriegarth 2, Corriegarth and Bhlaraidh
Figure 6.17	Wild Land Area 20 and Cairngorms National Park - with Blade Tip Height (149.9 m) Zone of Theoretical Visibility
Figure 6.18	Wild Land Area 20 and Cairngorms National Park - with Comparative ZTV Corriegarth and Corriegarth 2
Figure 6.19	Wild Land Area 20 and Cairngorms National Park - with CZTV of Operational Wind Farms and Corriegarth 2
Figure 6.20	Wild Land Area 20 and Cairngorms National Park - with CZTV of Operational and Consented Wind Farms and Corriegarth 2





Reproduced from Ordnance Survey digital map data © Crown copyright 2020. All rights reserved. License number 100048606



Development boundary

Existing Corriegarth turbine location

Corriegarth 2 turbine location

5 km intervals from outermost turbines

60 km from outermost turbines

Wind farms (by status)

Operational

Under Construction

Consented

Application Submitted

Appeal/Public Inquiry

Design/Scoping

Operational

1: Corriegarth

2: Easter Aberchader

3: Dunmaglass

4: Stronelairg

5: Farr

6: Bhlaraidh

7: Corrimony

8: Millennium

9: Moy

10: Beinneun Extension

12: Tom Nan Clach

11: Beinneun

13: Auchmore

14: Fairburn

15: Hill of Glaschyle

16: Novar Phase2

17: Lochluichart

18: Berry Burn

19: Novar Phase1

20: Corriemoillie

21: Lochluichart Extension

22: Pauls Hill

Under Construction

23: Kyllachy

Consented

24: Dell

25: Aberarder

26: Millennium South

27: Druim Fada

28: Lochluichart Extension II

Application Submitted

29: Cloiche

30: Kirkan

Appeal/Pubic Inquiry

31: Glenshero

32: Clash Gour

33: Pauls Hill 2

Design/Scoping

34: Bhlaraidh Extension

35: Fasnakyle

36: Tomchrasky

37: Cairn Duhie

38: Ourack

39: Berry Burn Extension

1:450,000 Scale @ A3

08.517

km



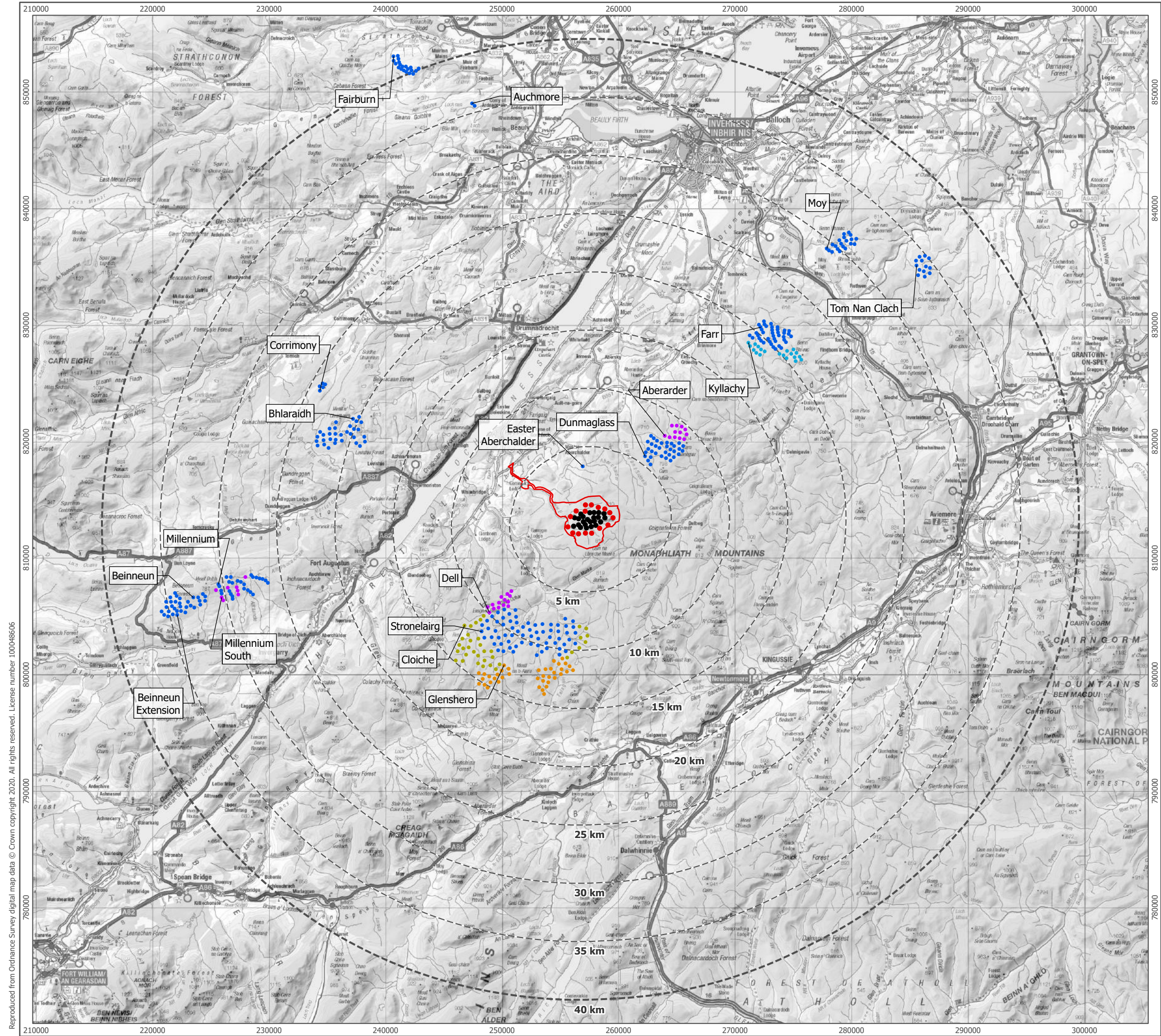
Produced By: JN	Ref: 10792-6.8a
Checked By: DW	Date: 11/09/2020

Other Wind Farm Developments - 60km

Figure 6.8a

Corriegarth 2 Wind Farm EIA Report

T:\10710792_CorriegarthWFExtLVIA\GIS\PRO\Corriegarth2_LVIA_EIA_202008\LUC_Corriegarth2_LVIA_EIA_A3L\LUC_Corriegarth2_LVIA_EIA_A3L.aprx[FIG6-8a_10792_r1_LVIA_CML_WF_60km_A3L



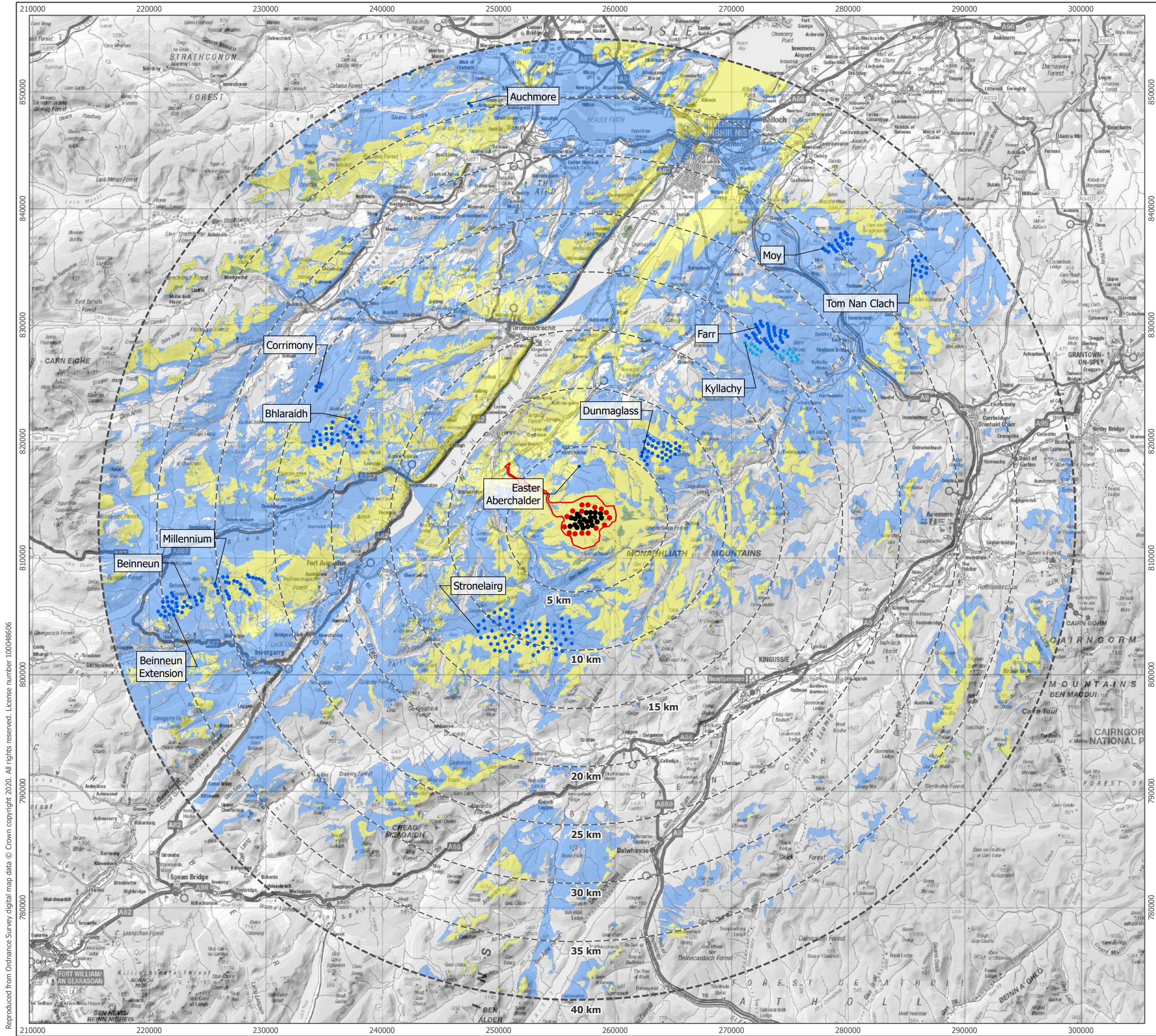
- Development boundary
- Existing Corriegarth turbine location
 - Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)**
- Operational
 - Under Construction
 - Consented
 - Application Submitted
 - Appeal/Public Inquiry
 - Design/Scoping



Produced By: JN	Ref: 10792-6.8b
Checked By: DW	Date: 11/09/2020

**Other Wind Farm
Developments - 40km**
Figure 6.8b

**Corriegarth 2 Wind Farm
EIA Report**



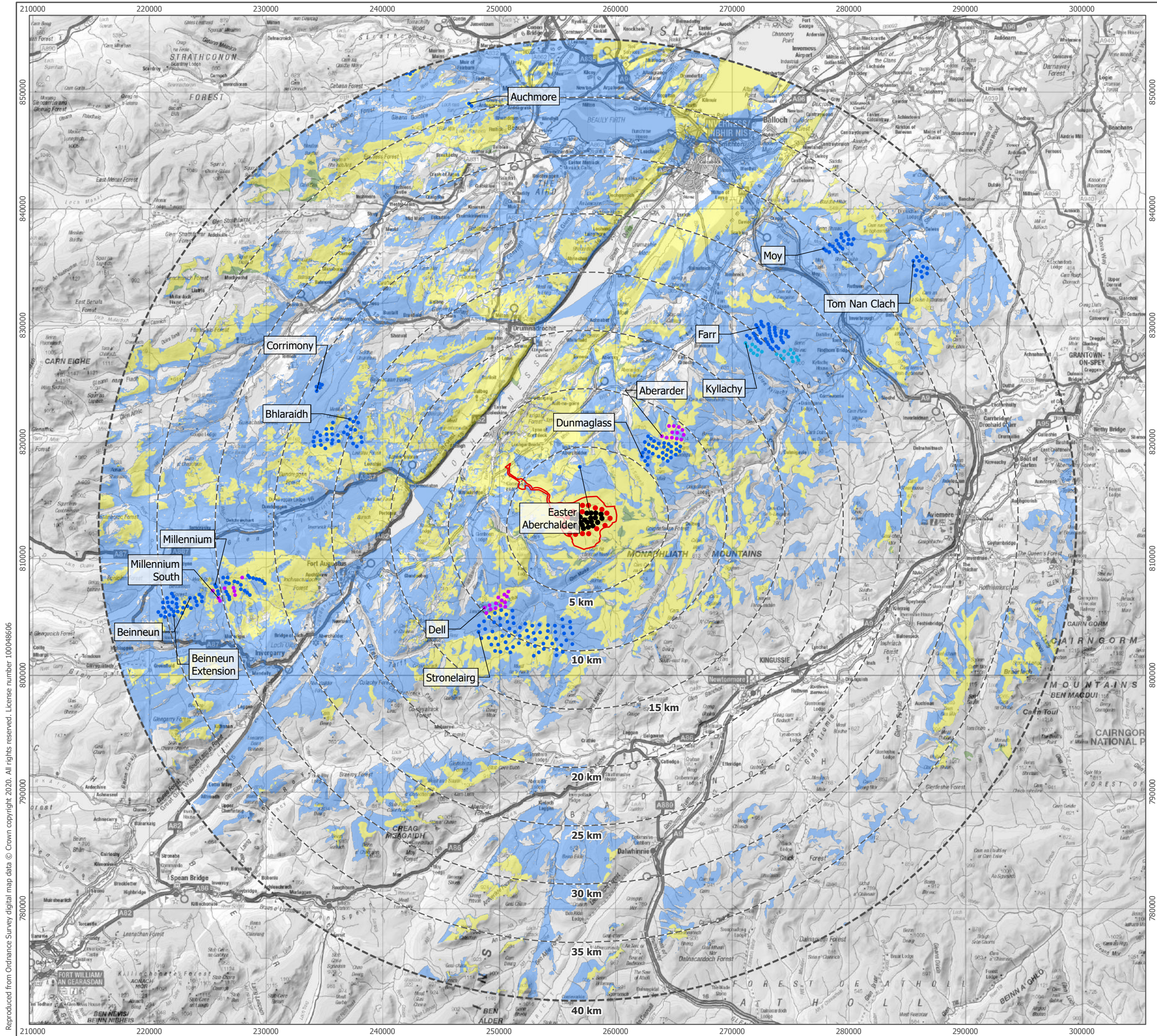
- Development boundary
- Existing Corriegarth turbine location
- Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)
 - Operational
 - Under Construction
- Cumulative ZTV - Operational Wind Farms and Corriegarth 2
 - Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible

Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

1:315,000 Scale @ A3	
Produced By: JN	Ref: 10792-6.9
Checked By: DW	Date: 11/09/2020

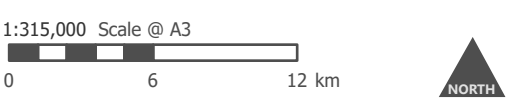
Cumulative Zone of Theoretical Visibility (CZTV) - Operational Wind Farms and Corriegarth 2
Figure 6.9

Corriegarth 2 Wind Farm EIA Report



- Development boundary
- Existing Corriegarth turbine location
- Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)**
- Operational
 - Under Construction
 - Consented
- Cumulative ZTV - Operational and Consented Wind Farms and Corriegarth 2**
- Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible

Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

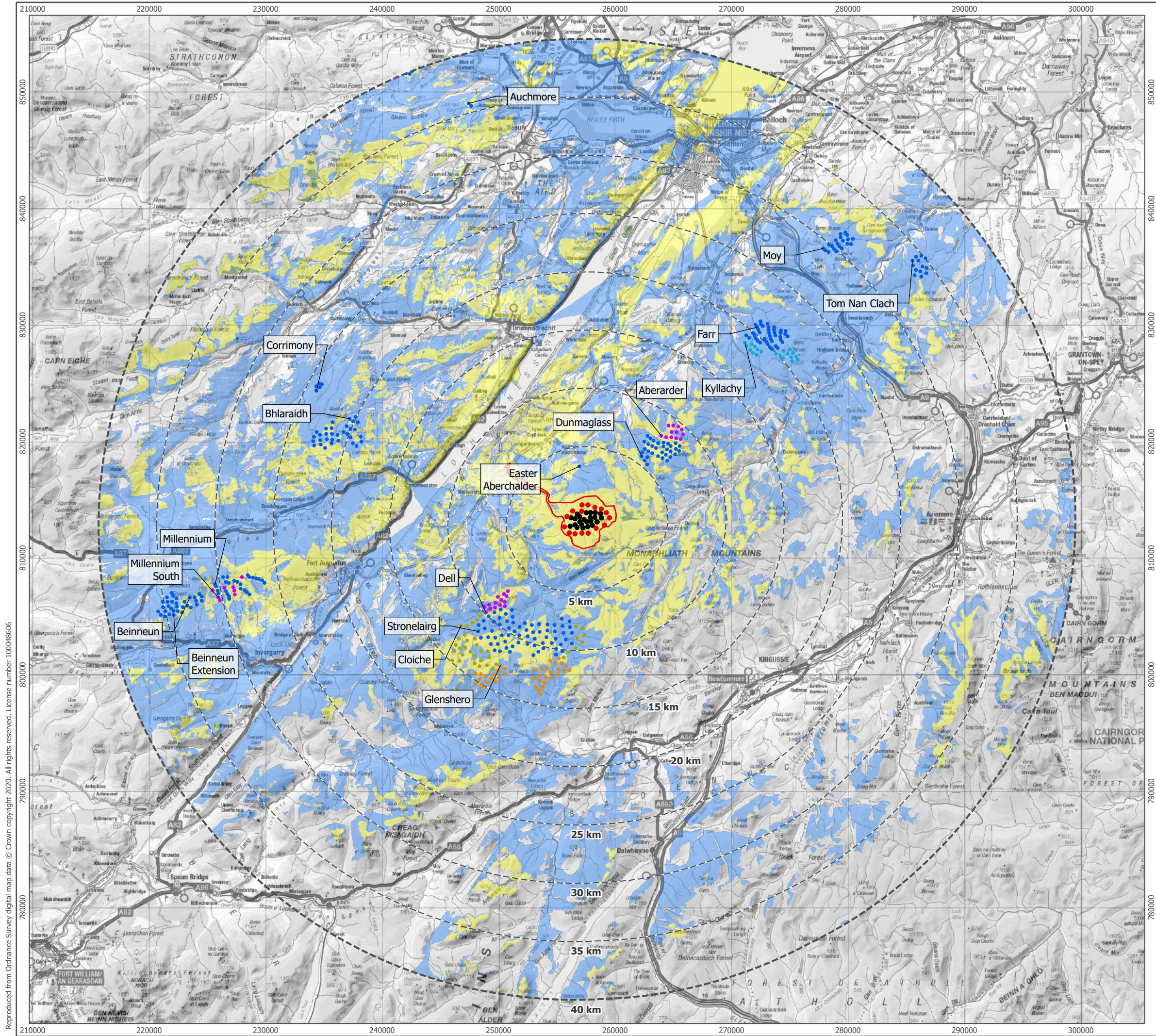


Produced By: JN	Ref: 10792-6.10
Checked By: DW	Date: 11/09/2020

Cumulative Zone of Theoretical Visibility (CZTV) - Operational and Consented Wind Farms and Corriegarth 2

Figure 6.10

Corriegarth 2 Wind Farm EIA Report

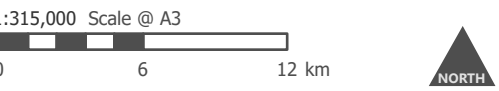


- Development boundary
- Existing Corriegarth turbine location
 - Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)**
- Operational
 - Under Construction
 - Consented
 - Application Submitted
 - Appeal/Public Inquiry

Cumulative ZTV - Operational, Consented and Proposed Wind Farms and Corriegarth 2

- Other wind farms (not Corriegarth 2) visible
- Only Corriegarth 2 visible
- Corriegarth 2 and other wind farms visible

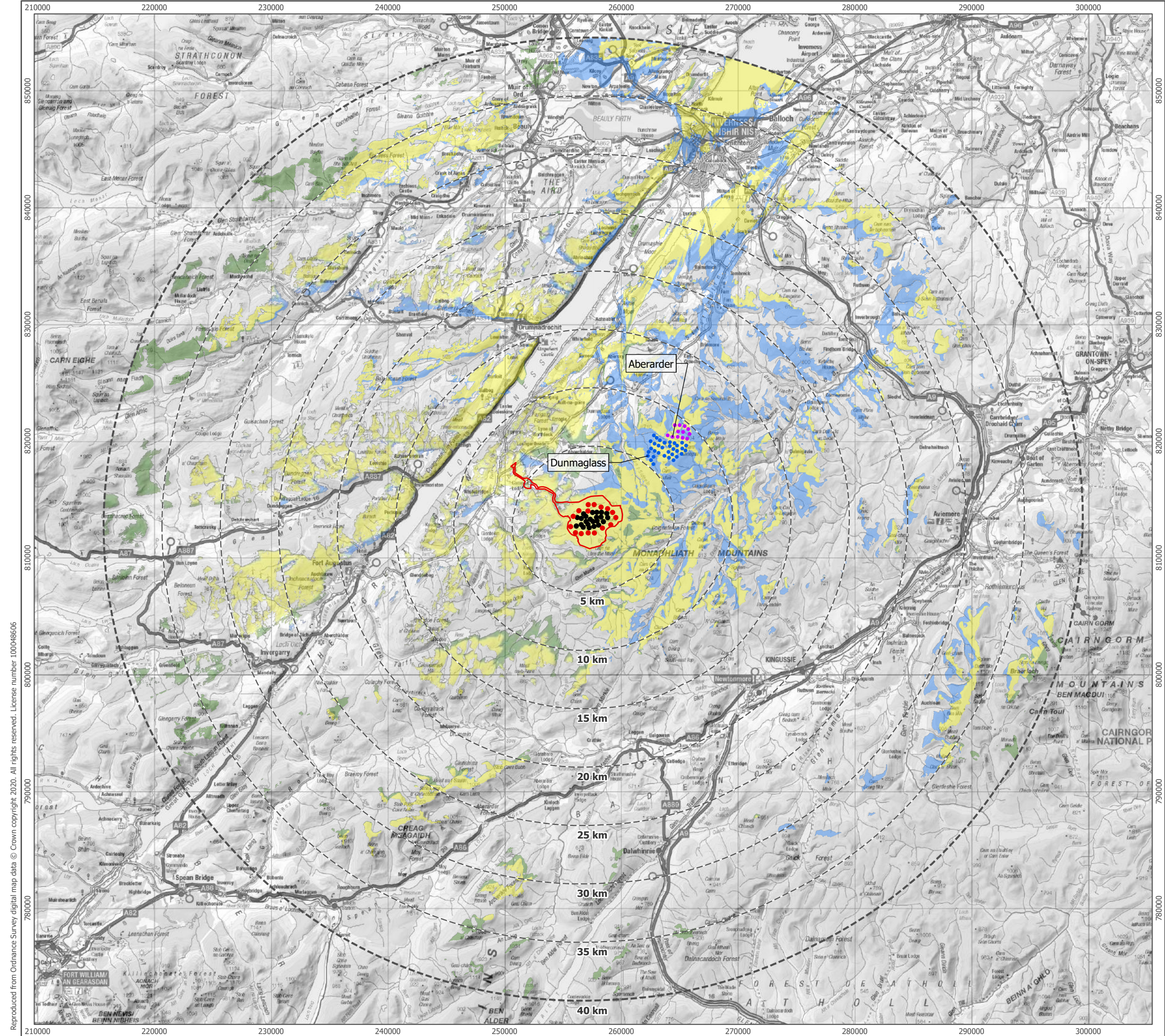
Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.



Produced By: JN	Ref: 10792-6.11
Checked By: DW	Date: 11/09/2020

Cumulative Zone of Theoretical Visibility (CZTV) - Operational, Consented and Proposed Wind Farms and Corriegarth 2
Figure 6.11

Corriegarth 2 Wind Farm EIA Report



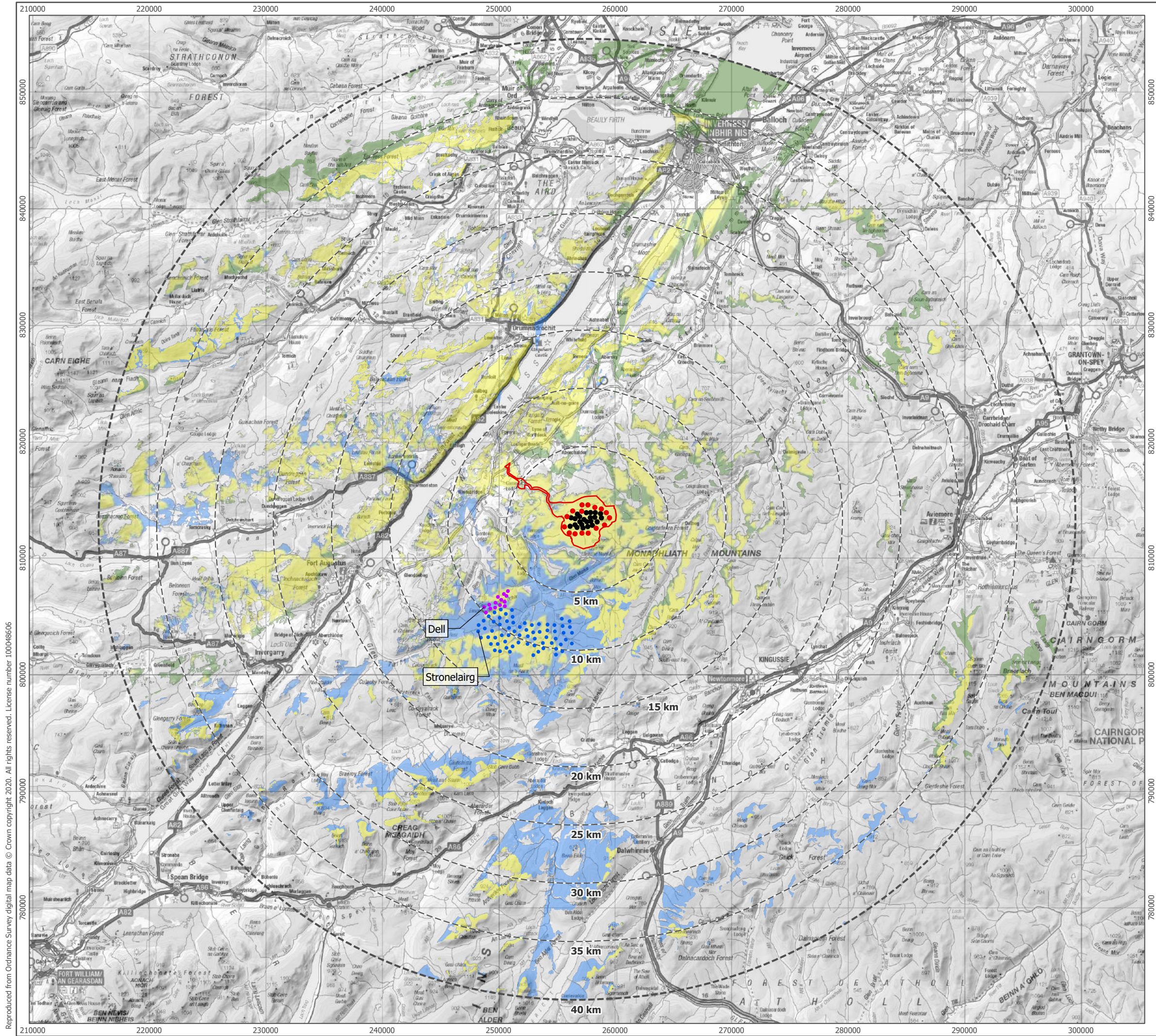
- Development boundary
- Existing Corriegarth turbine location
- Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)**
 - Operational
 - Consented
- Combined ZTV - Corriegarth 2, Corriegarth, Dunmaglass and Aberarder**
 - Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible

Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

1:315,000 Scale @ A3	
0612 km NORTH	
Produced By: JN	Ref: 10792-6.12
Checked By: DW	Date: 11/09/2020

Combined ZTV - Corriegarth 2, Corriegarth, Dunmaglass and Aberarder
Figure 6.12

Corriegarth 2 Wind Farm EIA Report



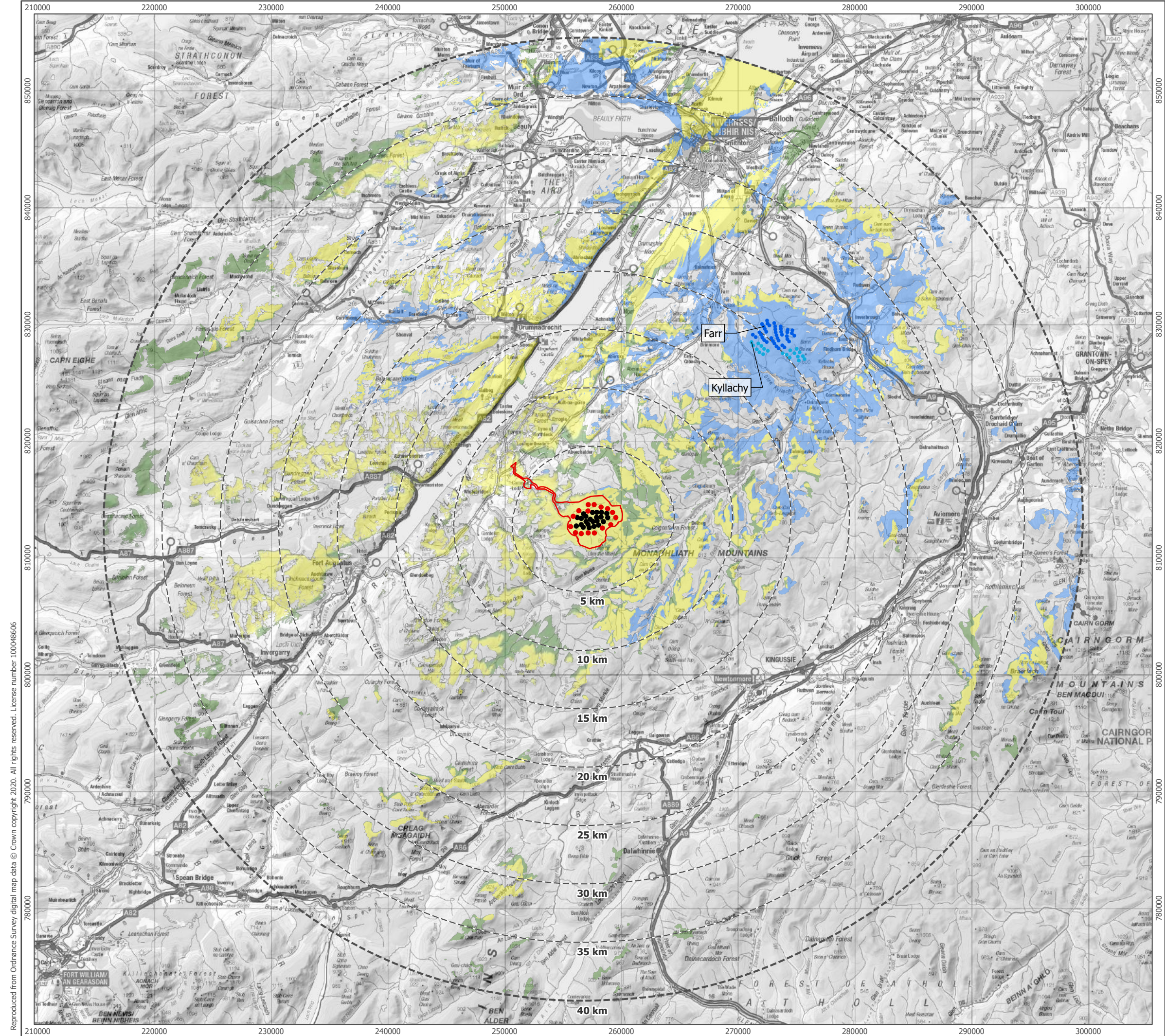
- Development boundary
- Existing Corriegarth turbine location
- Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)**
 - Operational
 - Consented
- Combined ZTV - Corriegarth 2, Corriegarth, Stronelaig and Dell**
 - Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible

Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

1:315,000 Scale @ A3	
Produced By: JN	Ref: 10792-6.13
Checked By: DW	Date: 11/09/2020

Combined ZTV - Corriegarth 2, Corriegarth, Stronelaig and Dell
Figure 6.13

Corriegarth 2 Wind Farm EIA Report



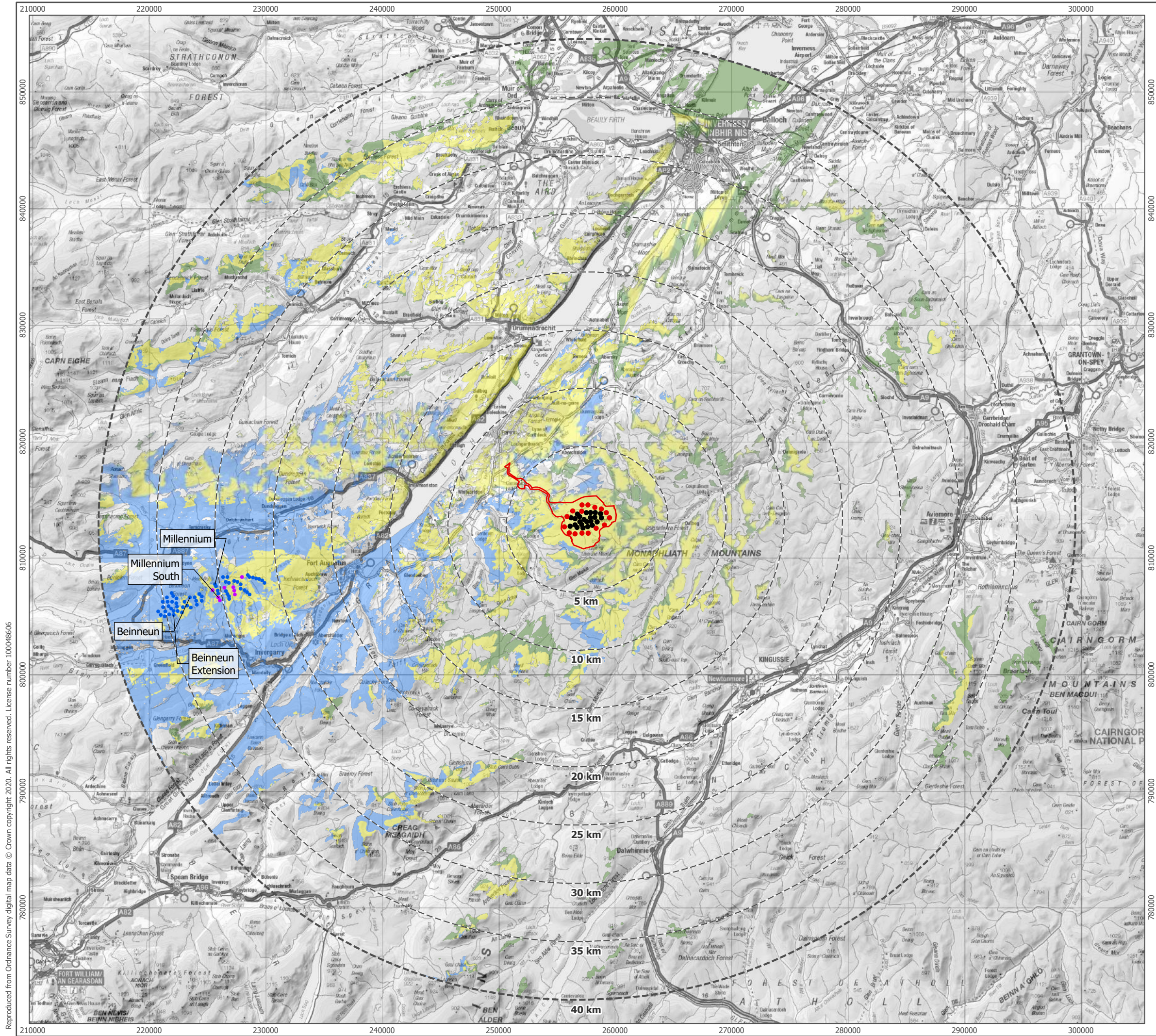
- Development boundary
- Existing Corriegarth turbine location
 - Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)**
- Operational
 - Under Construction
- Combined ZTV - Corriegarth 2, Corriegarth, Farr and Kyllachy**
- Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible

Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

1:315,000 Scale @ A3	
Produced By: JN	Ref: 10792-6.14
Checked By: DW	Date: 11/09/2020

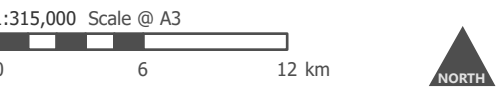
Combined ZTV - Corriegarth 2, Corriegarth, Farr and Kyllachy
Figure 6.14

Corriegarth 2 Wind Farm
EIA Report



- Development boundary
- Existing Corriegarth turbine location
- Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)
 - Operational
 - Consented
- Combined ZTV - Corriegarth 2, Corriegarth, Beinneun, Beinneun Extension, Millennium and Millenium South
 - Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible

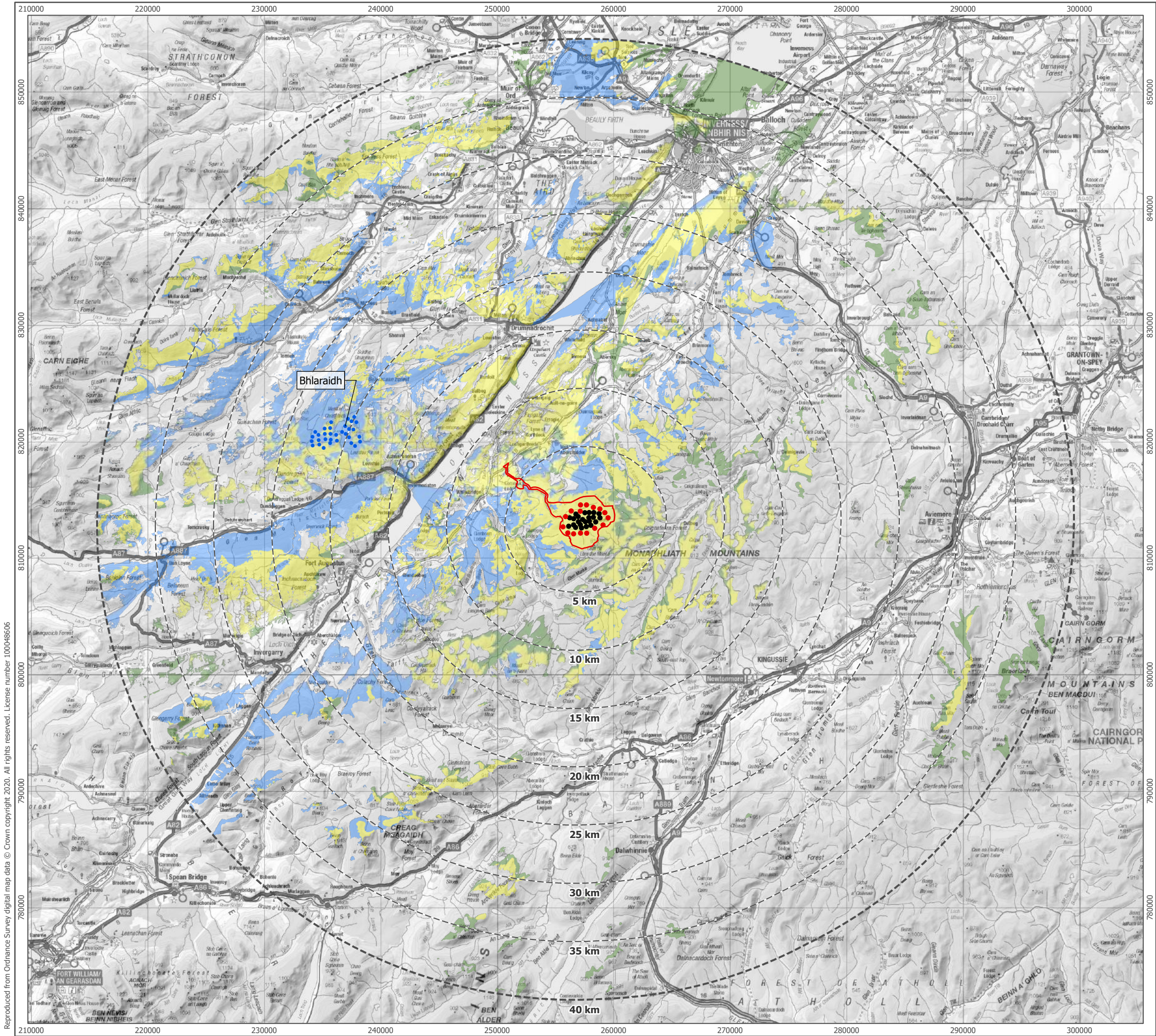
Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.



Produced By: JN	Ref: 10792-6.15
Checked By: DW	Date: 11/09/2020

Combined ZTV - Corriegarth 2, Corriegarth, Beinneun, Beinneun Extension, Millennium and Millenium South
Figure 6.15

Corriegarth 2 Wind Farm
EIA Report



- Development boundary
- Existing Corriegarth turbine location
- Corriegarth 2 turbine location
- 5 km intervals from outermost turbines
- 40 km from outermost turbines
- Wind farms (by status)
 - Operational
- Combined ZTV - Corriegarth 2, Corriegarth and Bhalraidh
 - Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible

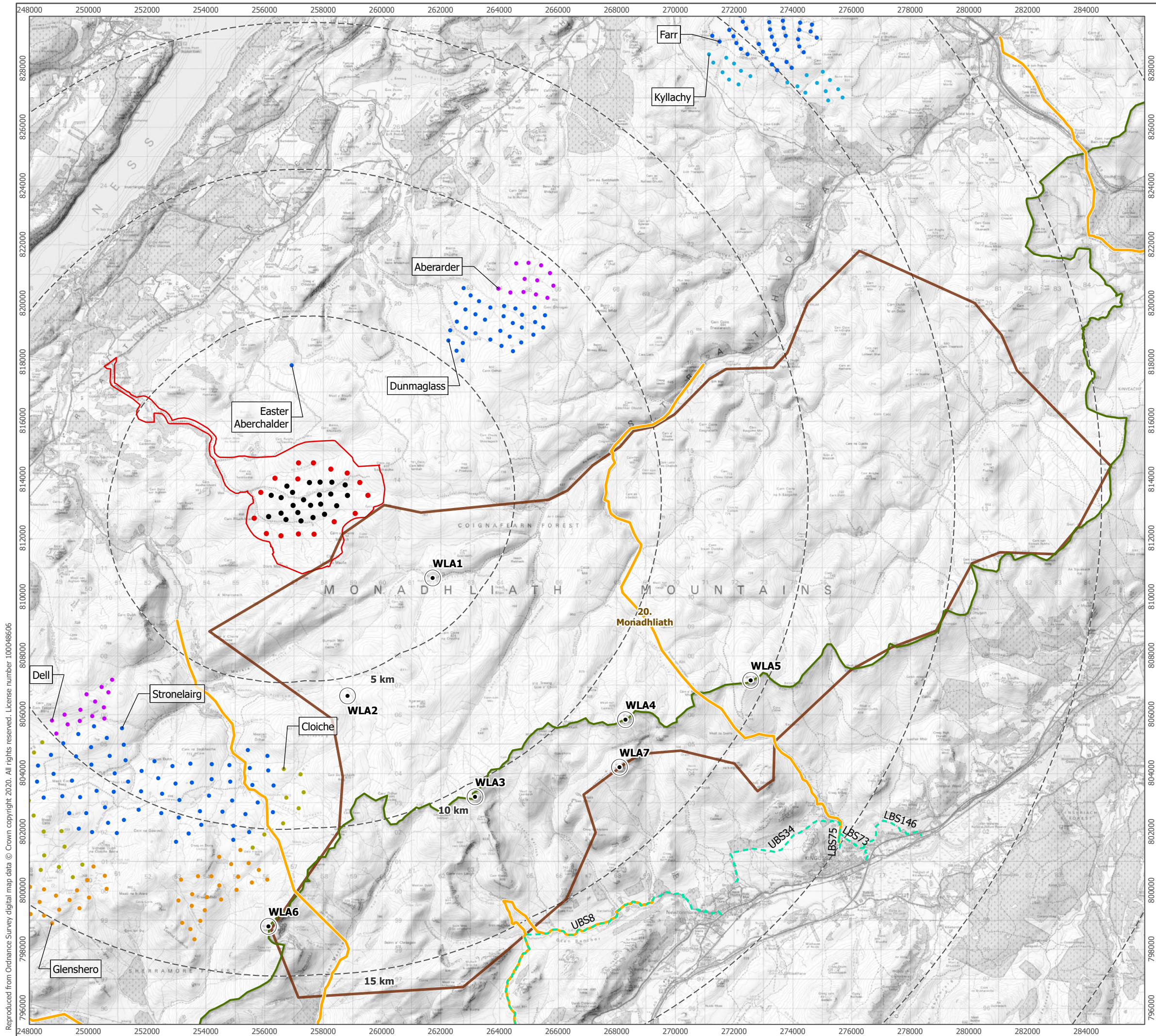
Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 50 height data (obtained from Ordnance Survey in July 2019). Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

1:315,000 Scale @ A3	
Produced By: JN	Ref: 10792-6.16
Checked By: DW	Date: 11/09/2020

Combined ZTV - Corriegarth 2, Corriegarth and Bhalraidh

Figure 6.16

Corriegarth 2 Wind Farm EIA Report



Reproduced from Ordnance Survey digital map data © Crown copyright 2020. All rights reserved. License number 100048606

T:\10710792_CorriegarthWFExtLVIA\GIS\PRO\Corriegarth2_LVIA_EIA_202008\LUC_Corriegarth2_LVIA_EIA_A3L\LUC_Corriegarth2_LVIA_EIA_A3L.aprx[FIG6-17_10792_r1_LVIA_WLA_ZTV_A3L

Development boundary

Corriegarth 2 turbine location

Existing Corriegarth turbine location

5 km intervals from outermost turbines

Wind farms (by status)

- Operational
- Under Construction
- Consented
- Application Submitted
- Appeal/Public Inquiry

Theoretical turbine visibility

- 1-4 Turbines are visible
- 5-8 Turbines are visible
- 9-12 Turbines are visible
- 13-16 Turbines are visible

Assessment Points

- WLA1: River Eskin Estate track
- WLA2: Allt Cam Ban
- WLA3: Carn Ban (AESLQ1)
- WLA4: Carn Sgùlain (AESLQ5)
- WLA5: Càrn an Fhriceadain (AESLQ2)
- WLA6: Geal Charn (AESLQ4)
- WLA7: A'Chailleach (AESLQ3)

Designated Landscapes and Wild Land Areas

- Cairngorms National Park
- Wild Land

Recreational Routes

- Core Path
- Heritage Paths (approximate routes informed by Scotways 'Heritage Paths of Scotland' Map)

The ZTV is calculated to turbine tip height (149.9m) from a viewing height of 2m above ground level. The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

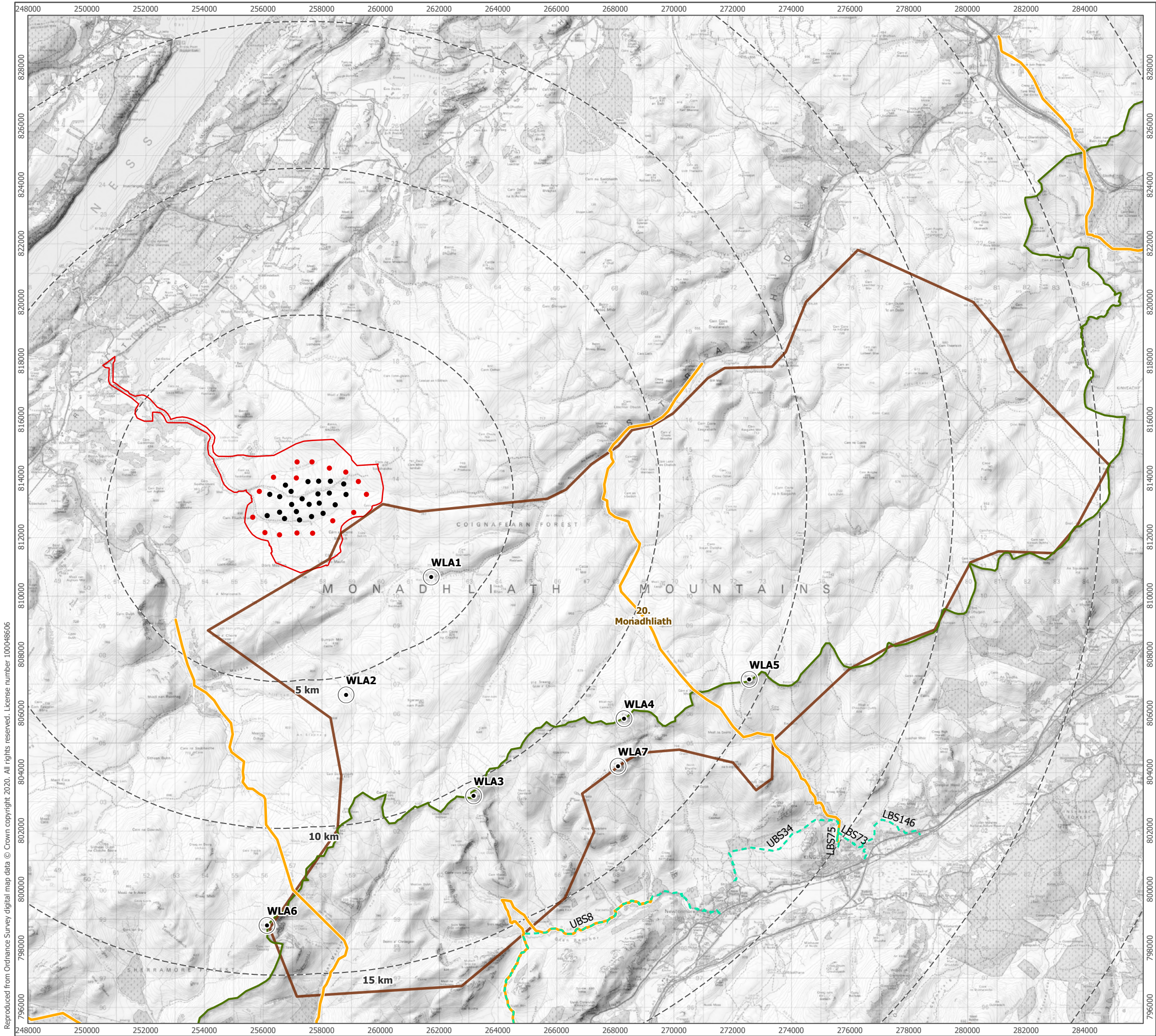
1:125,000 Scale @ A3

Produced By: JN	Ref: 10792-6.17
Checked By: DW	Date: 11/09/2020

Wild Land Area 20 and Cairngorms National Park - with Blade Tip Height (149.9 m) Zone of Theoretical Visibility

Figure 6.17

Corriegarth 2 Wind Farm EIA Report



BayWa r.e.



- Development boundary
- Corriegarth 2 turbine location
- Existing Corriegarth turbine location
- 5 km intervals from outermost turbines

Theoretical wind farm visibility

- Only Corriegarth is visible
- Only Corriegarth 2 is visible
- Both wind farms are visible

- Assessment Points

- WLA1: River Eskin Estate track
- WLA2: Allt Cam Ban
- WLA3: Carn Ban (AESLQ1)
- WLA4: Carn Sgulain (AESLQ5)
- WLA5: Càrn an Fhreachdain (AESLQ2)
- WLA6: Geal Charn (AESLQ4)
- WLA7: A'Chailleach (AESLQ3)

Designated Landscapes and Wild Land Areas

- Cairngorms National Park
- Wild Land

Recreational Routes

- Core Path
- Heritage Paths (approximate routes informed by Scotways 'Heritage Paths of Scotland' Map)

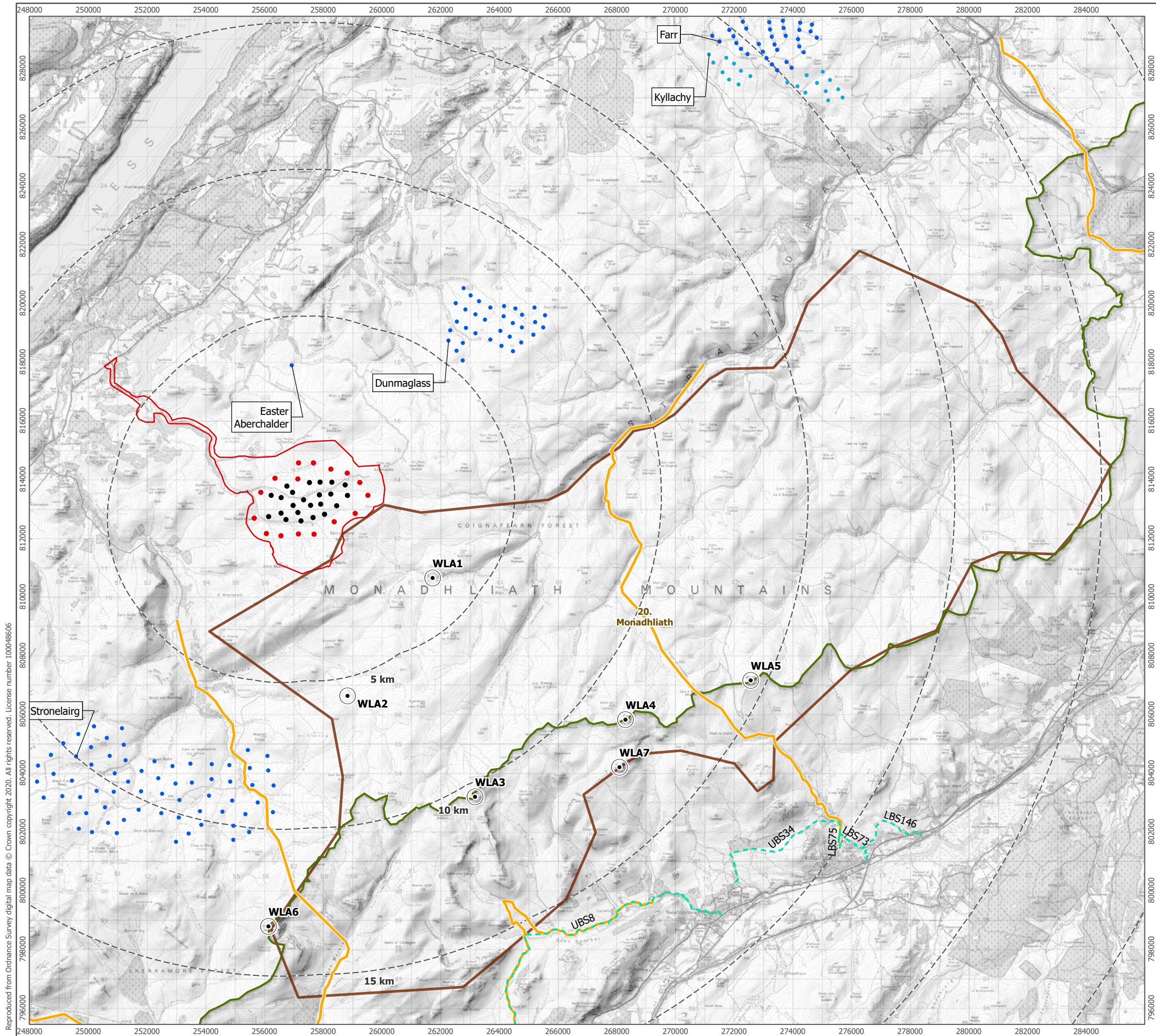
The ZTV illustrates the comparative extent of visibility of the existing Corriegarth wind farm (tip height 120m), Corriegarth 2 wind farm (tip height 149.9m) and where both are visible. Visibility is shown to a distance of 40km from the outermost turbines in all directions. The terrain model assumes bare ground and is derived from OS Terrain 5 height. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.

1:125,000 Scale @ A3
0 2.5 5 km
NORTH

Produced By: JN	Ref: 10792-Layout
Checked By: DW	Date: 11/09/2020

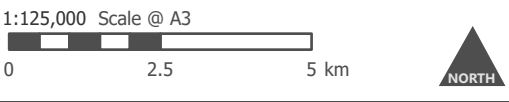
Wild Land Area 20 and Cairngorms National Park - with Comparative ZTV of Corriegarth and Corriegarth 2
Figure 6.18

Corriegarth 2 Wind Farm EIA Report



- Development boundary
- Corriegarth 2 turbine location
- Existing Corriegarth turbine location
- 5 km intervals from outermost turbines
- Wind farms (by status)**
 - Operational
 - Under Construction
- Cumulative ZTV - Operational Wind Farms and Corriegarth 2**
 - Other wind farms (not Corriegarth 2) visible
 - Only Corriegarth 2 visible
 - Corriegarth 2 and other wind farms visible
- Assessment Points
 - WLA1: River Eskin Estate track
 - WLA2: Allt Cam Ban
 - WLA3: Carn Ban (AESLQ1)
 - WLA4: Carn Sgulain (AESLQ5)
 - WLA5: Càrn an Fhreicheadain (AESLQ2)
 - WLA6: Geal Charn (AESLQ4)
 - WLA7: A'Chailleach (AESLQ3)
- Designated Landscapes and Wild Land Areas**
 - Cairngorms National Park
 - Wild Land
- Recreational Routes**
 - Core Path
 - Heritage Paths (approximate routes informed by Scotways 'Heritage Paths of Scotland' Map)

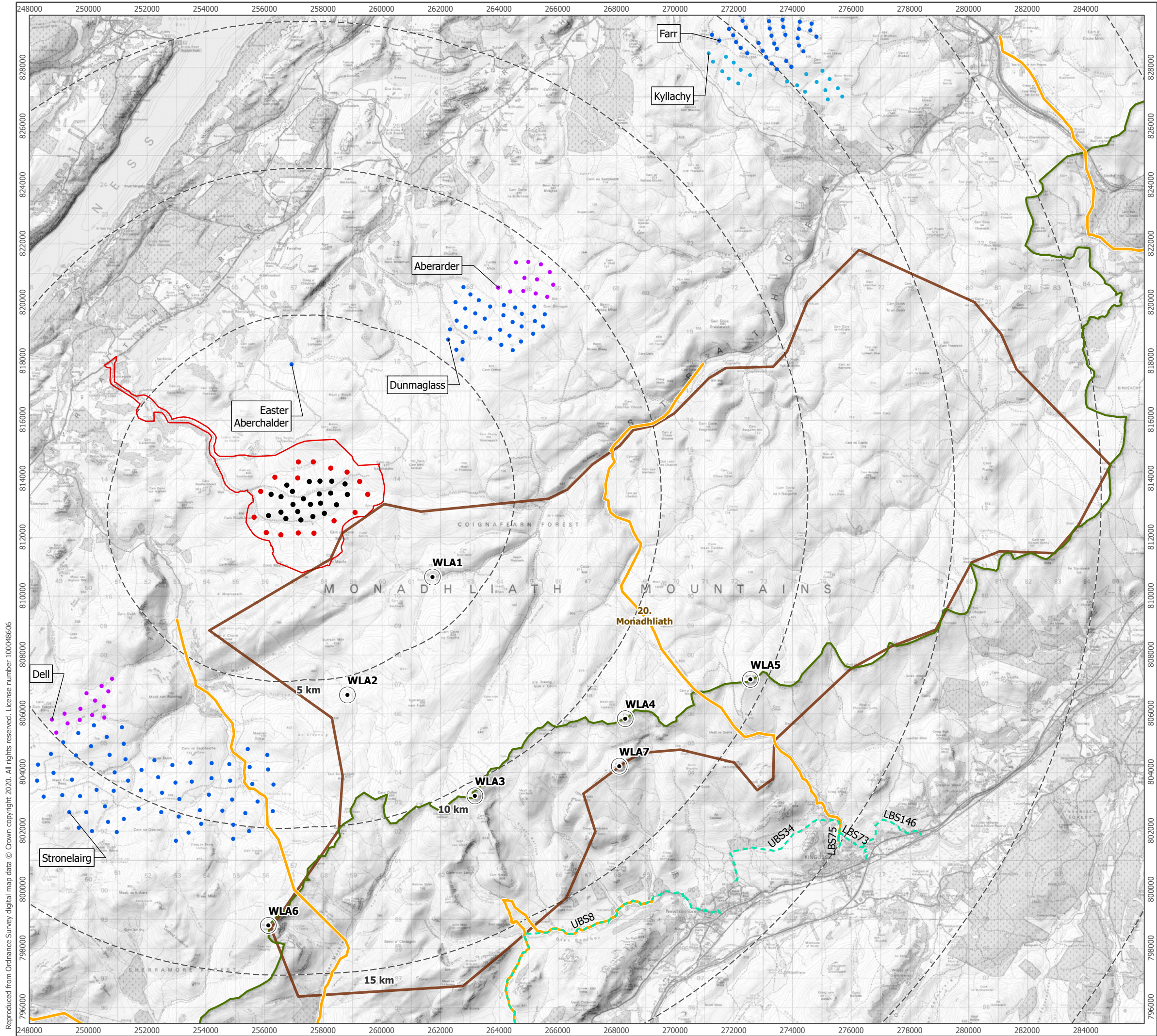
Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.



Produced By: JN	Ref: 10792-6.19
Checked By: DW	Date: 11/09/2020

Wild Land Area 20 and Cairngorms National Park - with CZTV of Operational Wind Farms and Corriegarth 2
Figure 6. 19

Corriegarth 2 Wind Farm EIA Report



BayWa r.e.



- Development boundary
- Corriegarth 2 turbine location
- Existing Corriegarth turbine location
- 5 km intervals from outermost turbines

Wind farms (by status)

- Operational
- Under Construction
- Consented

Cumulative ZTV - Operational and Consented Wind Farms and Corriegarth 2

- Other wind farms (not Corriegarth 2) visible
- Only Corriegarth 2 visible
- Corriegarth 2 and other wind farms visible

Assessment Points

- WLA1: River Eskin Estate track
- WLA2: Allt Cam Ban
- WLA3: Carn Ban (AESLQ1)
- WLA4: Carn Sgulain (AESLQ5)
- WLA5: Càrn an Fhreicheadain (AESLQ2)
- WLA6: Geal Charn (AESLQ4)
- WLA7: A'Chailleach (AESLQ3)

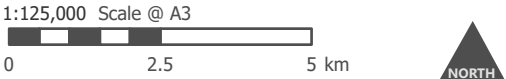
Designated Landscapes and Wild Land Areas

- Cairngorms National Park
- Wild Land

Recreational Routes

- Core Path
- Heritage Paths (approximate routes informed by Scotways 'Heritage Paths of Scotland' Map)

Each ZTV is calculated to turbine tip height from a viewing height of 2m above ground level. The ZTV extents for all windfarms are based on SNH guidance (Visual Representation of Windfarms, SNH, 2017). The terrain model assumes bare ground and is derived from OS Terrain 5 height data. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcMap 10.5.1 software.



Produced By: JN	Ref: 10792-6.20
Checked By: DW	Date: 11/09/2020

Wild Land Area 20 and Cairngorms National Park - with CZTV of Operational and Consented Wind Farms and Corriegarth 2
Figure 6.20

**Corriegarth 2 Wind Farm
EIA Report**