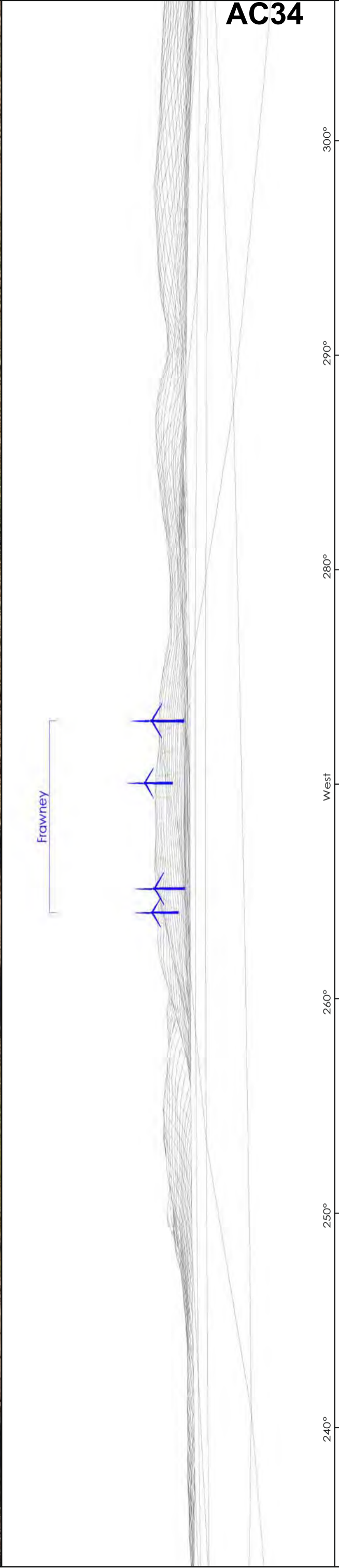




Existing View



AC34




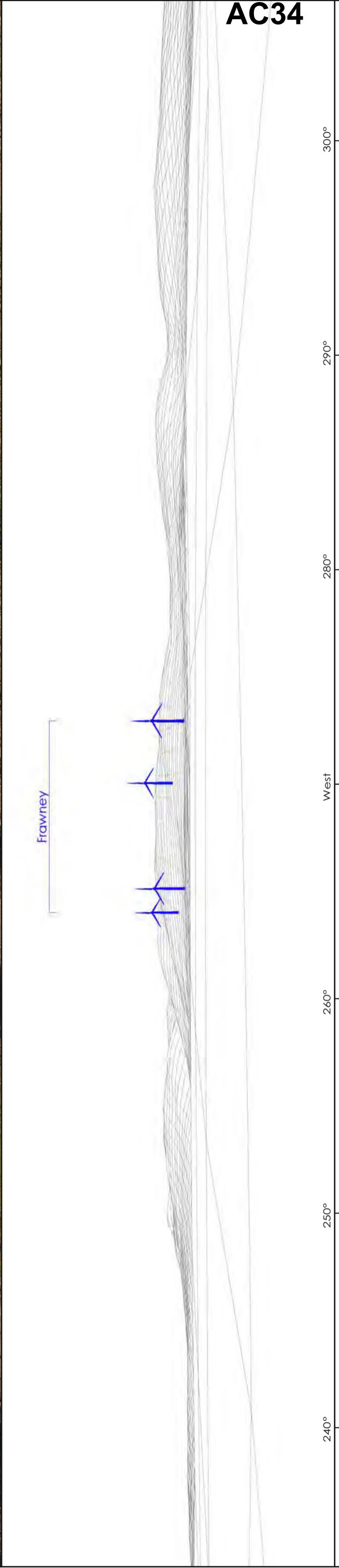
	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 4: Gallowfauld	Horizontal View Angle 73° Approximate Viewing Distance 315mm	  Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C004b
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Figure 6-9b



Predicted View



AC34

	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 4: Gallowfauld	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-9c	 	Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C004b
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Predicted View (70mm Focal Length)



Frawney Wind Farm



Figure 6-10a
Viewpoint 5 - A928 Milton of Ogilvie

Viewpoint Data

Grid Reference
E338768, N743423
Elevation
173m AOD

Wireframe/Photograph

Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

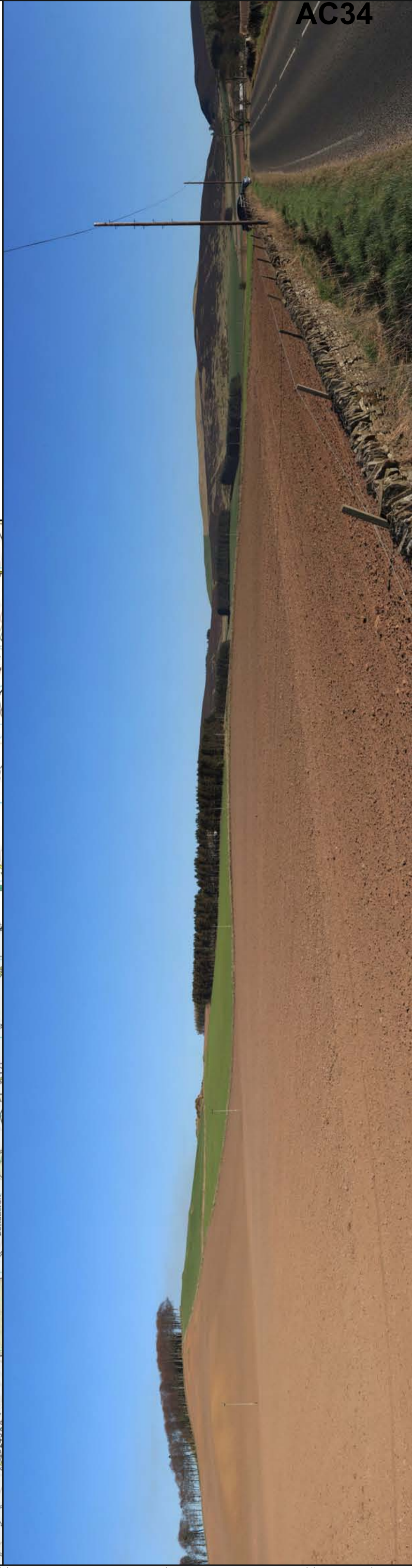
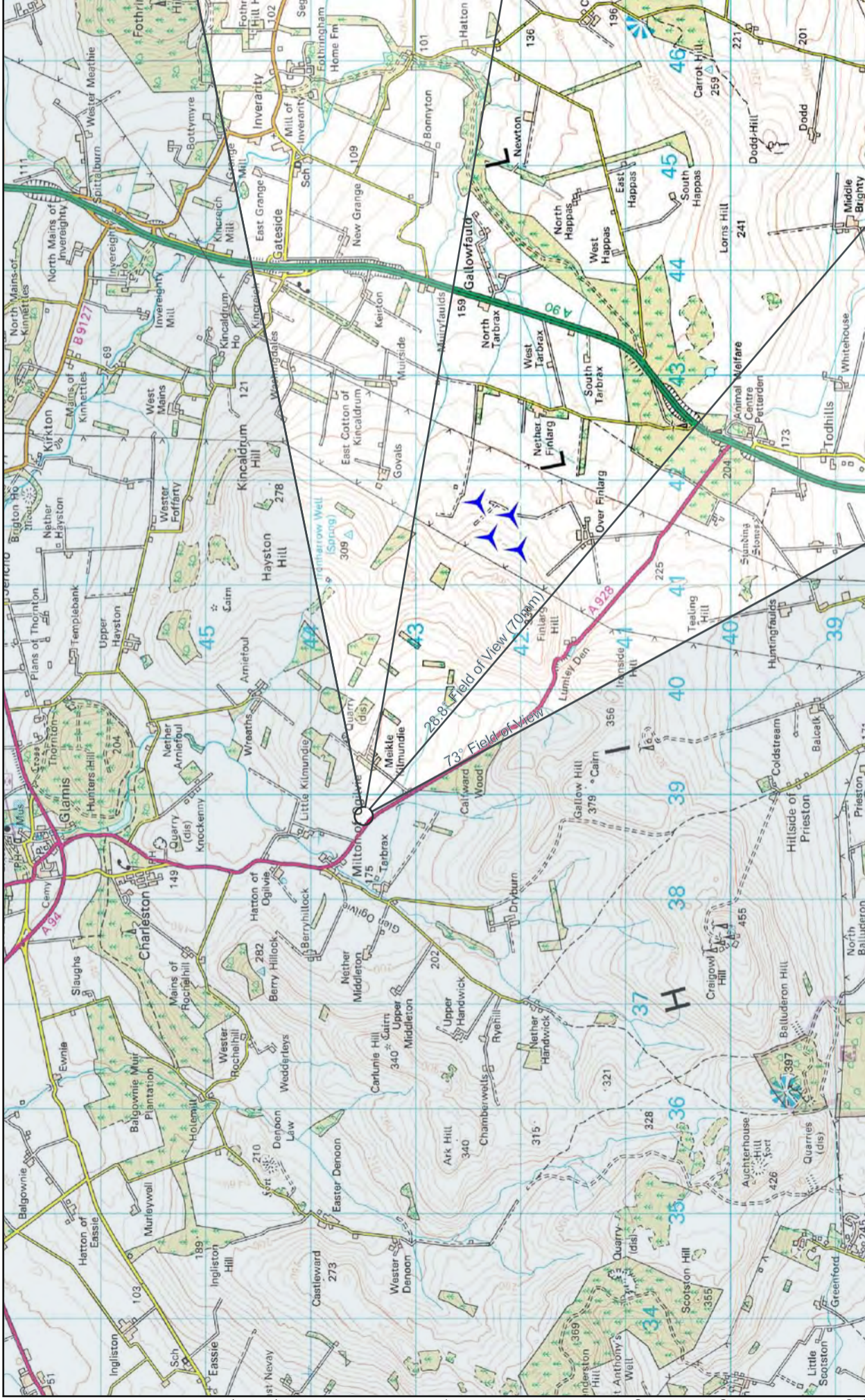
Proposed Turbine Information

Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
1
Number of Turbine Hubs Visible
0
Distance to Nearest Turbine
2,901m

▼ Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



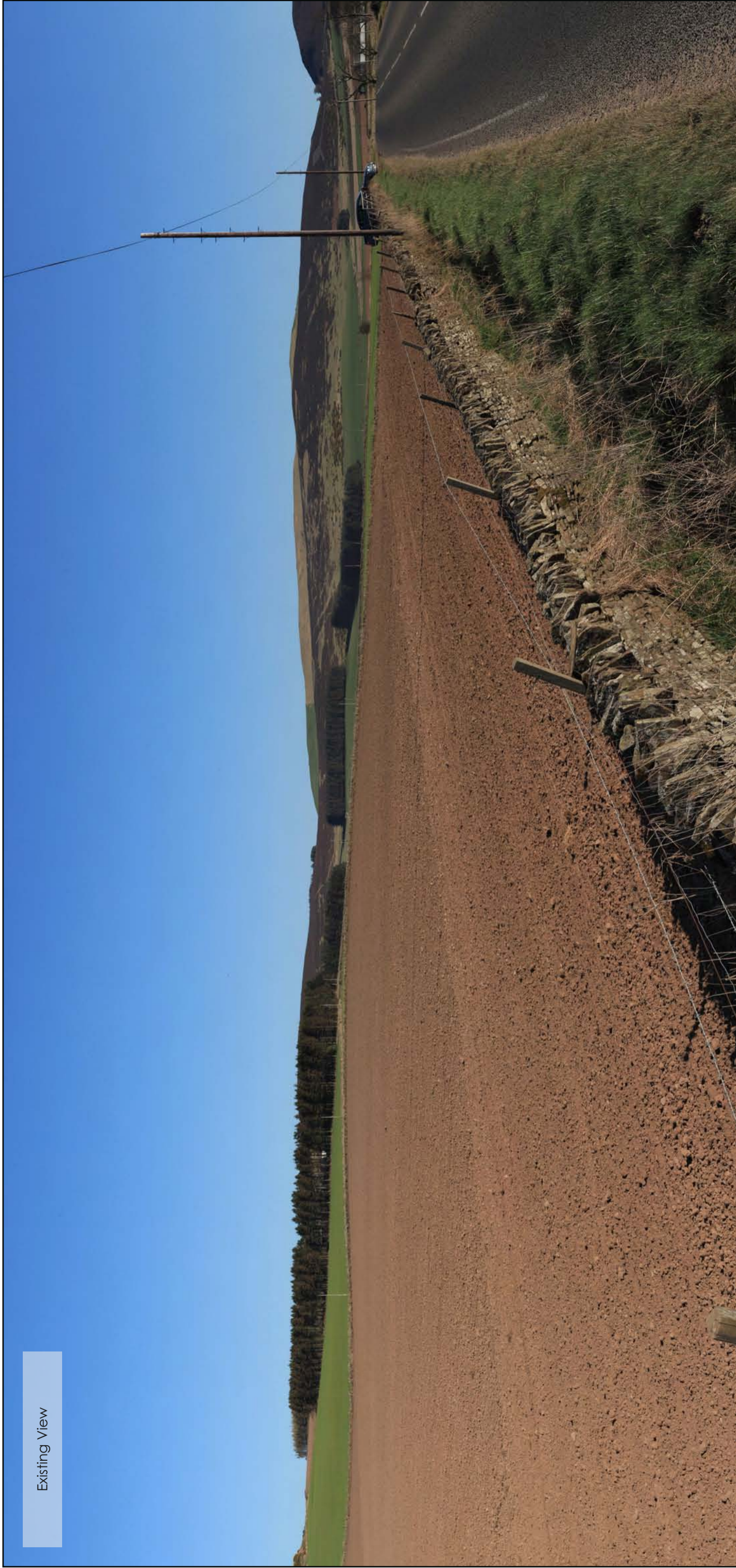
The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



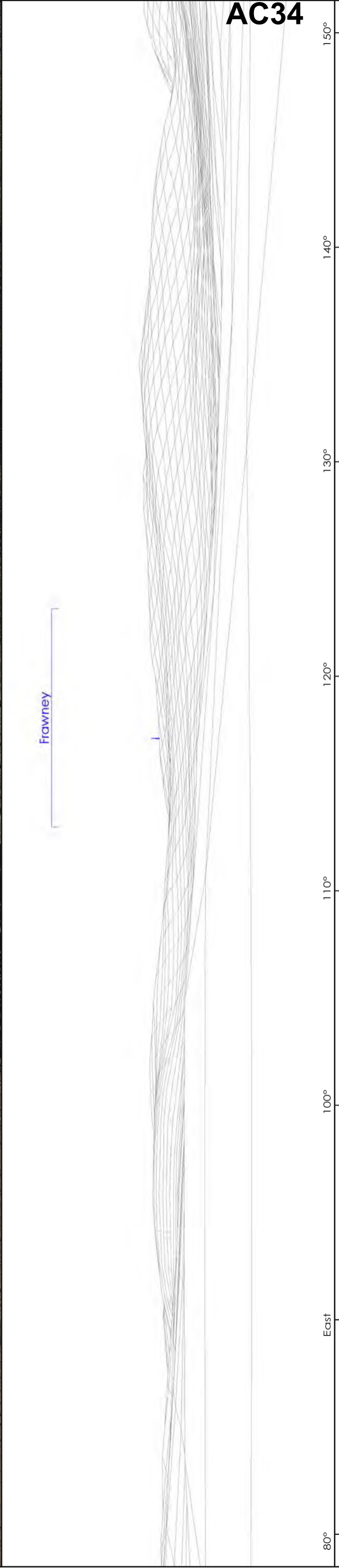
Drawn by SL
Checked by TP
Approved by

T102a
18/03/2014
4:03 PM C005b

Existing View



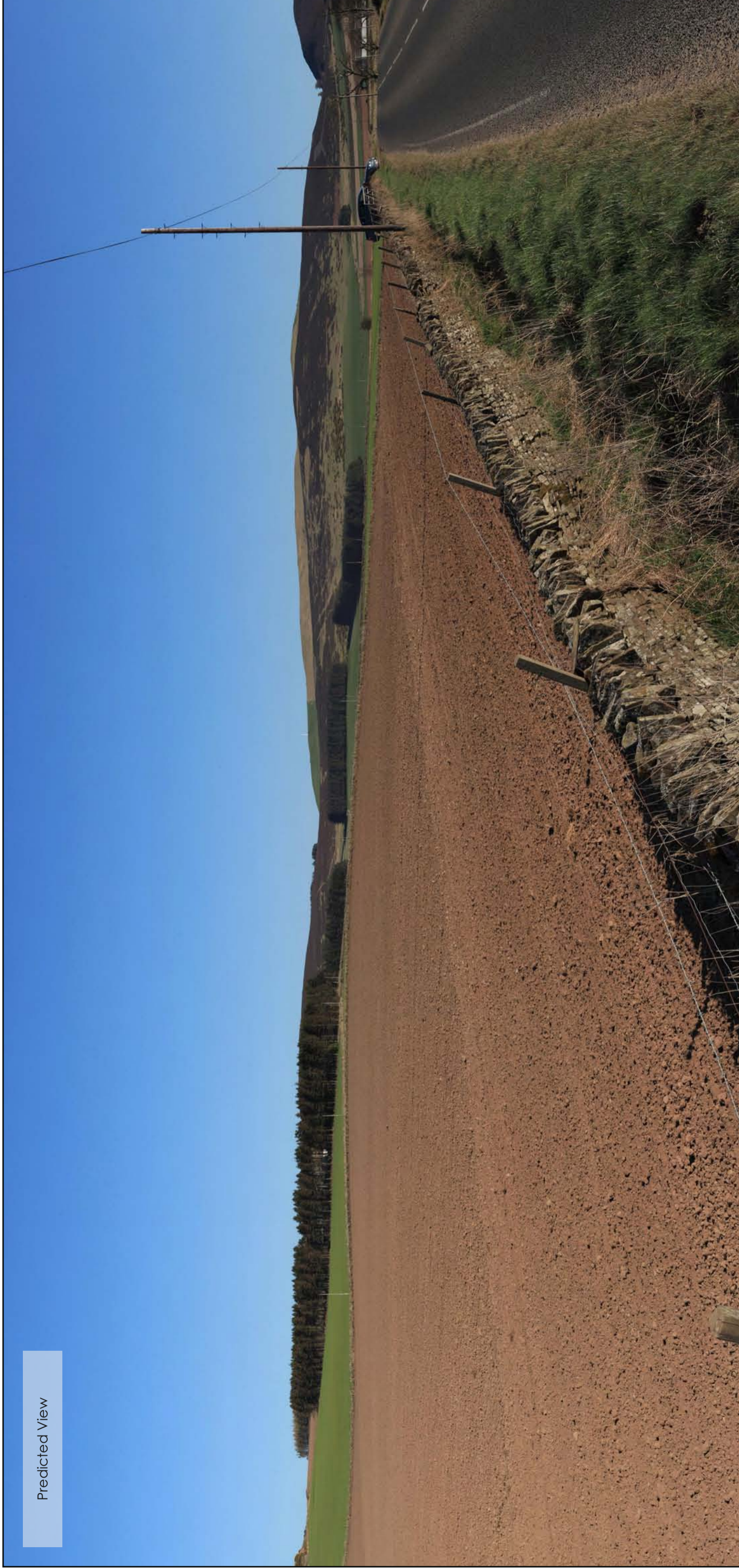
Frawney



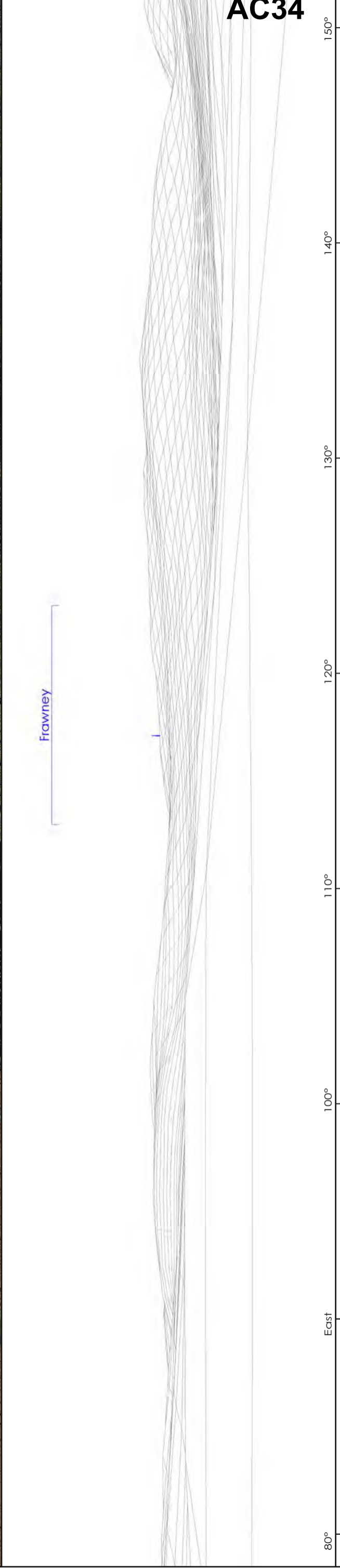
AC34

	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 5: A928 Milton on Ogilvie	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-10b		Drawn by SL Checked by TP Approved by 18/03/2014 4:03 PM C005b T102a
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Predicted View



Frawney

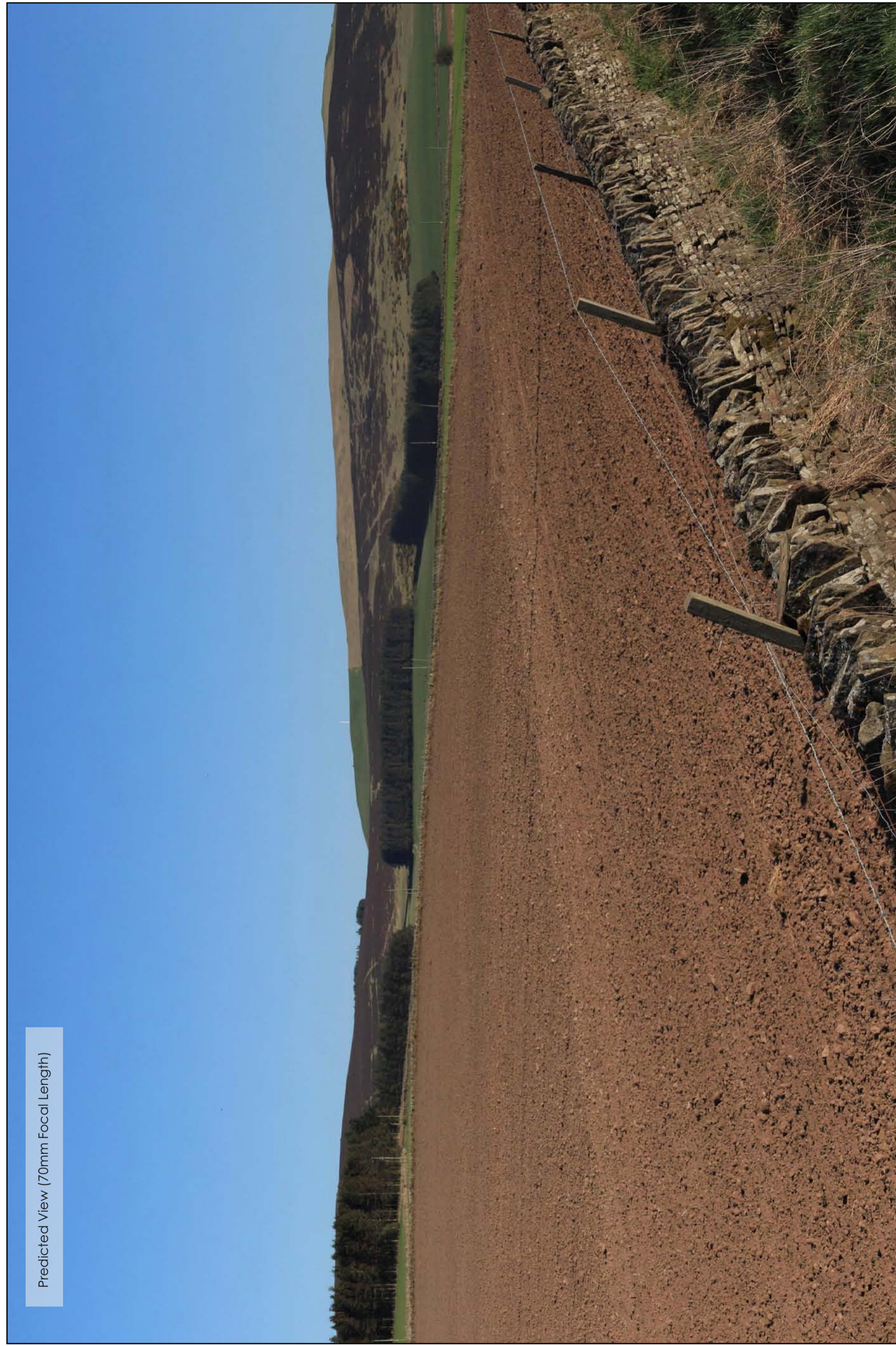


AC34

80° 100° 110° 120° 130° 140° 150°

	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 5: A928 Milton on Ogilvie	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-10c		Drawn by SL Checked by TP Approved by 18/03/2014 4:03 PM C005b T102a
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Predicted View (70mm Focal Length)



	Polar Energy (Finlary) Ltd	Frawney Wind Farm	Viewpoint 5: A928 Milton on Ogilvie	Horizontal View Angle 28.8° Approximate Viewing Distance 700mm	Figure 6-10d		Drawn by SL Checked by TP Approved by	T102a 18/03/2014 4:03 PM C005b
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Frawney Wind Farm



Figure 6-11a
Viewpoint 6 - Tealing

Viewpoint Data

Grid Reference
E341651, N738069
Elevation
145m AOD

Wireframe/Photograph

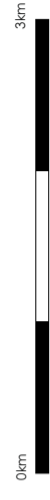
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

Hub Height
57m
Blade Tip Height
92.5m

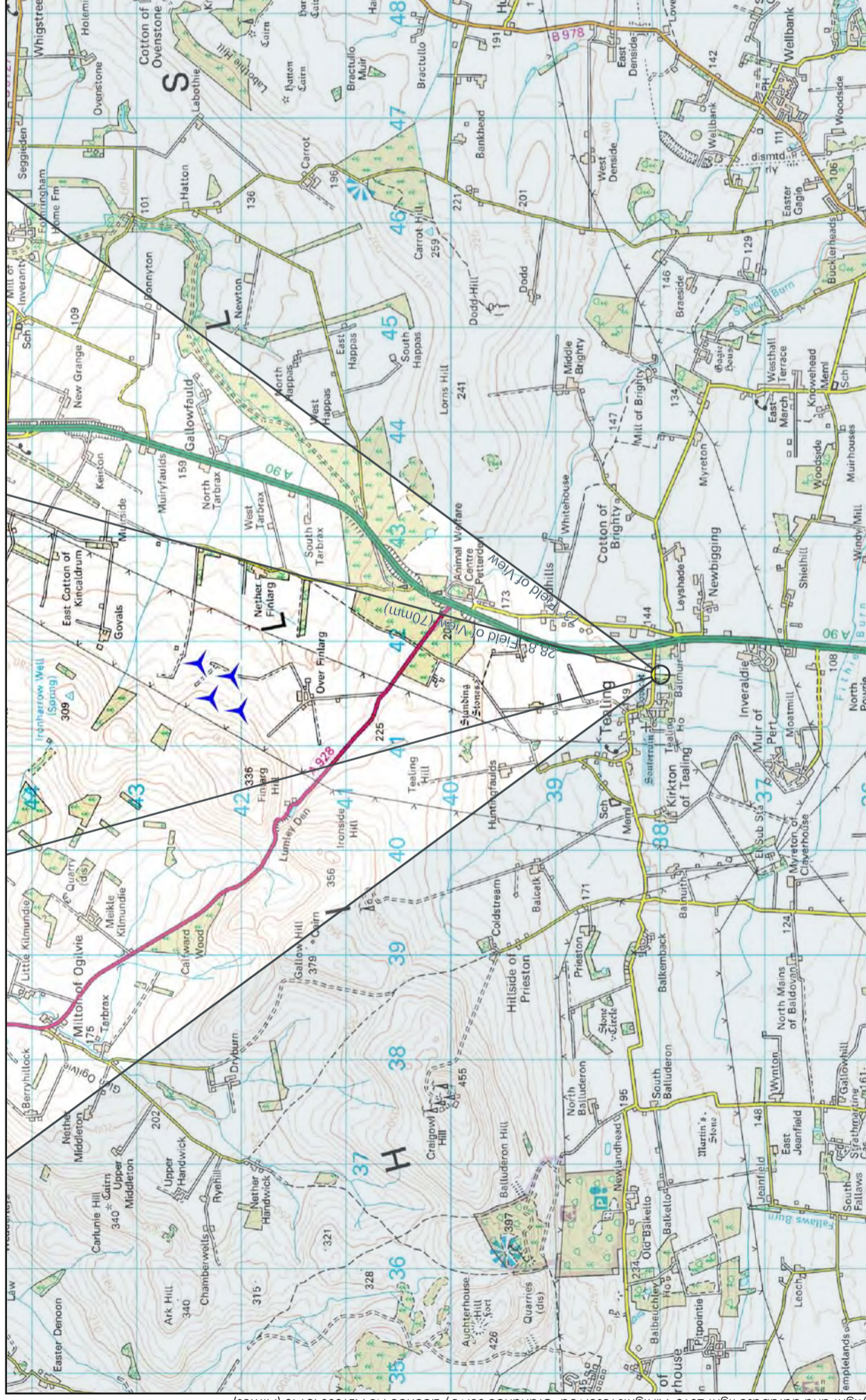
Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
0
Distance to Nearest Turbine
3,993m



Scale 1:50,000 @ A3

Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



AC34

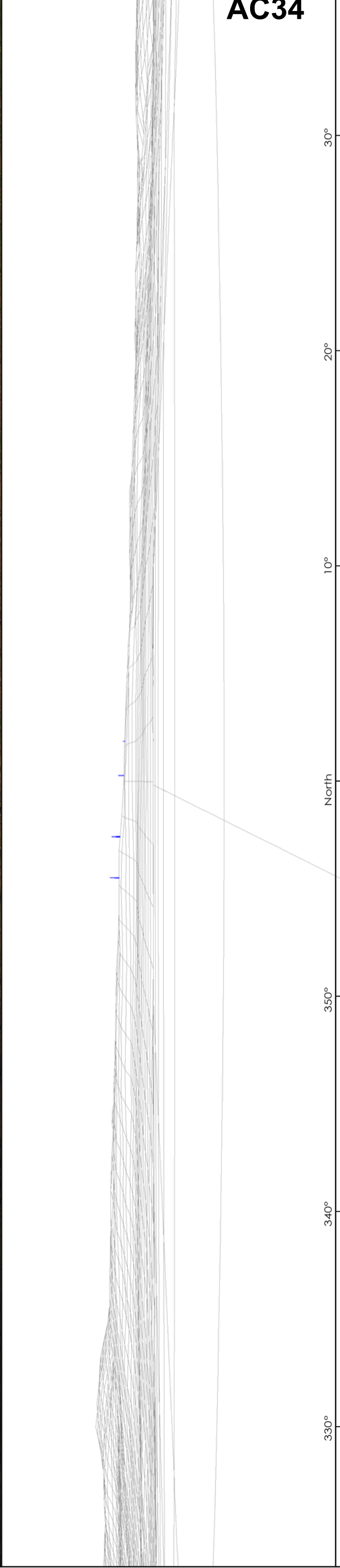
The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.

Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.

*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



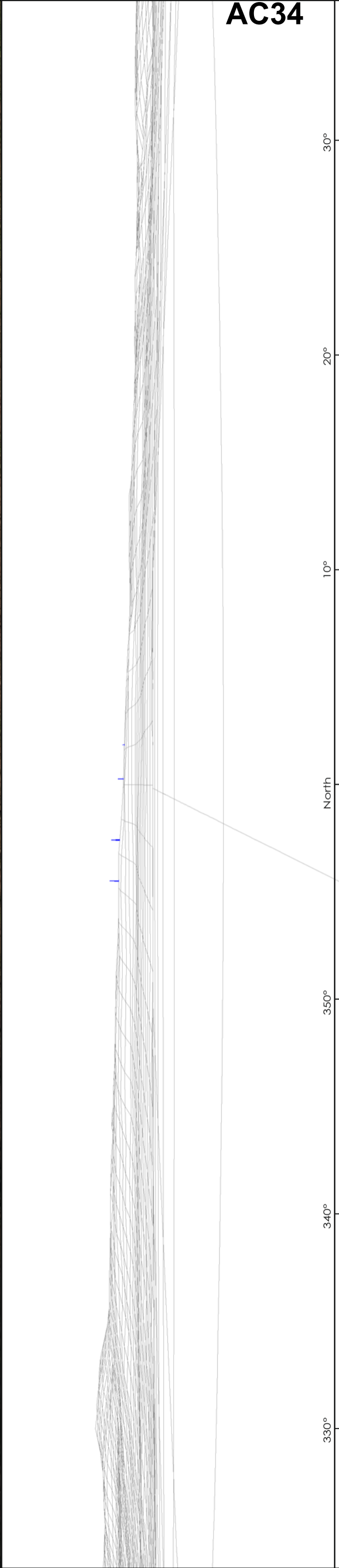
Existing View



AC34

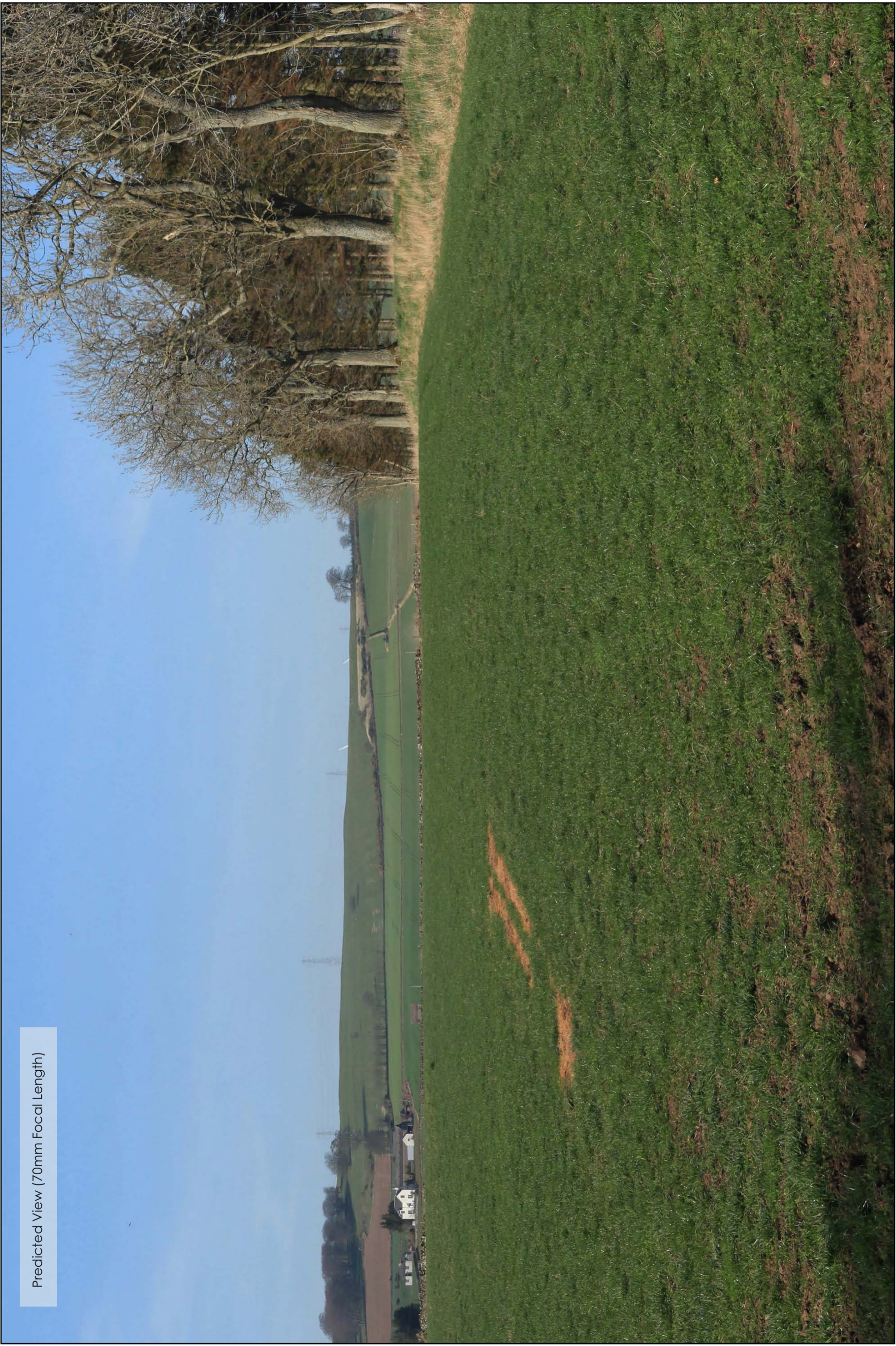
atmos CONSULTING	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 6: Tealing	North	Horizontal View Angle Approximate Viewing Distance	73° 315mm	Figure 6-11b	Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C006b
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Predicted View



AC34

	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 6: Tealing	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-11c	Drawn by SL Checked by TP Approved by 	TL 02a 18/03/2014 4:03 PM C006b
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Predicted View (70mm Focal Length)

	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 6: Tealing	Horizontal View Angle 28.8° Approximate Viewing Distance 700mm		Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C006b
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Figure 6-11d

Frawney Wind Farm



Figure 6-12a
Viewpoint 7 - Craigowl Hill

Viewpoint Data
Grid Reference
E337737, N740049
Elevation
451m AOD

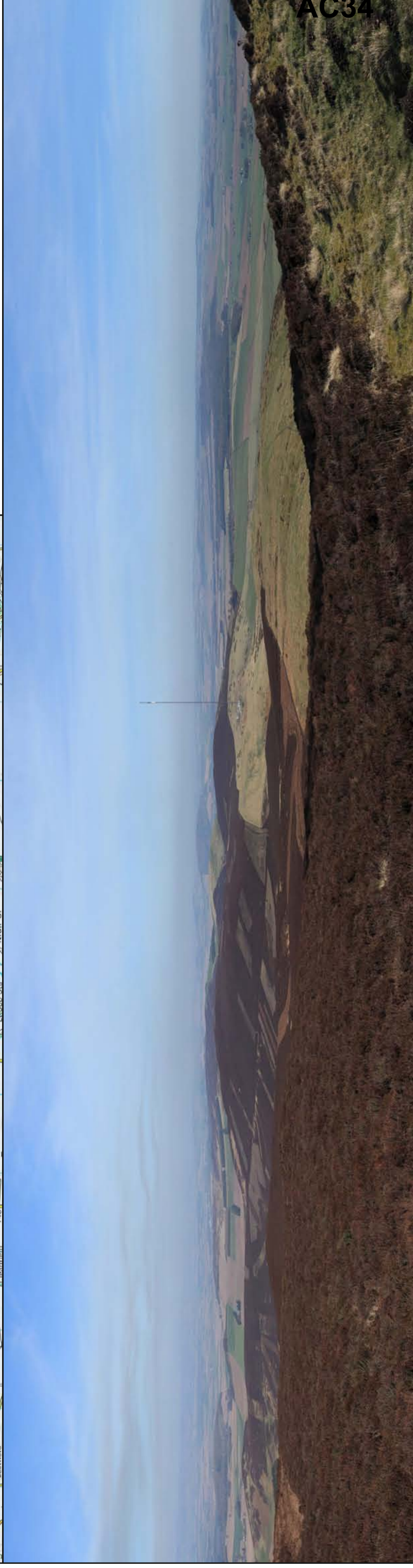
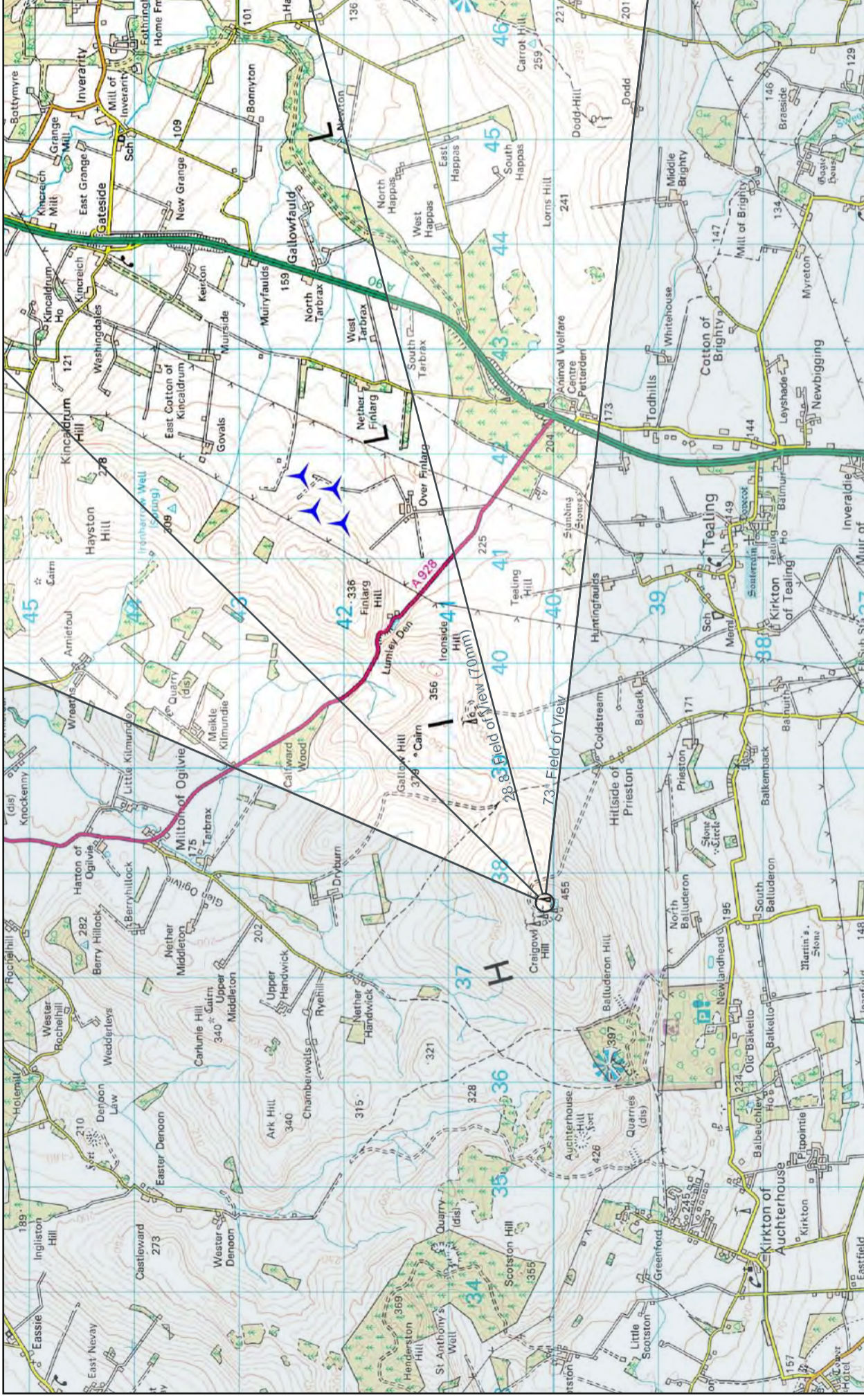
Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
4,118m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm

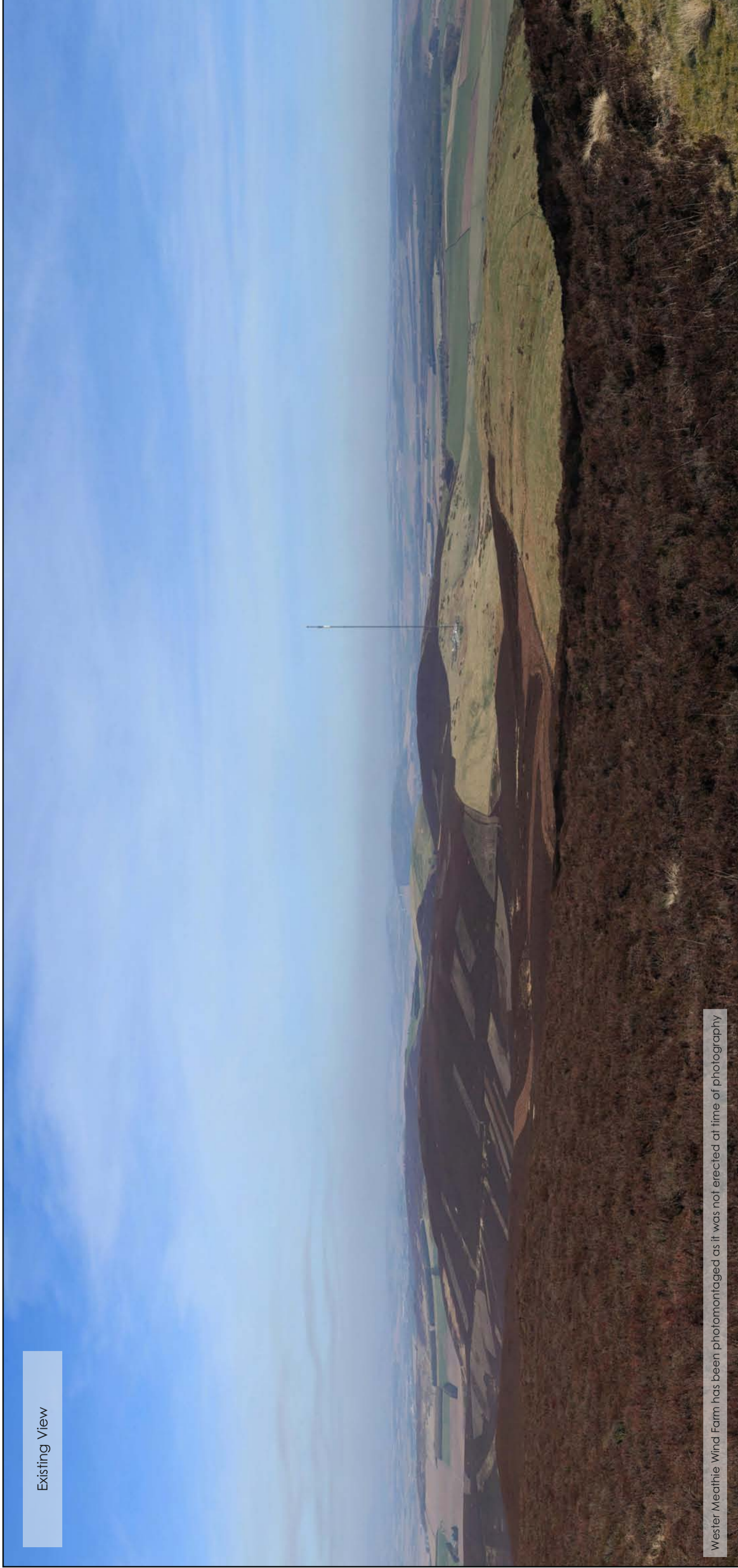


The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for. Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation. *Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.

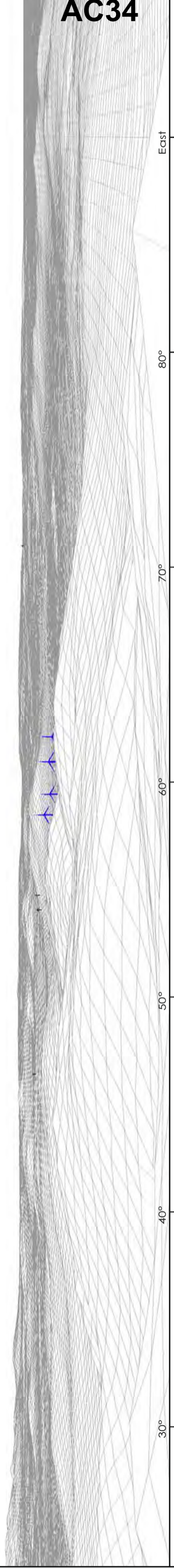


AC34

Existing View

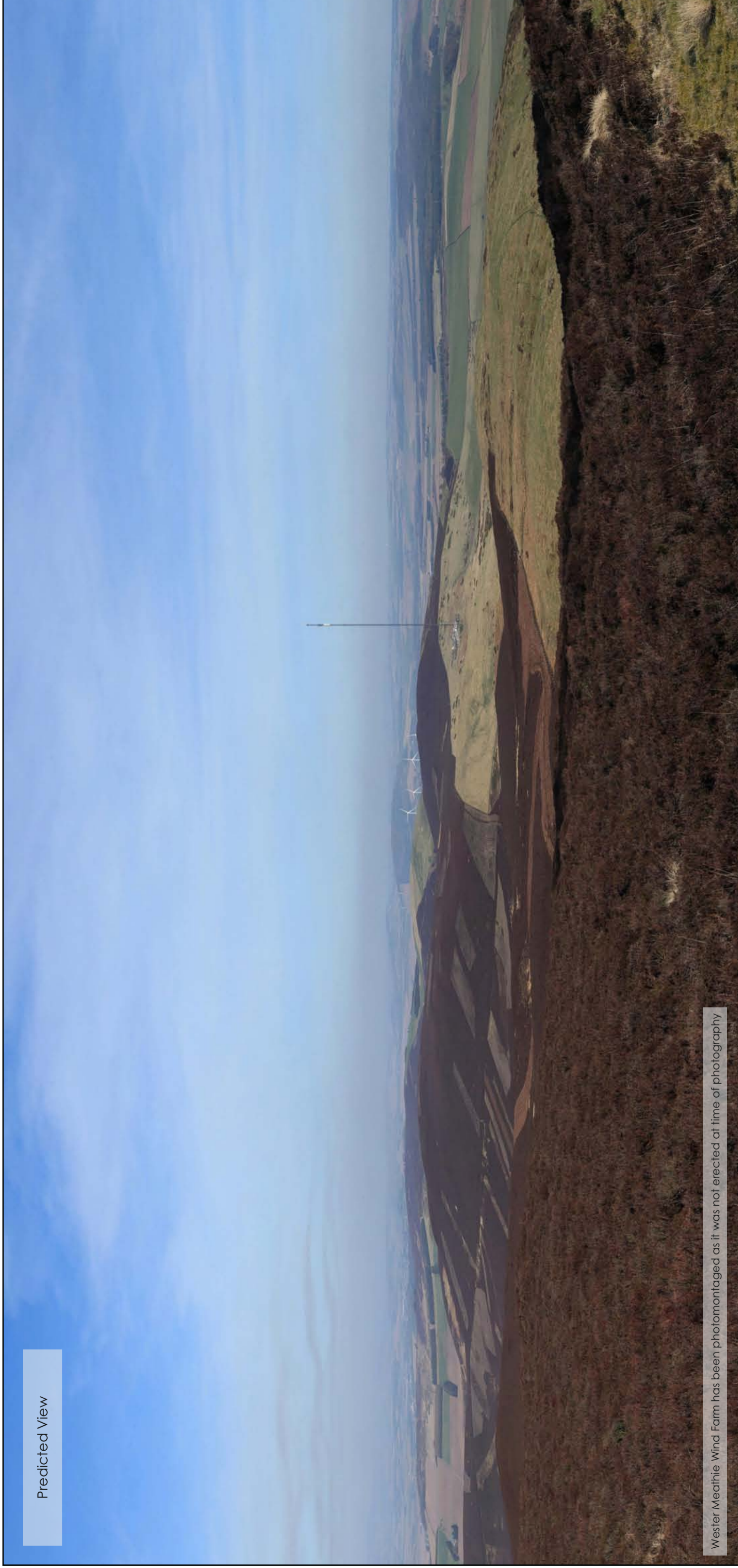


Wester Meathie Wind Farm has been photomontaged as it was not erected at time of photography

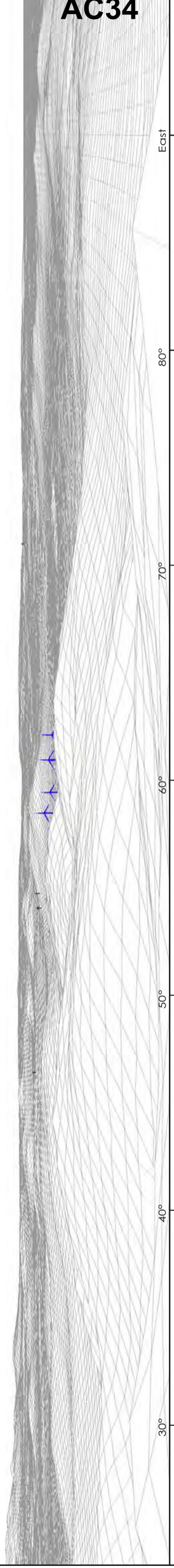


AC34

Predicted View



Wester Meathie Wind Farm has been photomontaged as it was not erected at time of photography



30°

40°

50°

60°

70°

80°

East

AC34



**Polar Energy
(Finlary) Ltd**

Frawney Wind Farm

Viewpoint 7: Craigow Hill

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

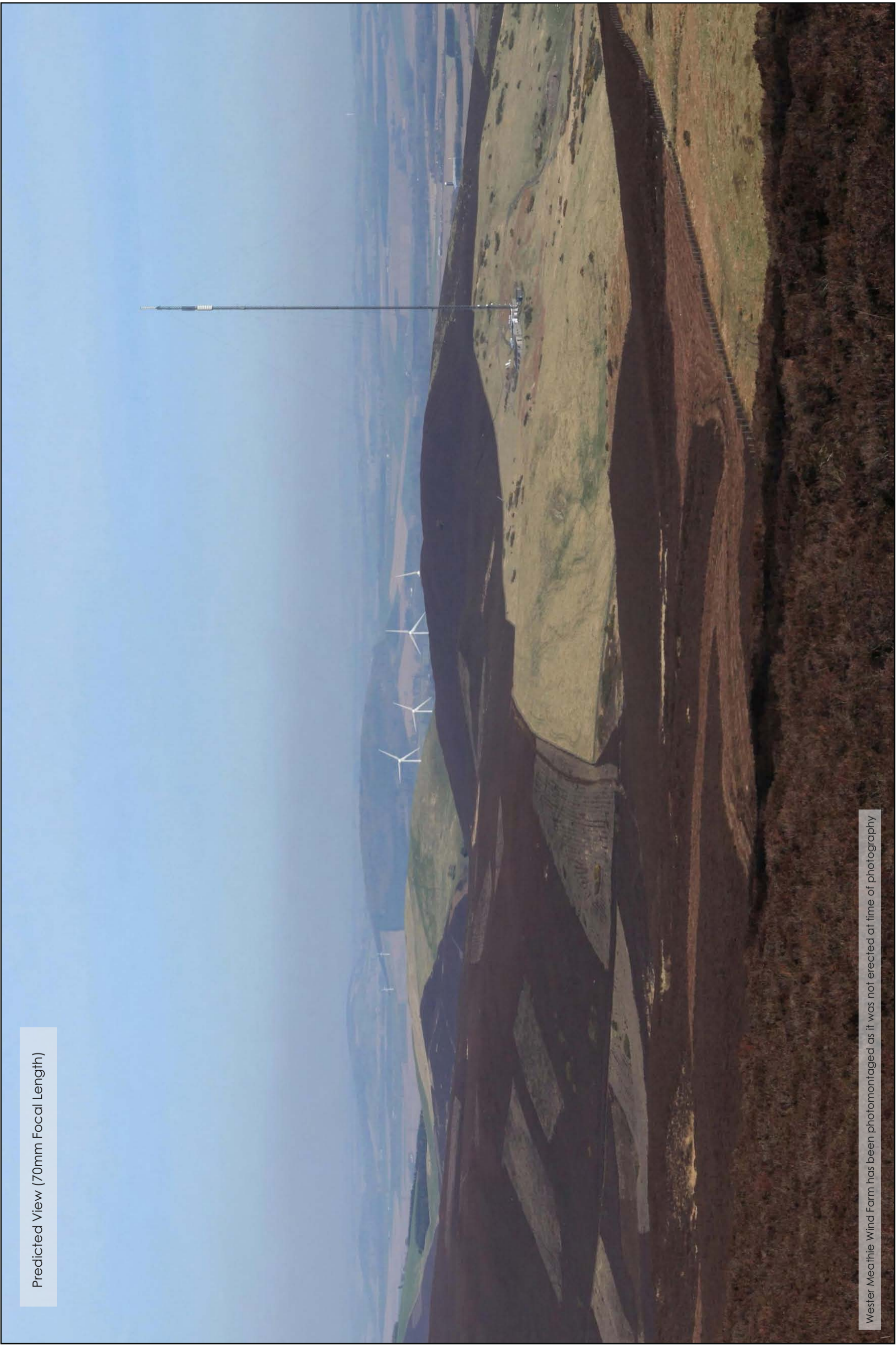
Figure 6-12c



Drawn by SL
Checked by TP
Approved by

TL 02a
18/03/2014
4:03 PM C007b

Predicted View (70mm Focal Length)



Wester Meathie Wind Farm has been photomontaged as it was not erected at time of photography

Frawney Wind Farm



Figure 6-13a
Viewpoint 8 - A90 junction to Douglastown

Viewpoint Data
Grid Reference
E344558, N746027
Elevation
87m AOD

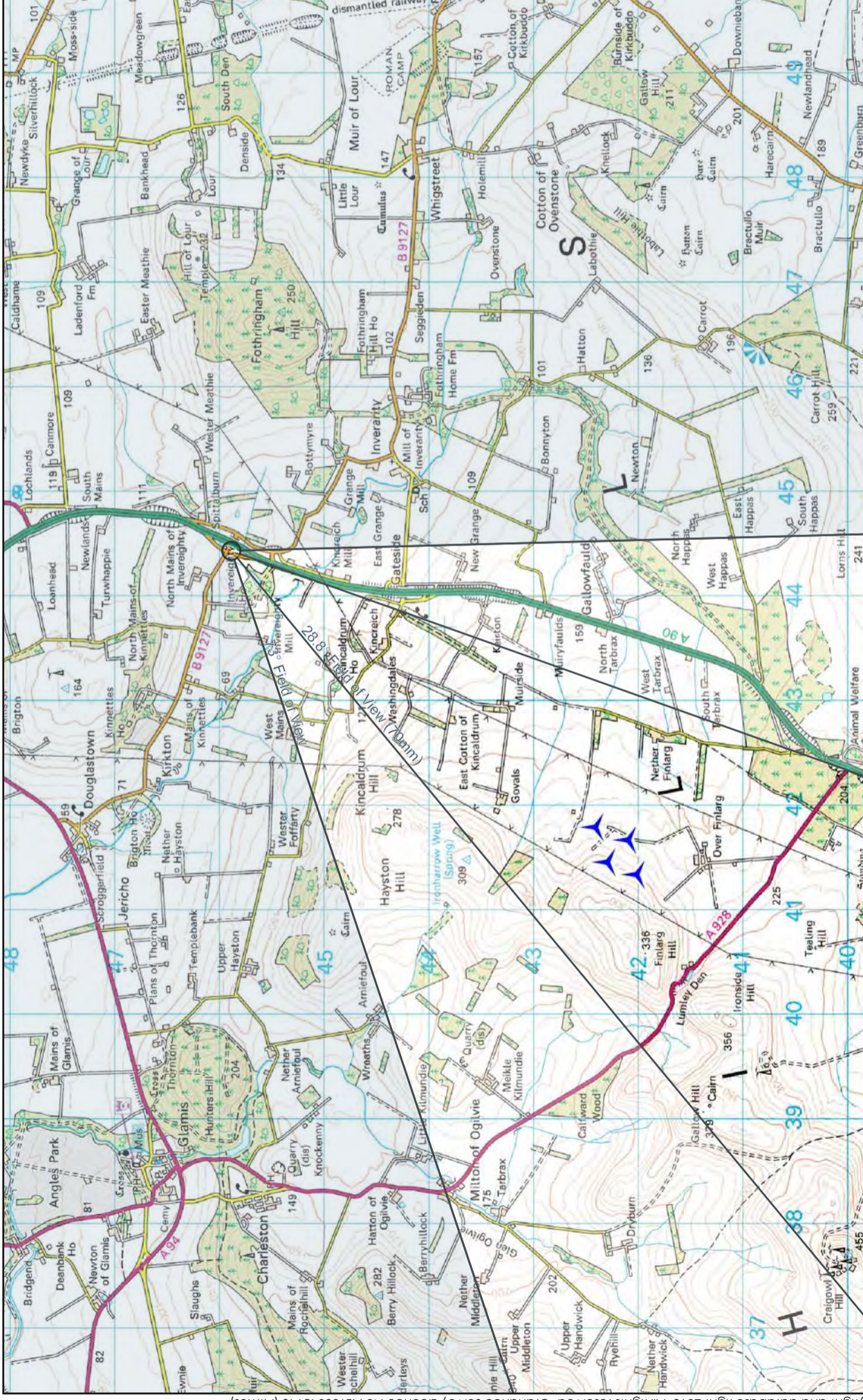
Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
4,527m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for. Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation. *Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.

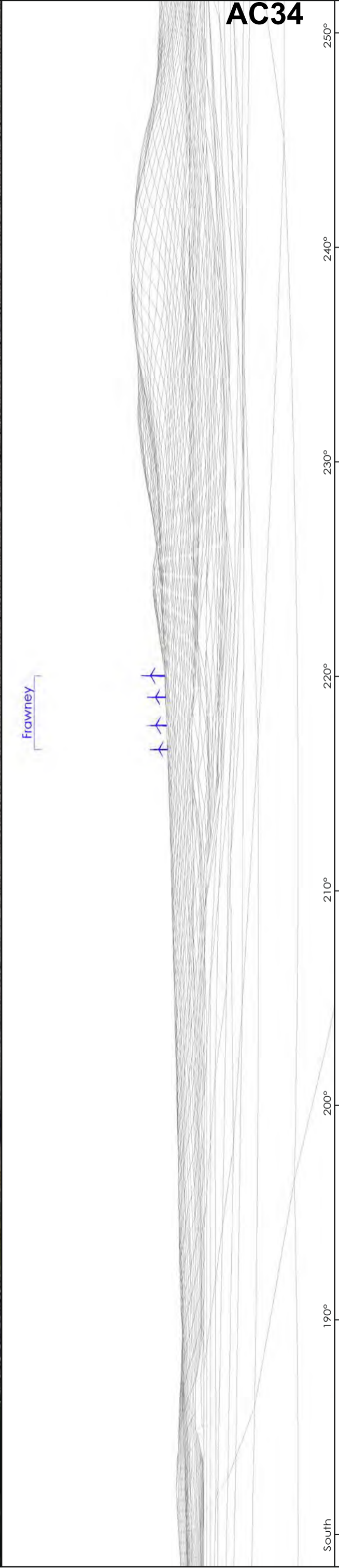


Drawn by SL
Checked by TP
Approved by

TL 02a
18/03/2014
4:03 PM C008b



Existing View



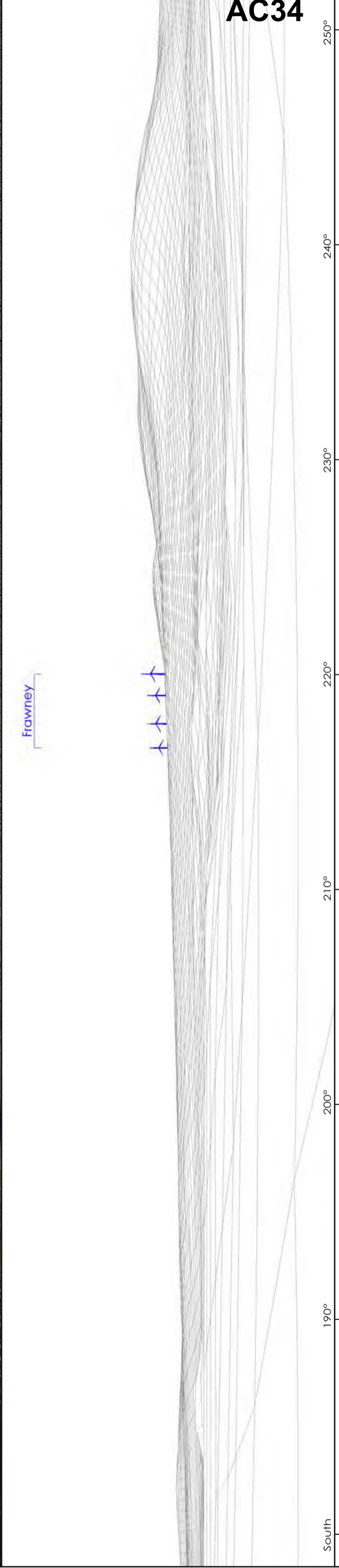
AC34

South	190°	200°	210°	220°	230°	240°	250°				
atmos CONSULTING		Polar Energy (Finlargo) Ltd		Frawney Wind Farm	Viewpoint 8: A90 Junction to Douglastown	Horizontal View Angle Approximate Viewing Distance	73° 315mm	Figure 6-13b		Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C008b

Predicted View



Frawney



AC34

South	190°	Frawney Wind Farm	Viewpoint 8: A90 junction to Douglstown	Horizontal View Angle Approximate Viewing Distance	73° 315mm	Figure 6-13c		Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C008b
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Predicted View (70mm Focal Length)



Frawney Wind Farm



Figure 6-14a
Viewpoint 9 - Carrot Hill

Viewpoint Data
Grid Reference
E346372, N740827
Elevation
215m AOD

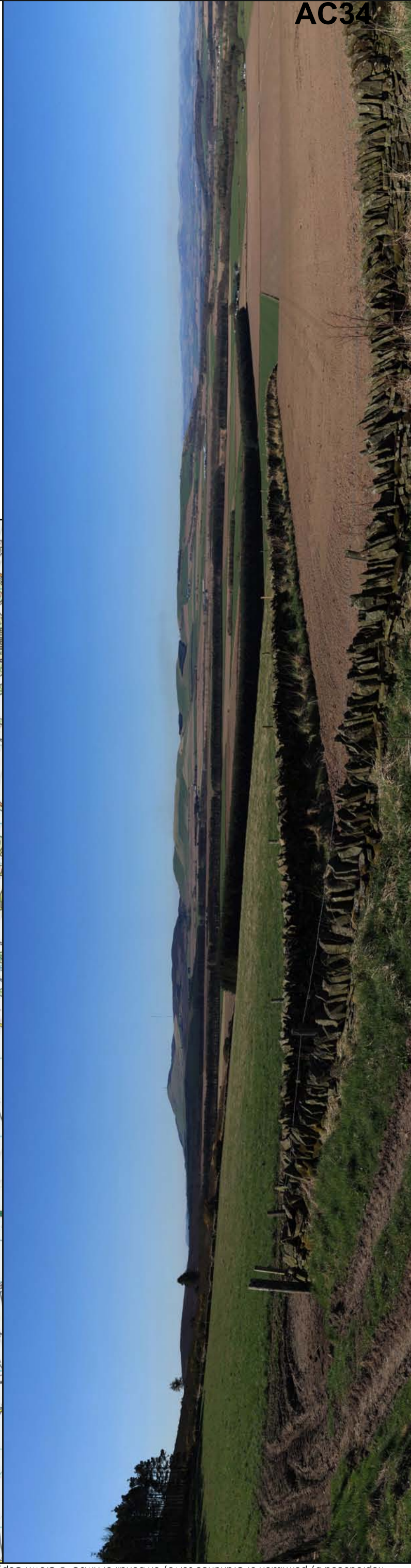
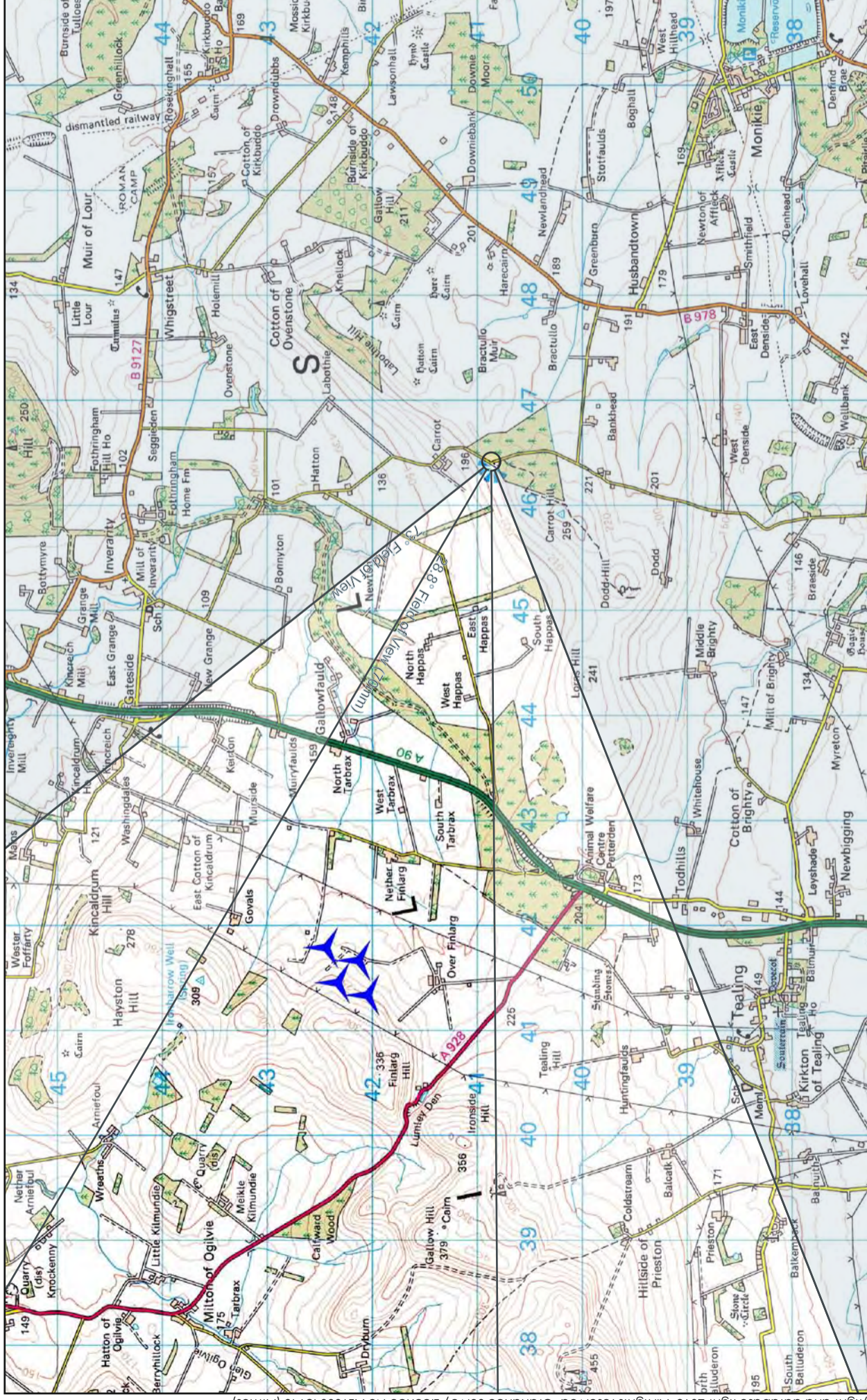
Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
4,858m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.

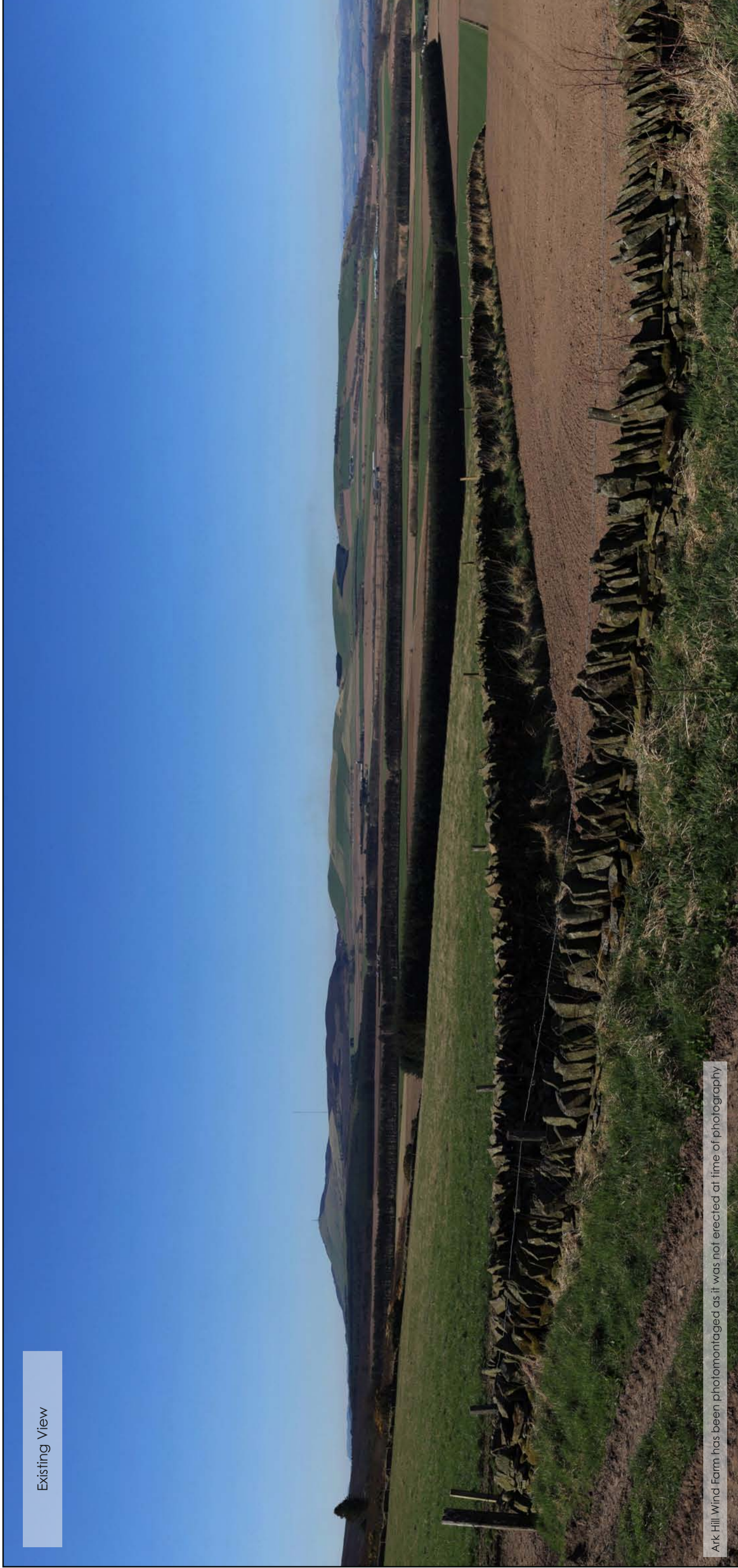


Drawn by SL
Checked by TP
Approved by

TL 02a
18/03/2014
4:03 PM C00916

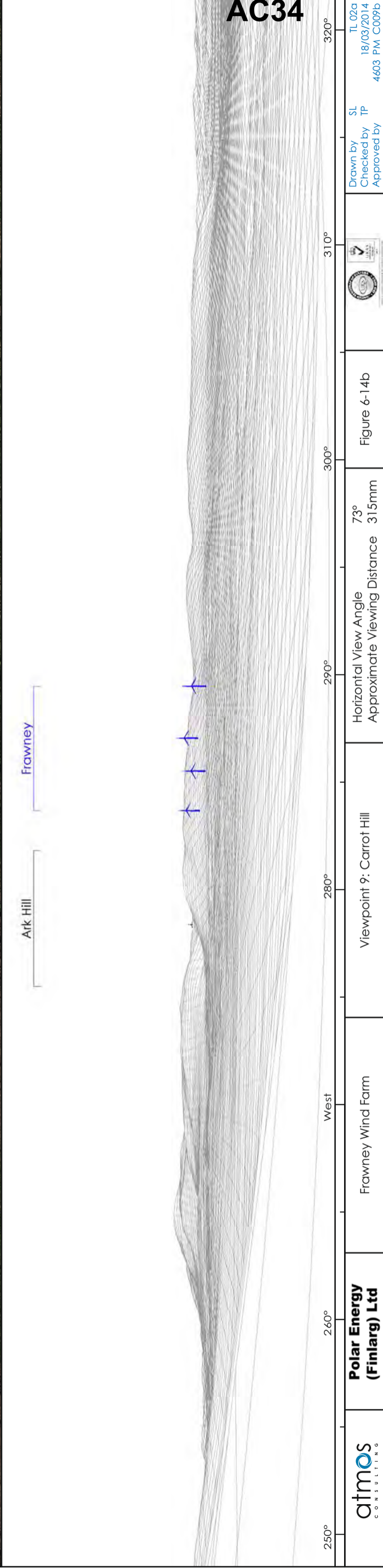
AC34

Existing View



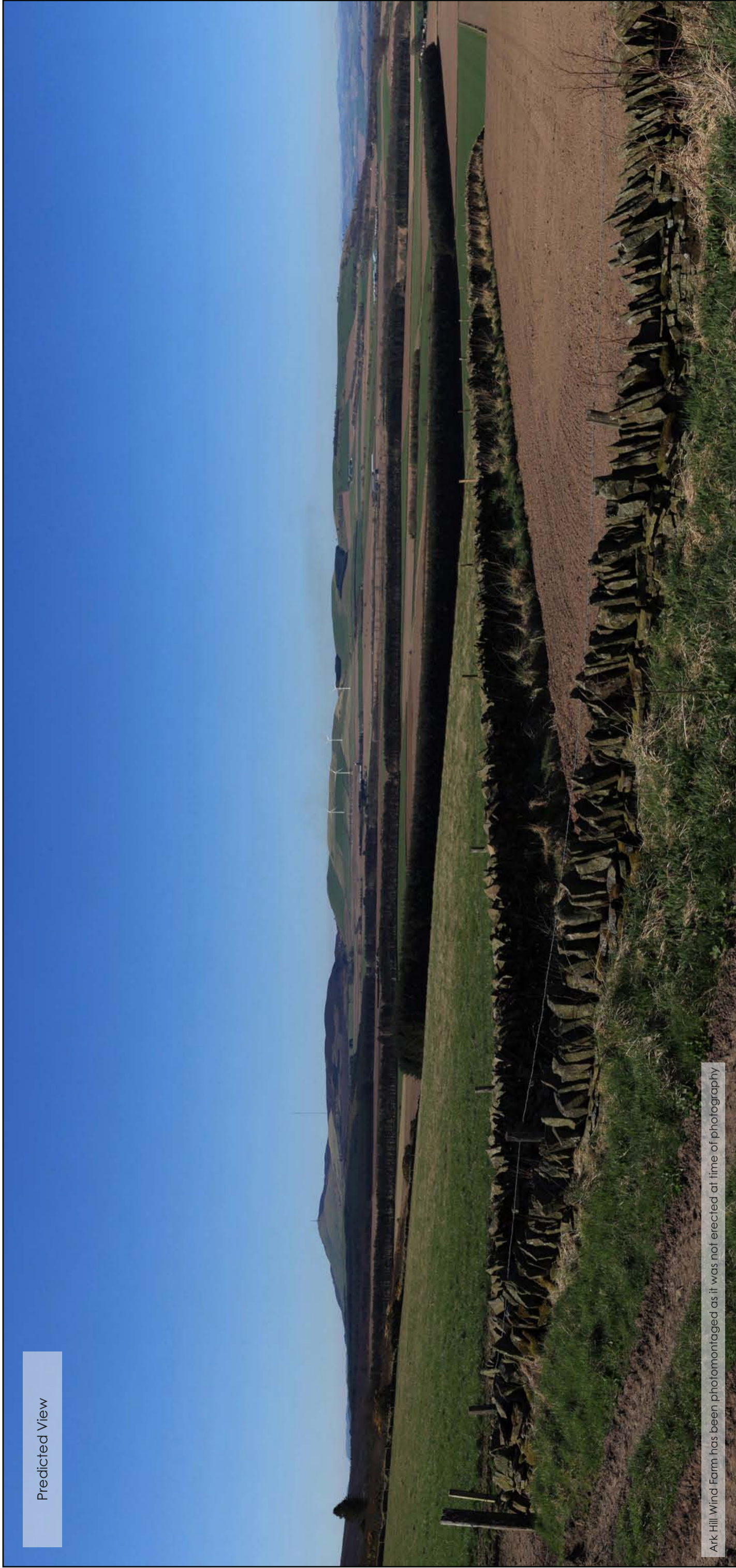
Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography

Ark Hill Frawney



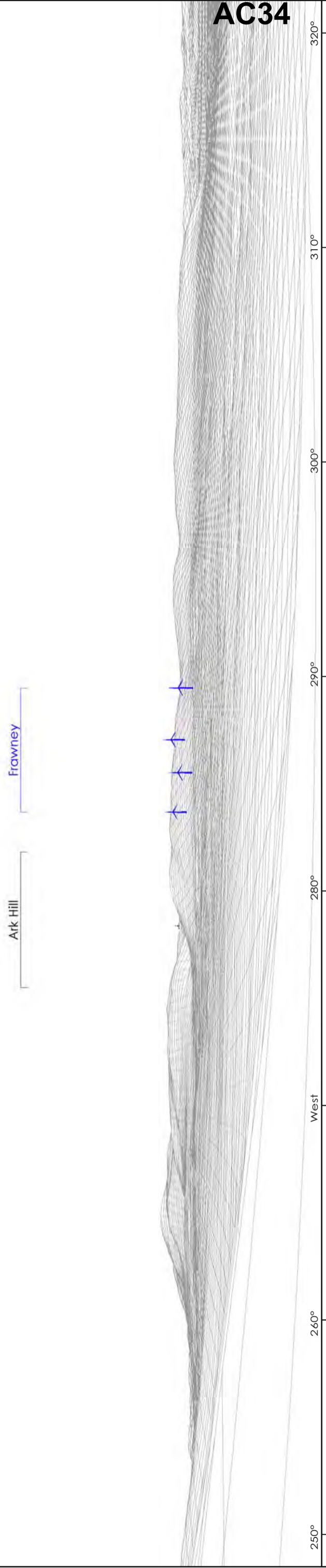
250°	260°	280°	290°	300°	310°	320°
West		Viewpoint 9: Carrot Hill		Horizontal View Angle 73° Approximate Viewing Distance 315mm		Figure 6-14b
Polar Energy (Finlargo) Ltd		Frawney Wind Farm				Drawn by SL Checked by TP Approved by
						TL 02a 18/03/2014 4:03 PM C009b

Predicted View



Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography

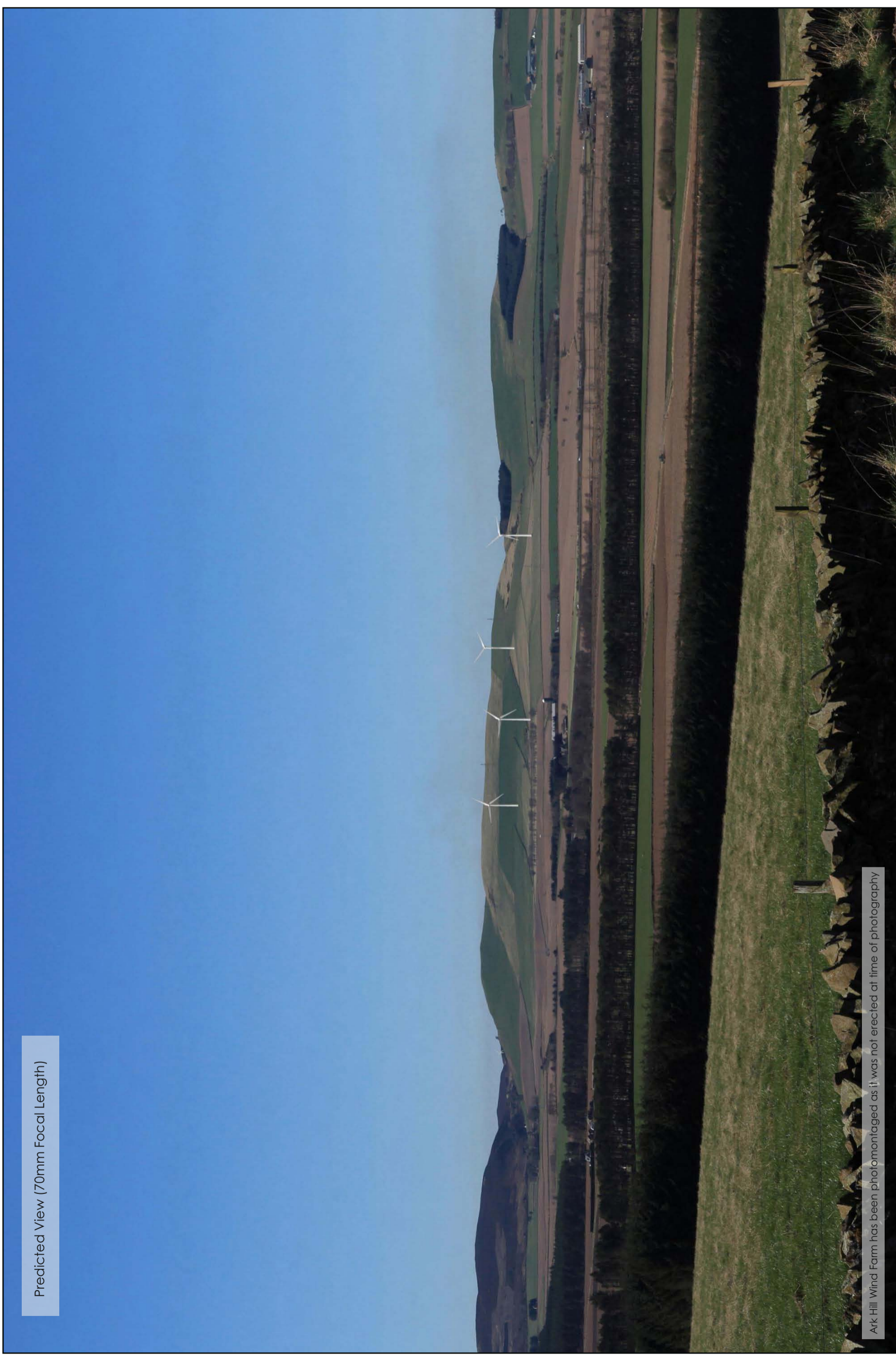
Ark Hill Frawney



AC34

250°	260°	280°	290°	300°	310°	320°
West						
Frawney Wind Farm		Viewpoint 9: Carrot Hill		Horizontal View Angle Approximate Viewing Distance		73° 315mm
atmos CONSULTING		Polar Energy (Finlargo) Ltd		Figure 6-14c		Drawn by SL Checked by TP Approved by
						TL 02a 18/03/2014 4:03 PM C009b

Predicted View (70mm Focal Length)



Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography

Frawney Wind Farm



Figure 6-15a
Viewpoint 10 - A90 North of Claverhouse, Dundee

Viewpoint Data

Grid Reference
 E341887, N735386
 Elevation
 119m AOD

Wireframe/Photograph

Height above ground
 1.6m
 Camera and Lens
 Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

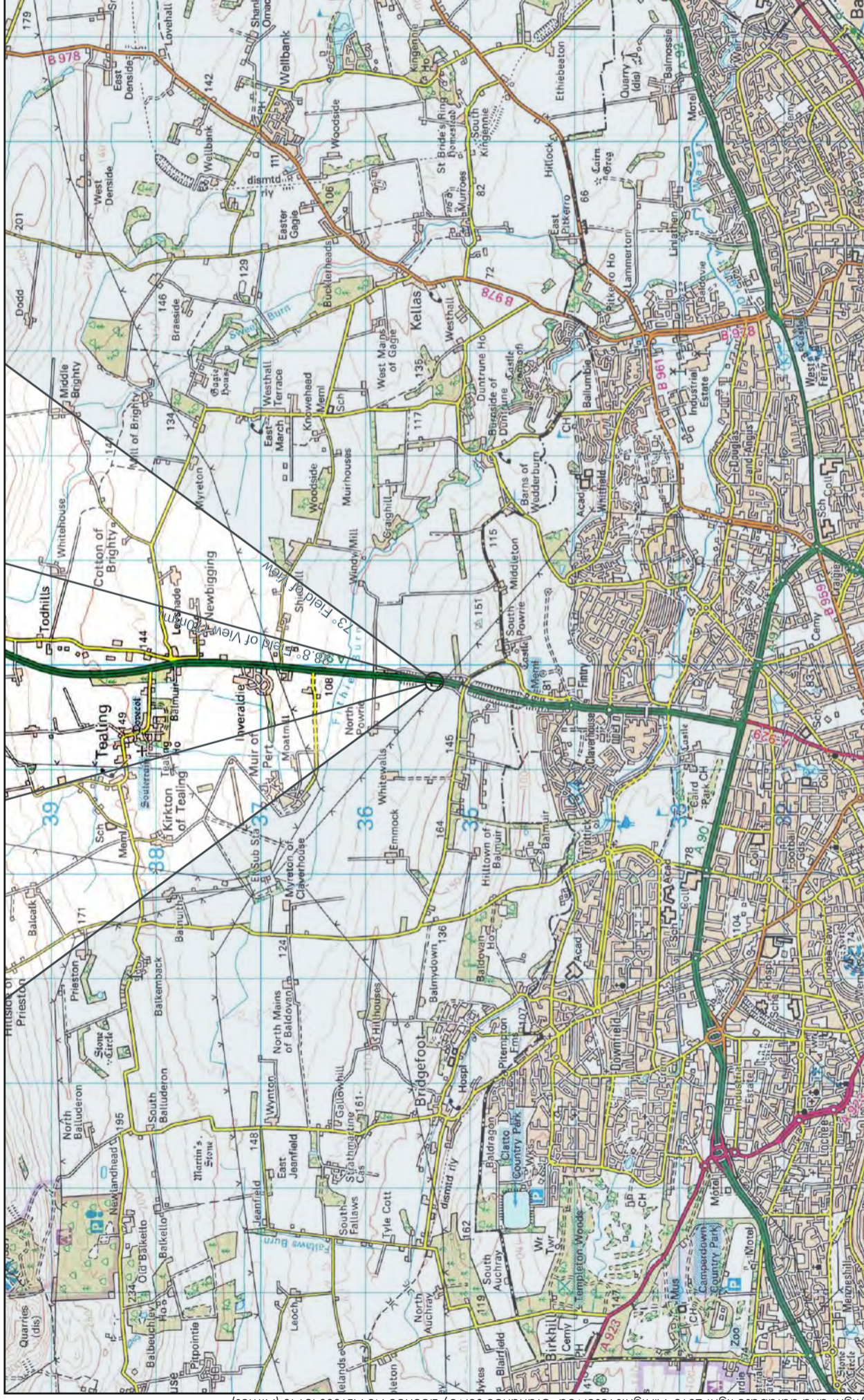
Hub Height
 57m
 Blade Tip Height
 92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
 4
 Number of Turbine Hubs Visible
 4
 Distance to Nearest Turbine
 6,686m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



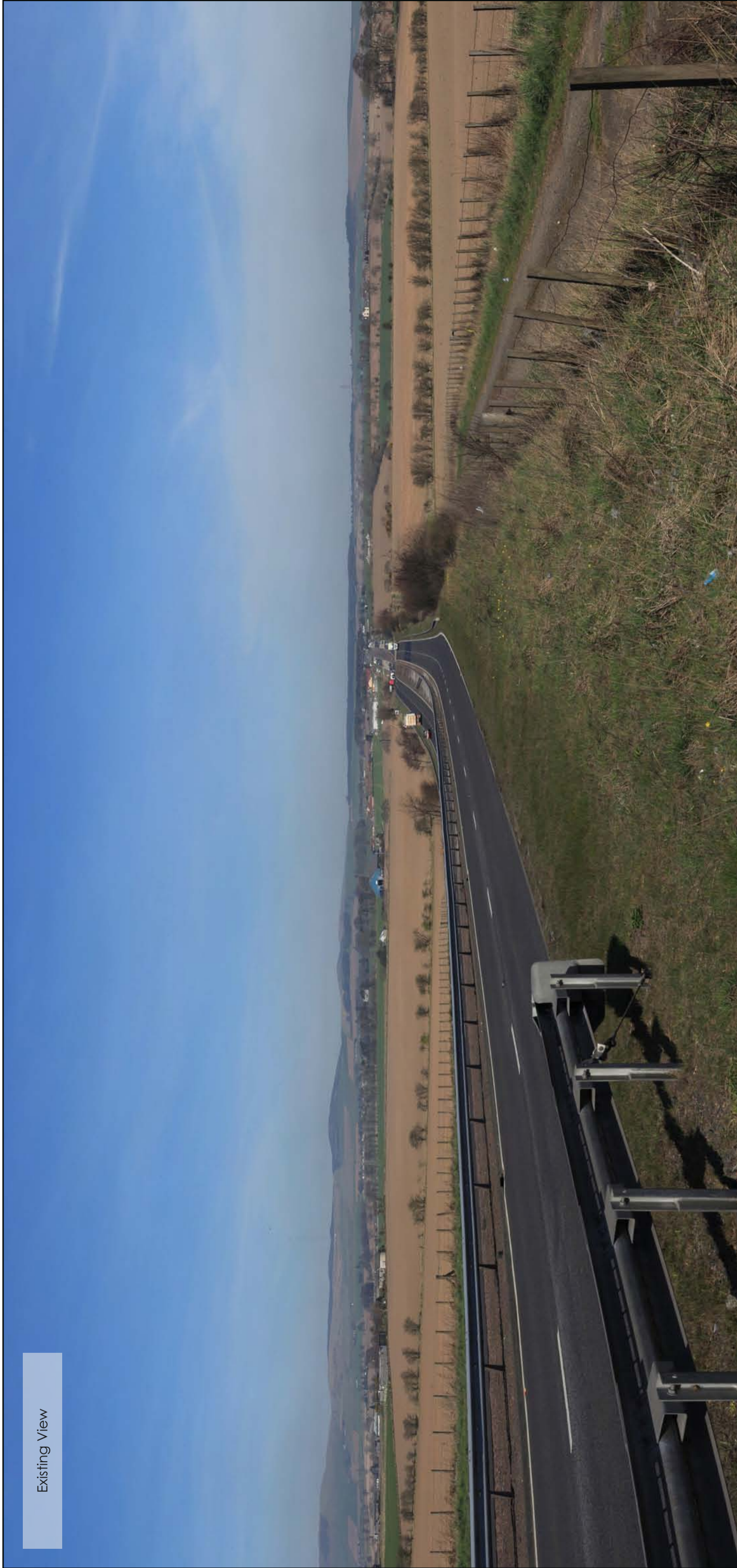
The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
 Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
 *Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



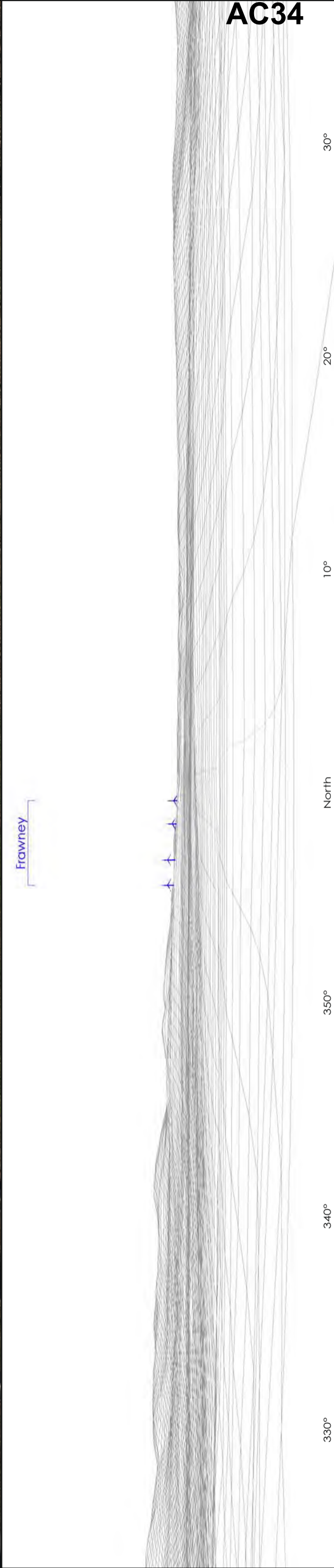
Drawn by SL
 Checked by TP
 Approved by

TL 02a
 18/03/2014
 4:03 PM C010b

Existing View



Frawney



AC34

Predicted View



Frawney



330°

340°

350°

North

10°

20°

30°



**Polar Energy
(Finlargo) Ltd**

Frawney Wind Farm

Viewpoint 10: A90 North of Claverhouse,
Dundee

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-15c



Drawn by SL
Checked by TP
Approved by

TL 02a
18/03/2014
4:03 PM C010b

AC34

Predicted View (70mm Focal Length)



Frawney Wind Farm



Figure 6-16a
Viewpoint 11 - Balmashanner Hill (Core path 297)

Viewpoint Data
Grid Reference
E346041, N748539
Elevation
145m AOD

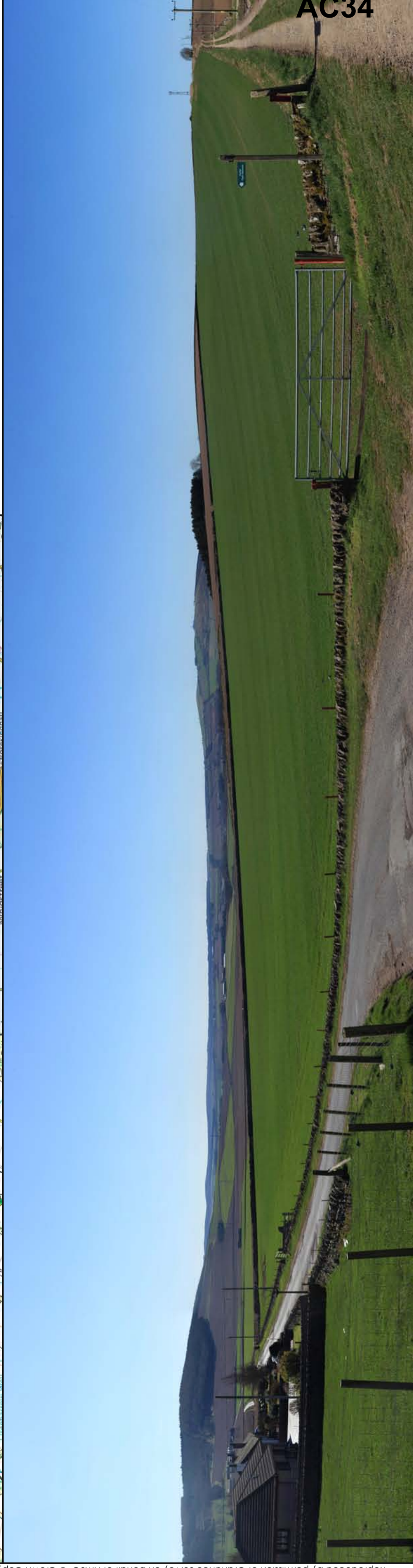
Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
7.431m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



AC34

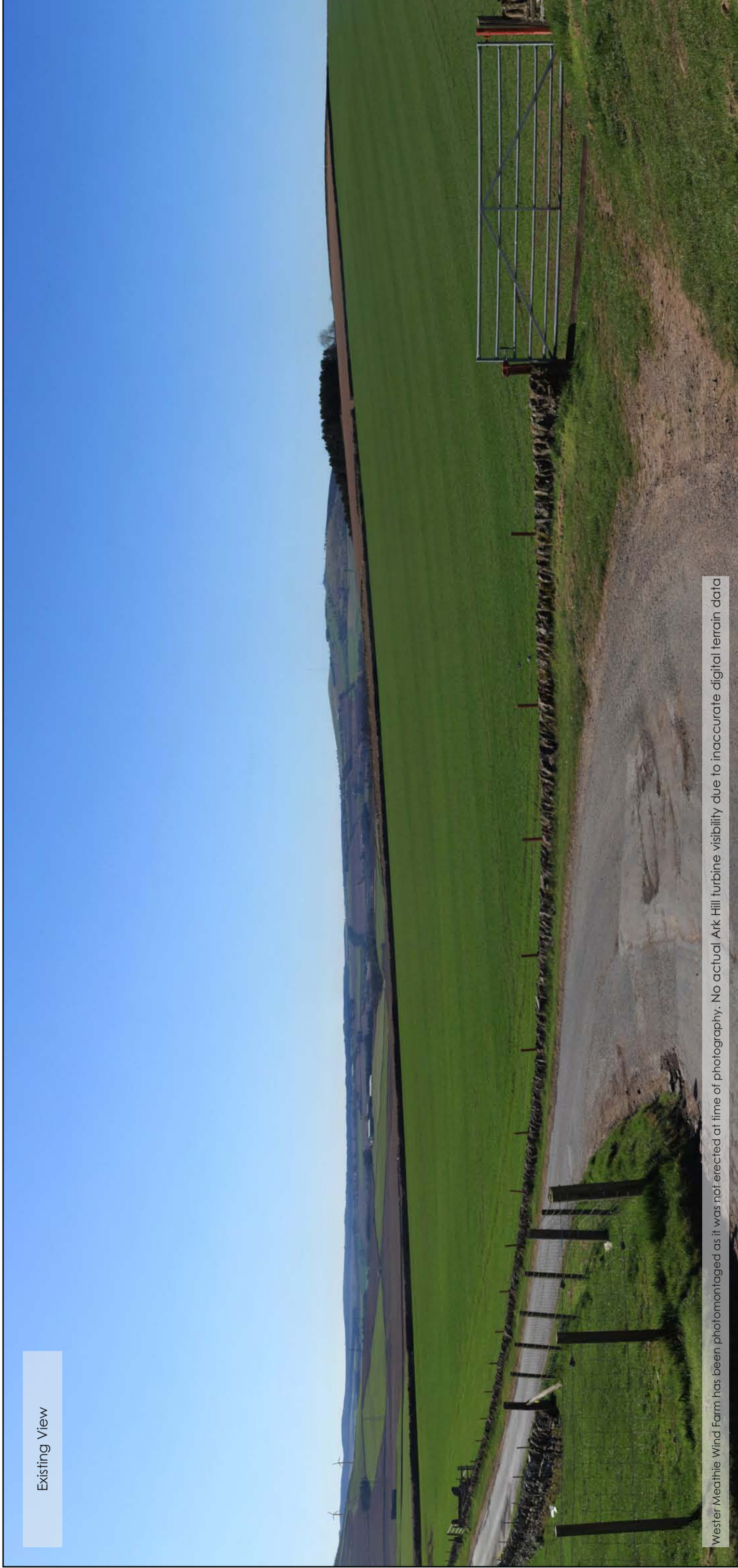
The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



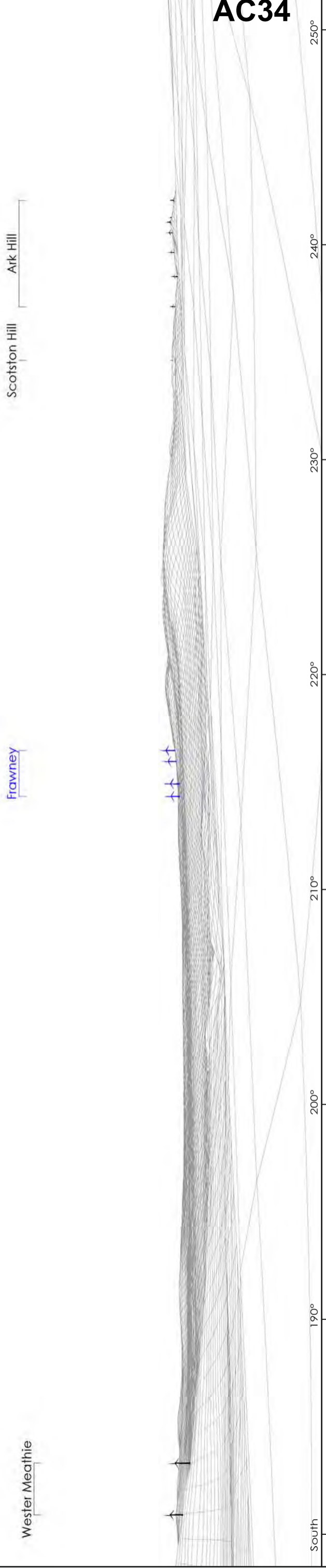
Drawn by SL
Checked by TP
Approved by

TL 02a
18/03/2014
4:03 PM C011b

Existing View



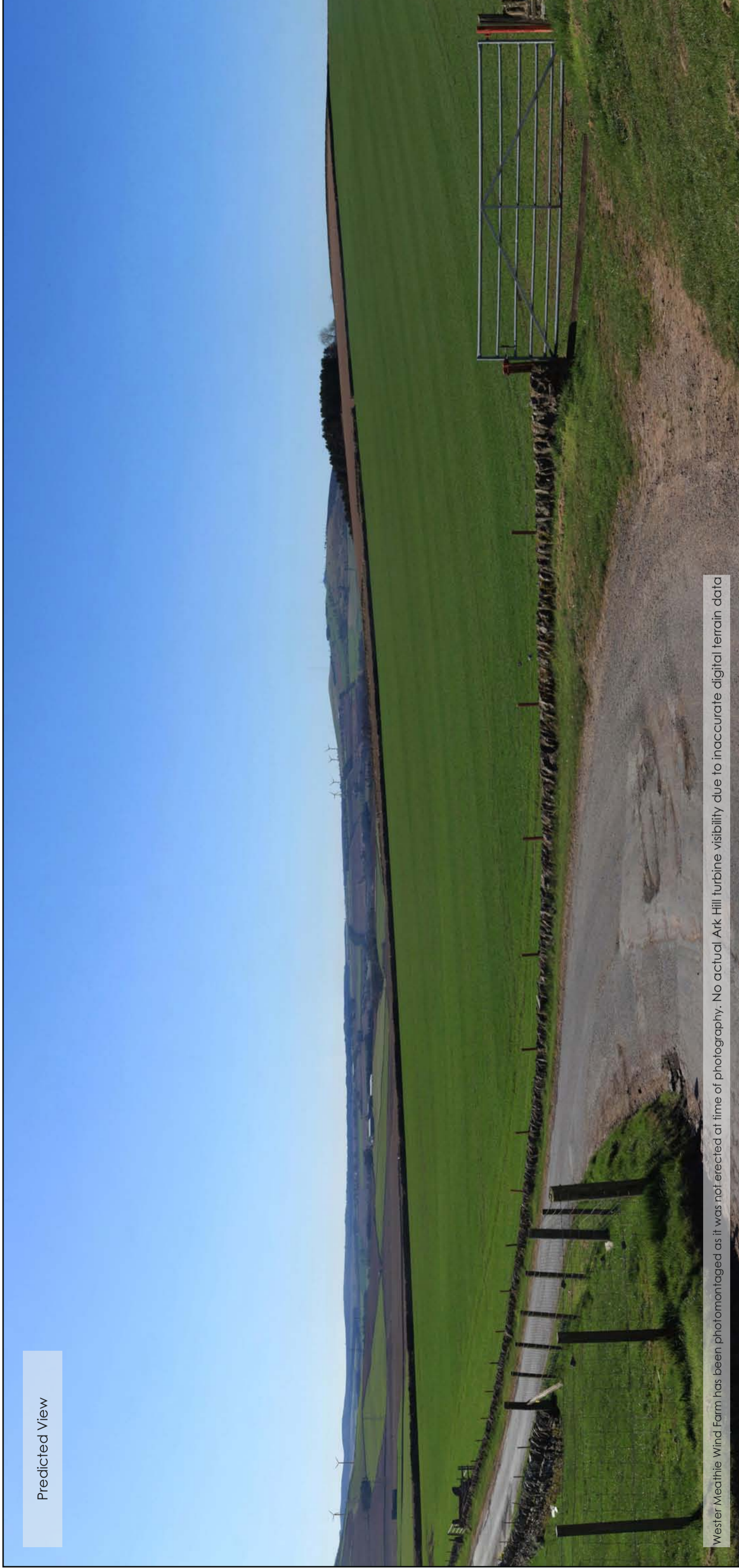
Wester Meathie Wind Farm has been photomontaged as it was not erected at time of photography. No actual Ark Hill turbine visibility due to inaccurate digital terrain data



AC34

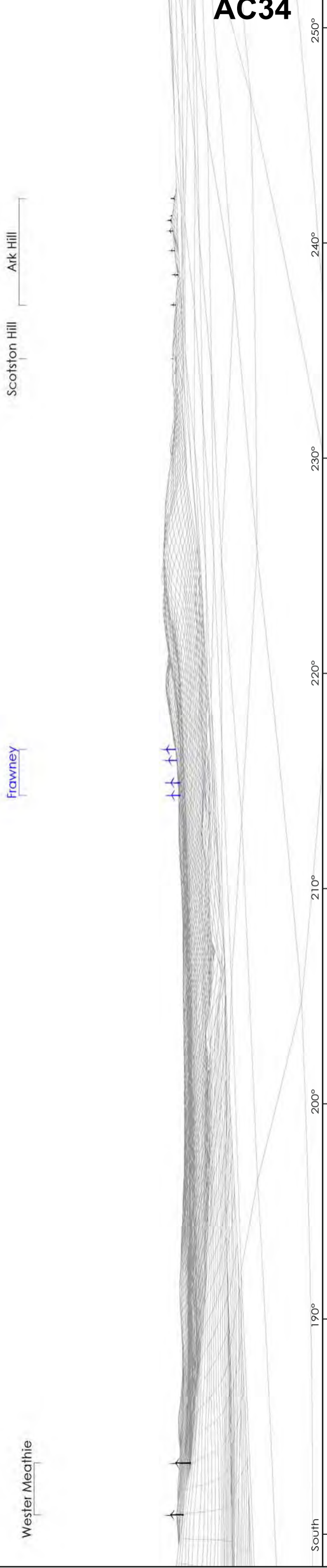
	Polar Energy (Finlång) Ltd	Frawney Wind Farm	Viewpoint 11: Balmashanner Hill (Core path 297)	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-16b	Drawn by SL Checked by TP Approved by TL 02a 18/03/2014 4:03 PM C011b
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Predicted View



Wester Meathie Wind Farm has been photomontaged as it was not erected at time of photography. No actual Ark Hill turbine visibility due to inaccurate digital terrain data

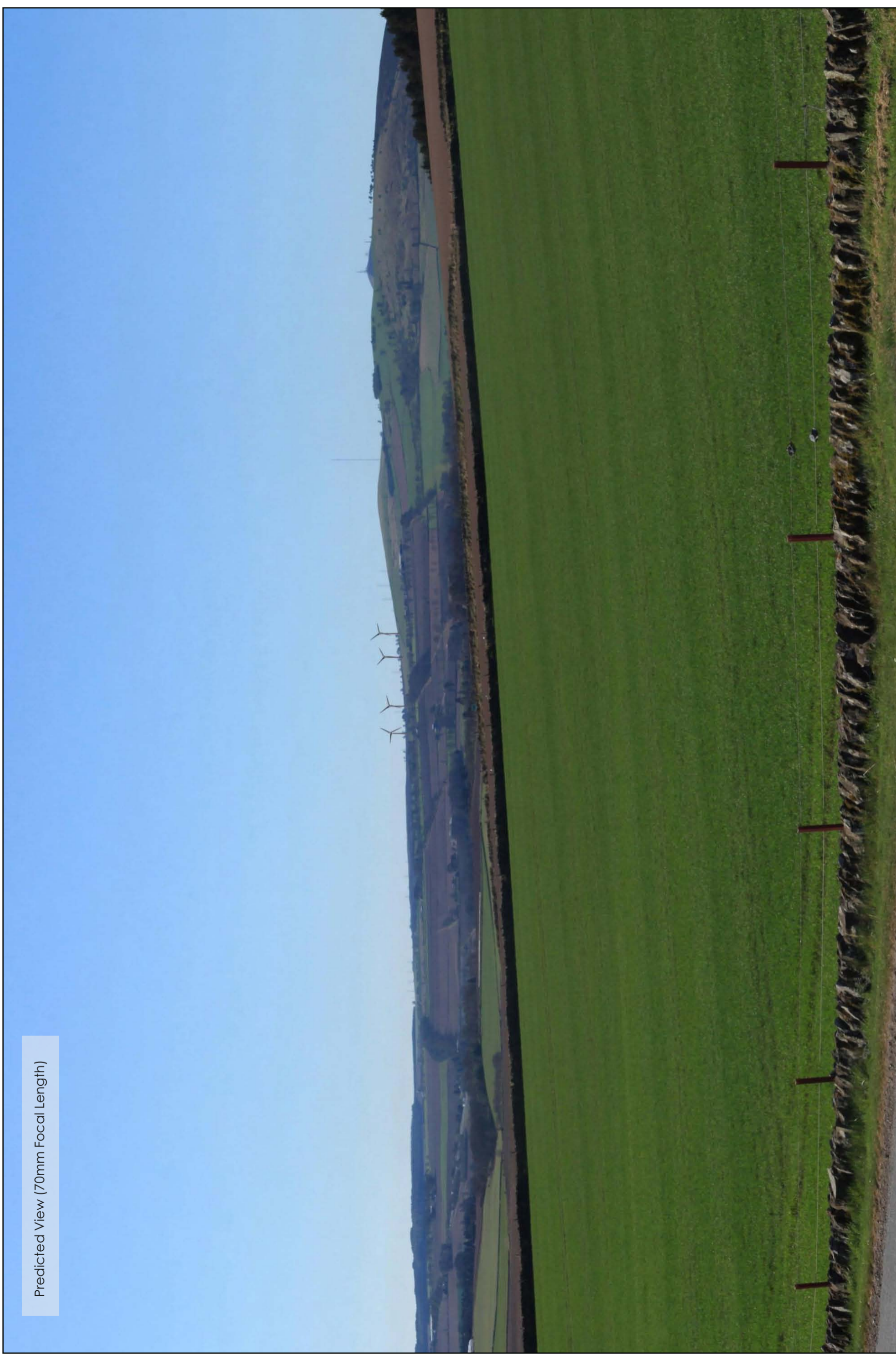
Wester Meathie | Scotston Hill | Ark Hill | Frawney



AC34

South	190°	200°	210°	220°	230°	240°	250°
Viewpoint 11: Balmashanner Hill (Core path 297)		Frawney Wind Farm		Horizontal View Angle Approximate Viewing Distance		Figure 6-16c	
73°		315mm					
Polar Energy (Finlång) Ltd		atmos CONSULTING		Drawn by SL Checked by TP Approved by		TL 02a 18/03/2014 4:03 PM C011b	

Predicted View (70mm Focal Length)



Frawney Wind Farm



Figure 6 17a
Viewpoint 12 Kinpurney Hill

Viewpoint Data

Grid Reference
E332287, N741744
Elevation
342m AOD

Wireframe/Photograph

Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

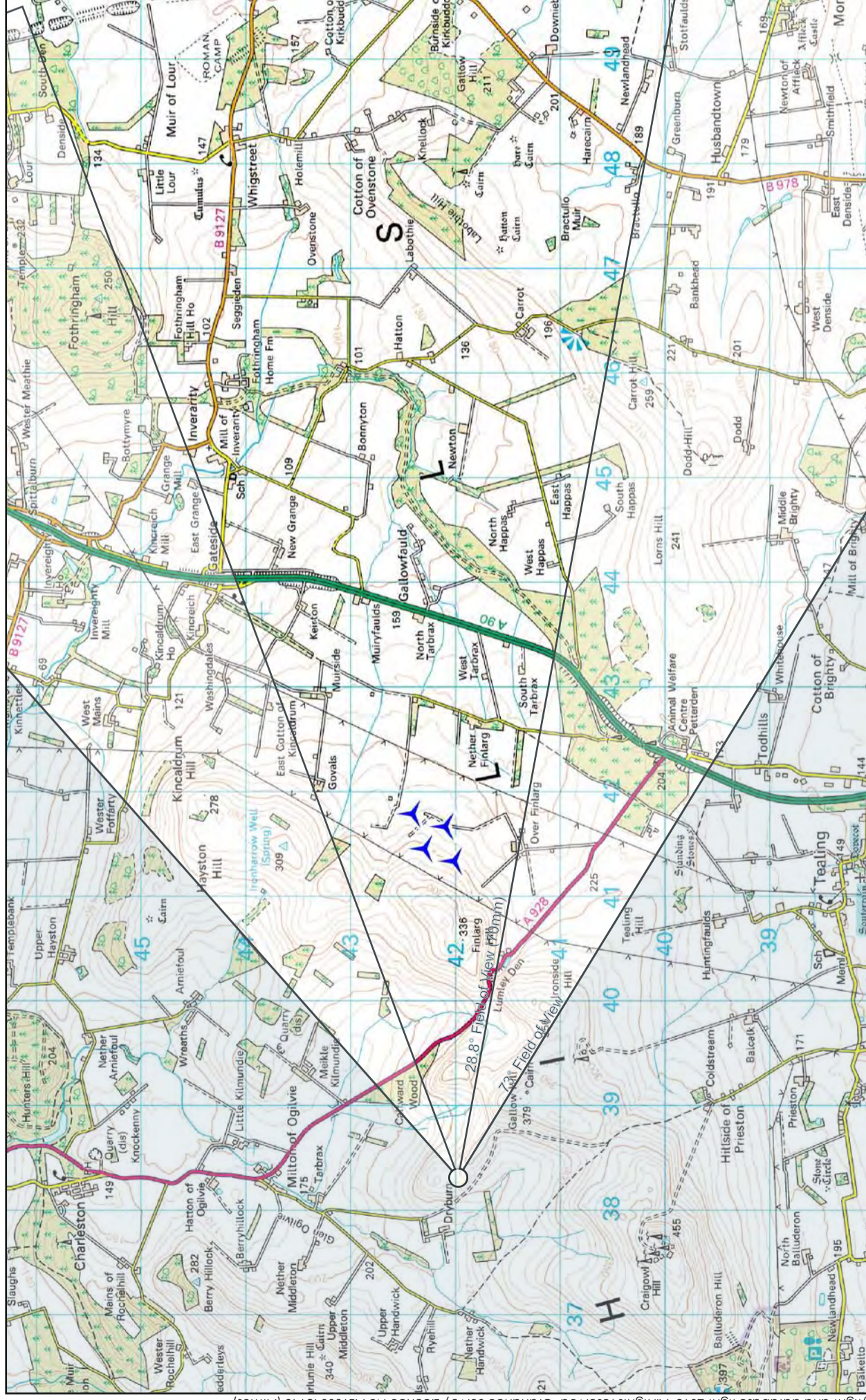
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
2
Number of Turbine Hubs Visible
0
Distance to Nearest Turbine
9,055m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



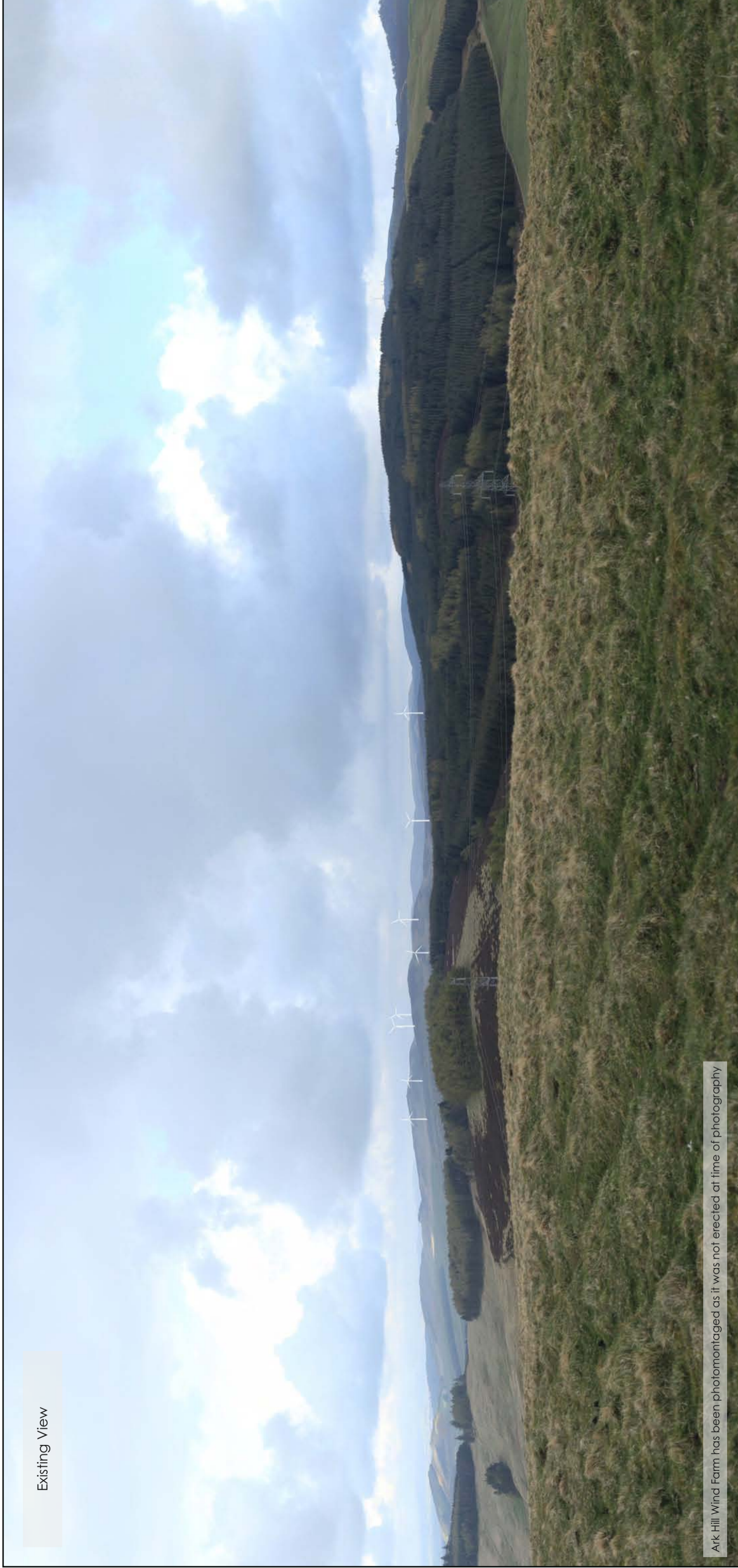
The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.

Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.

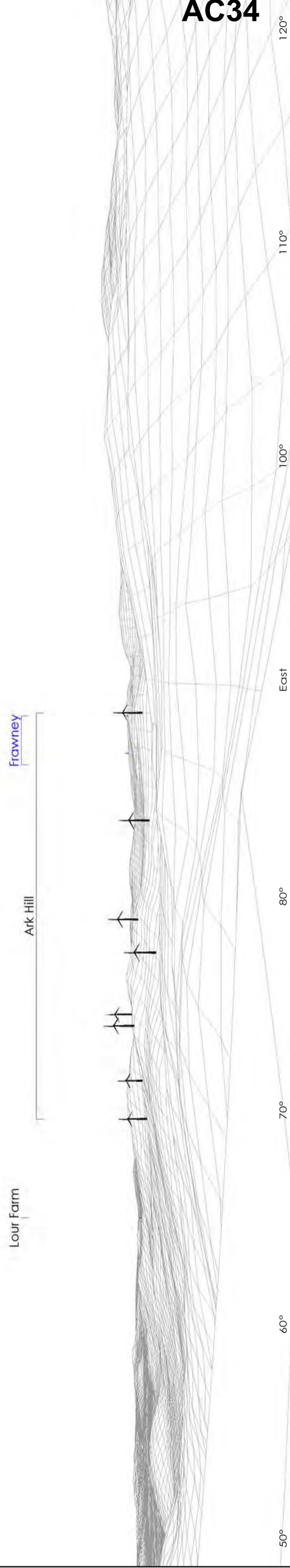
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



Existing View



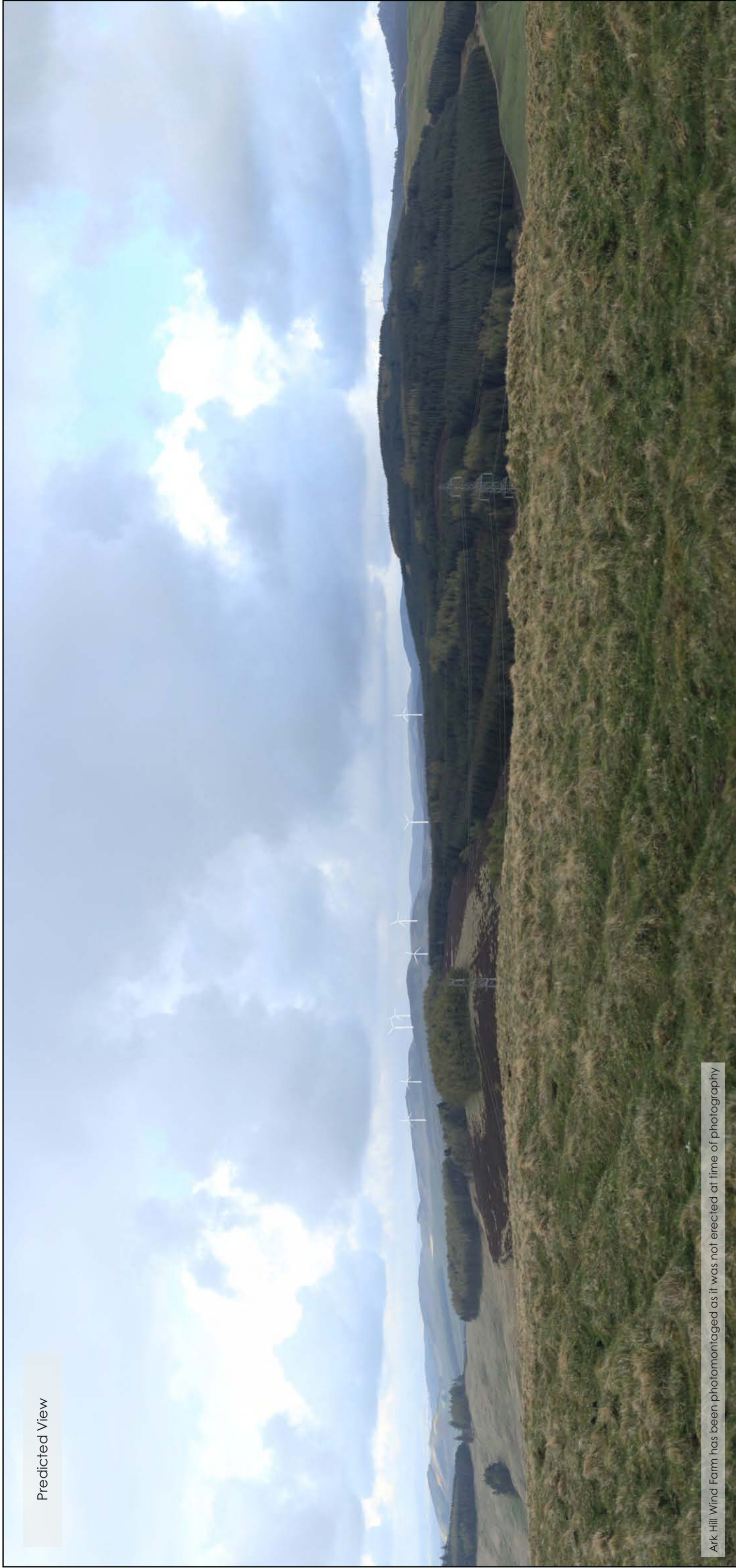
Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography



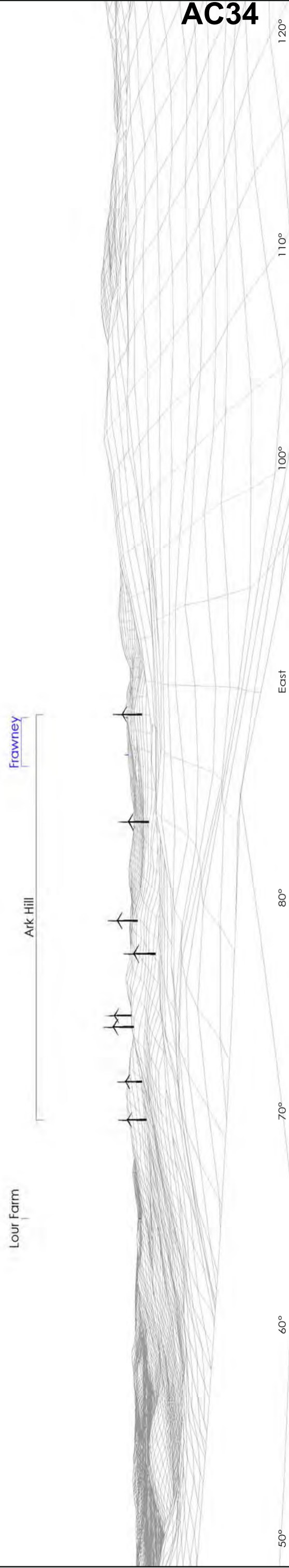
AC34

	Polar Energy (Finlary) Ltd	Frawney Wind Farm	Viewpoint 12: Kinpurney Hill	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-17b		Drawn by SL Checked by TP Approved by TL 02a 18/03/2014 4:03 PM C021b
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Predicted View



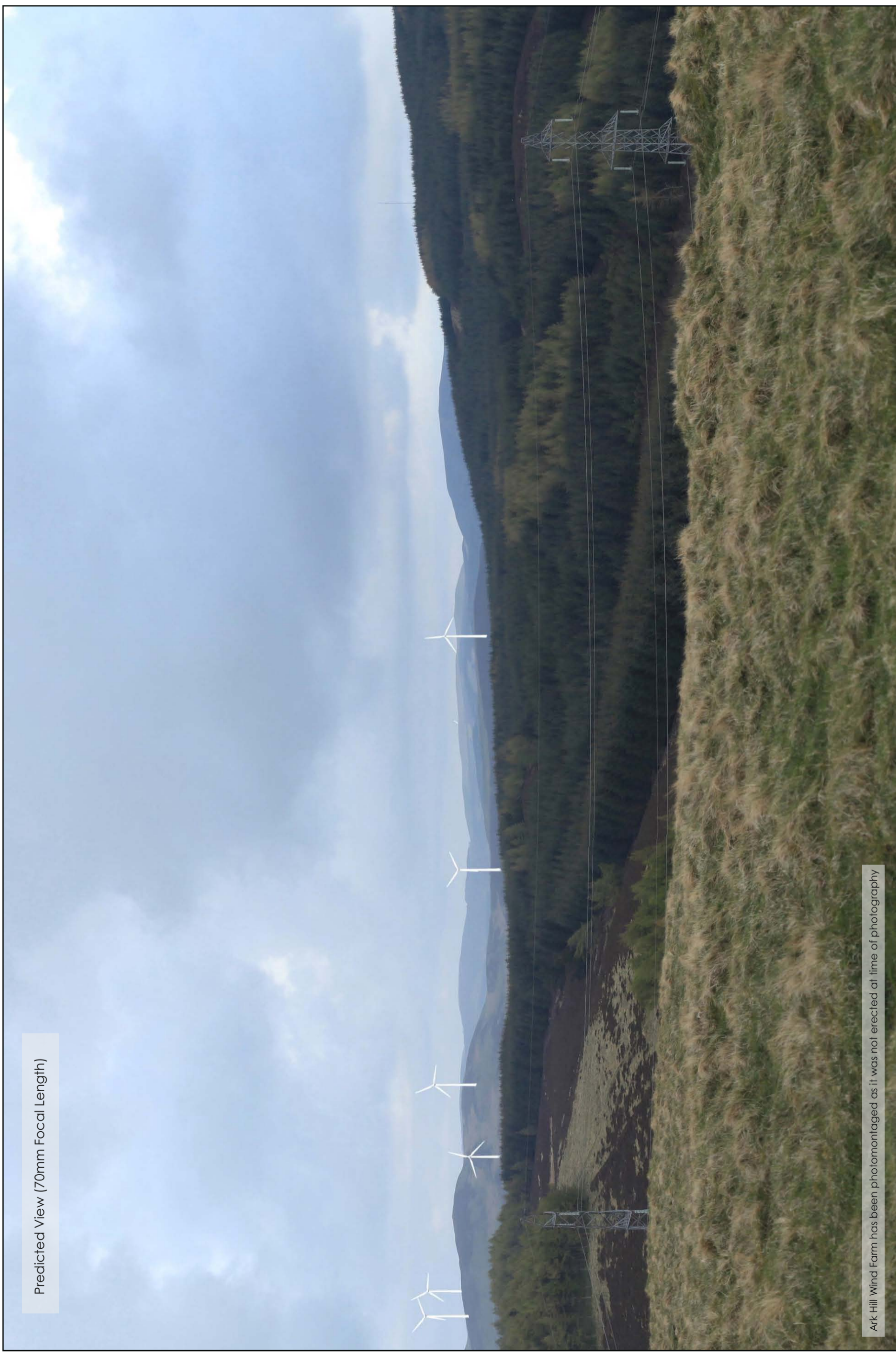
Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography



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50°	60°	70°	80°	100°	110°	120°
East						
atmos CONSULTING	Polar Energy (Finlary) Ltd	Frawney Wind Farm	Viewpoint 12: Kinpurney Hill	Horizontal View Angle Approximate Viewing Distance	73° 31.5mm	Figure 6-17c
				Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C021b	

Predicted View (70mm Focal Length)



Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography

Frawney Wind Farm



Figure 6-18a
Viewpoint 13 - Dundee Law

Viewpoint Data
Grid Reference
E339157, N731330
Elevation
179m AOD

Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
10,939m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



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The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.

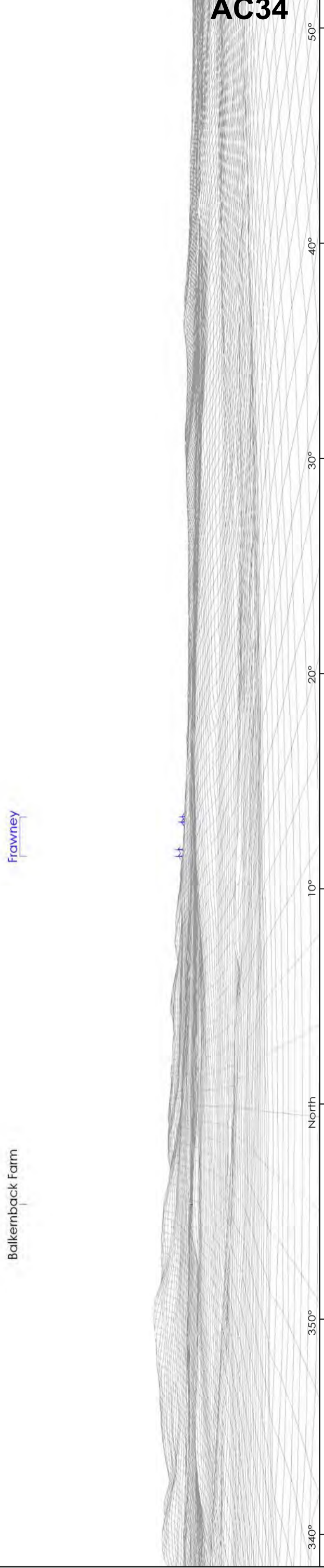


Existing View



Balkernback Farm

Frawney



AC34

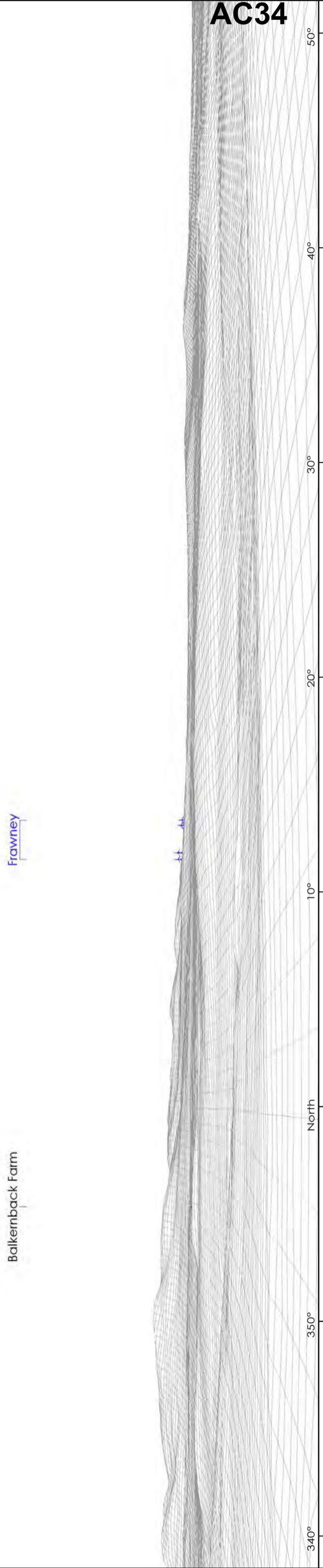
	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 13: Dundee Law	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-18b		Drawn by SL Checked by TP Approved by TP TL 02a 18/03/2014 4:03 PM C020b
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Predicted View



Balkernback Farm

Frawney



340°

350°

North

10°

20°

30°

40°

50°

atmos
CONSULTING

Polar Energy
(Finlargo) Ltd

Frawney Wind Farm

Viewpoint 13: Dundee Law

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-18c

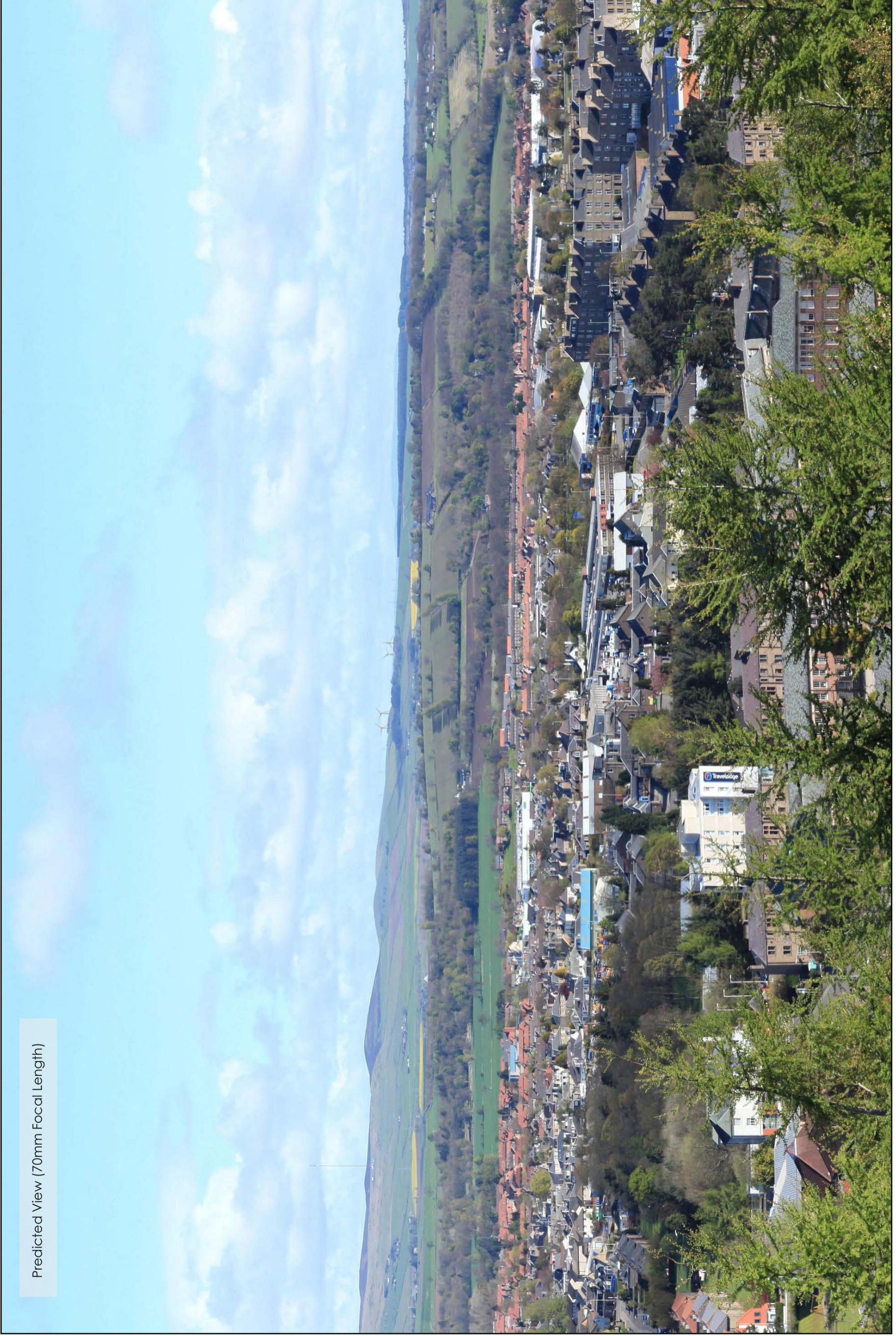


Drawn by SL
 Checked by TP
 Approved by

TL 02a
 18/03/2014
 4:03 PM C020b

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Predicted View (70mm Focal Length)



Frawney Wind Farm

Polar Energy (Finlarg) Ltd



Figure 6-19a Viewpoint 14 - Kirriemuir

Viewpoint Data
Grid Reference
E338744, N754490
Elevation
179m AOD

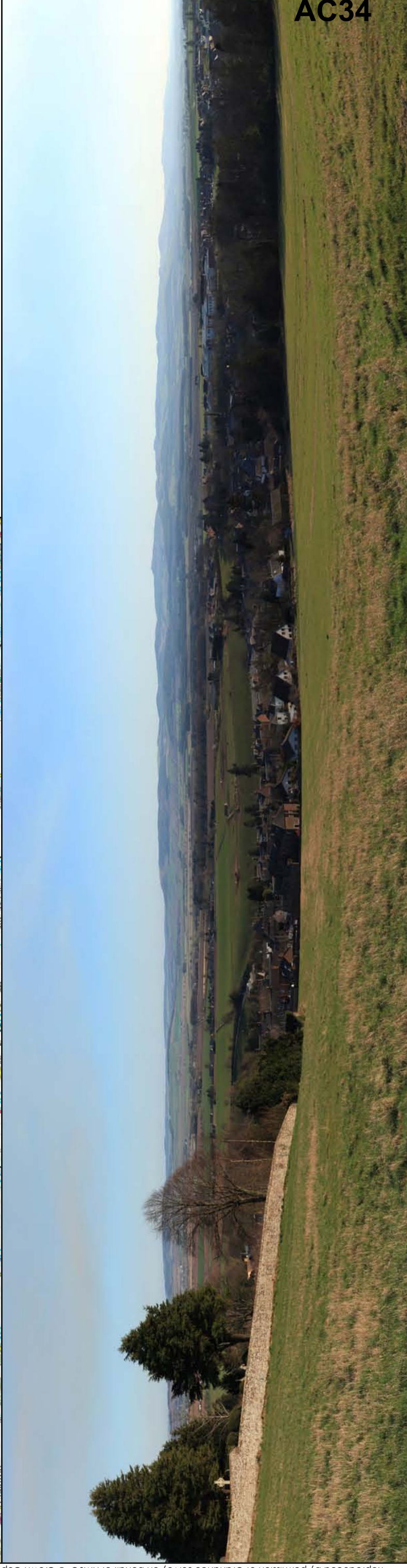
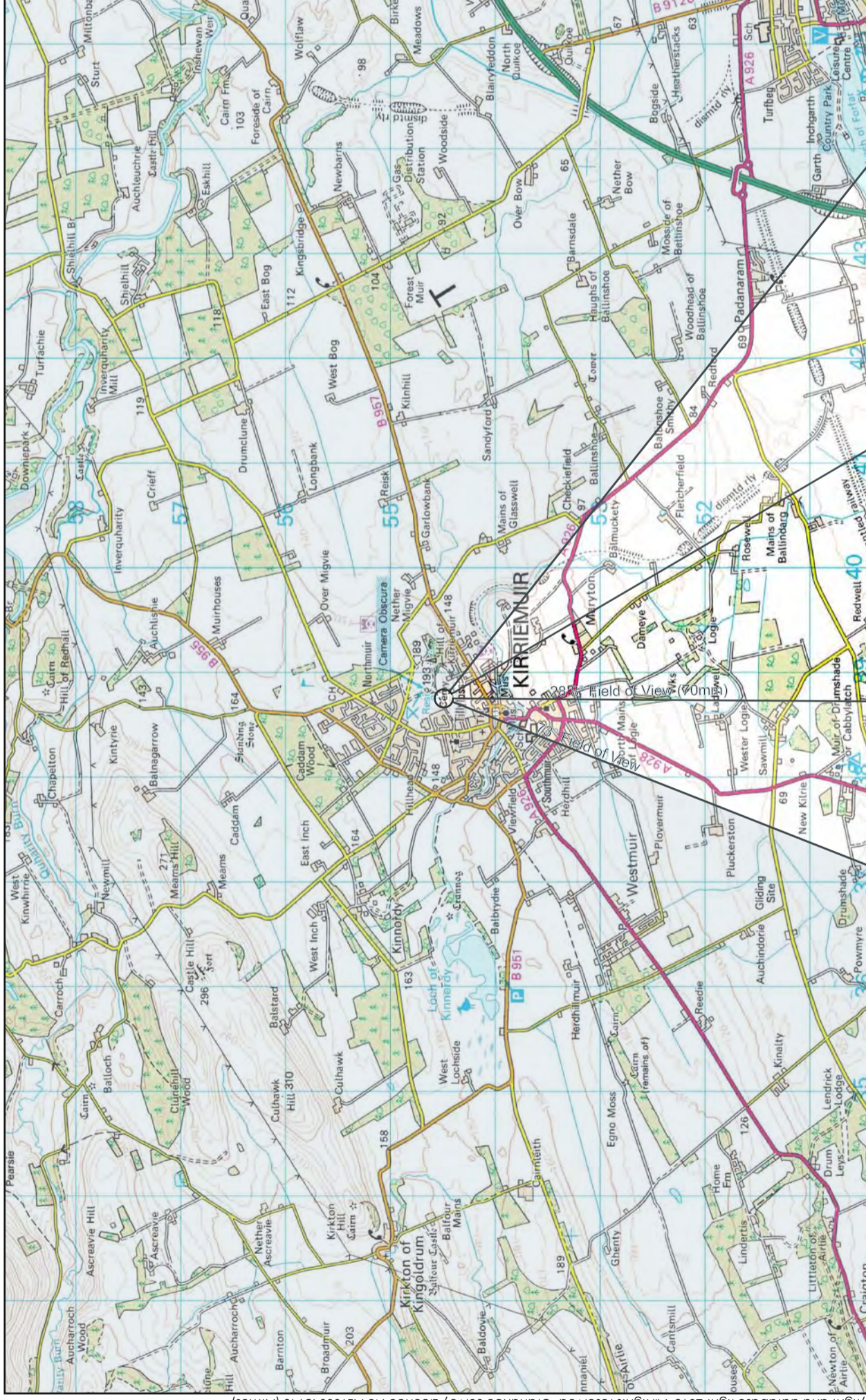
Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
2
Number of Turbine Hubs Visible
0
Distance to Nearest Turbine
12.425m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for. Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation. *Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



Drawn by SL
Checked by TP
Approved by

TL 02a
18/03/2014
4:03 PM C014b

Existing View

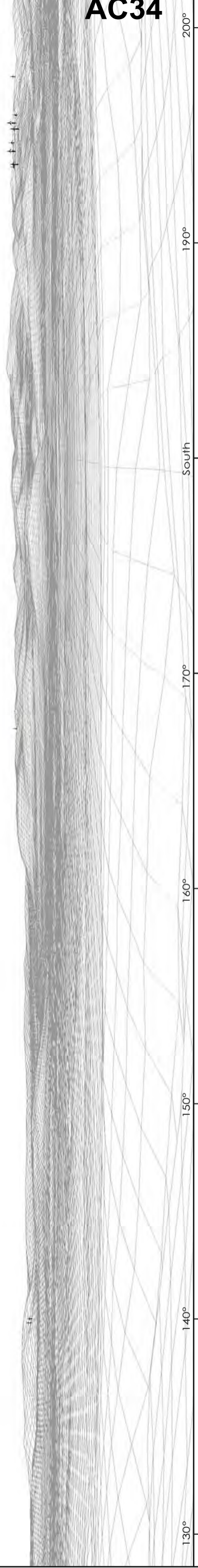


Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography

Wester Meathie

Frawney

Ark Hill Scotston Hill



200°

190°

South

170°

160°

150°

140°

130°



**Polar Energy
(Finlargo) Ltd**

Frawney Wind Farm

Viewpoint 14: Kiriemuir

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-19b



Drawn by SL
 Checked by TP
 Approved by

TL 02a
 18/03/2014
 4:03 PM C014b

AC34

Predicted View

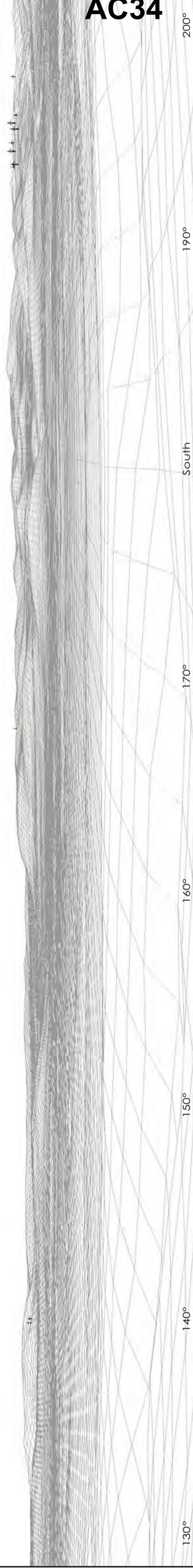


Ark Hill Wind Farm has been photomontaged as it was not erected at time of photography

Wester Meathie

Frawney

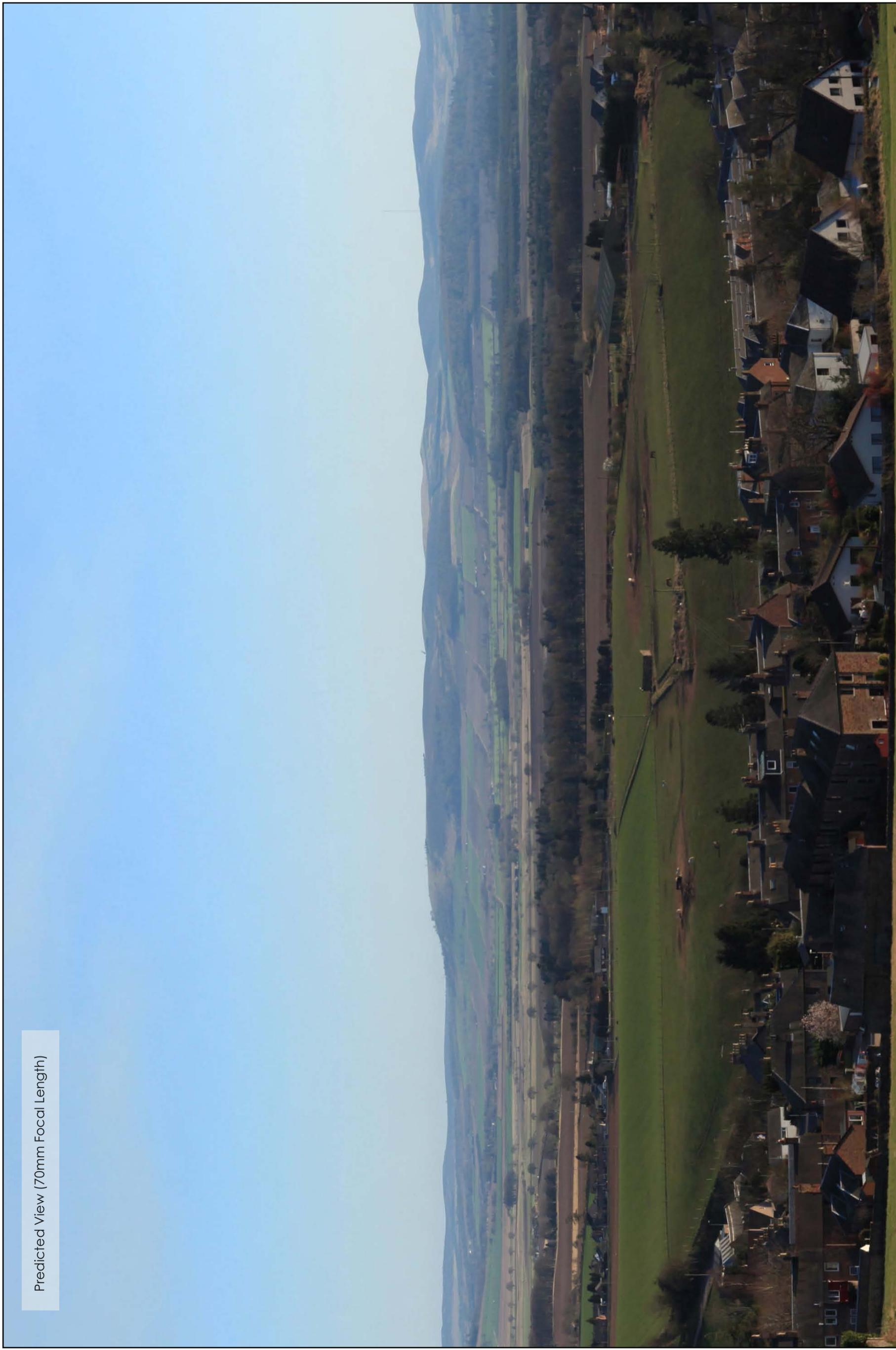
Ark Hill Scotston Hill



130° 140° 150° 160° 170° 190° 200°

South

Predicted View (70mm Focal Length)



Frawney Wind Farm



Figure 6-20a
Viewpoint 15 - Egno Moss to Arlie

Viewpoint Data
Grid Reference
Elevation

E334034, N752489
165m AOD

Wireframe/Photograph

Height above ground
Camera and Lens

1.6m
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

Hub Height
Blade Tip Height

57m
92.5m

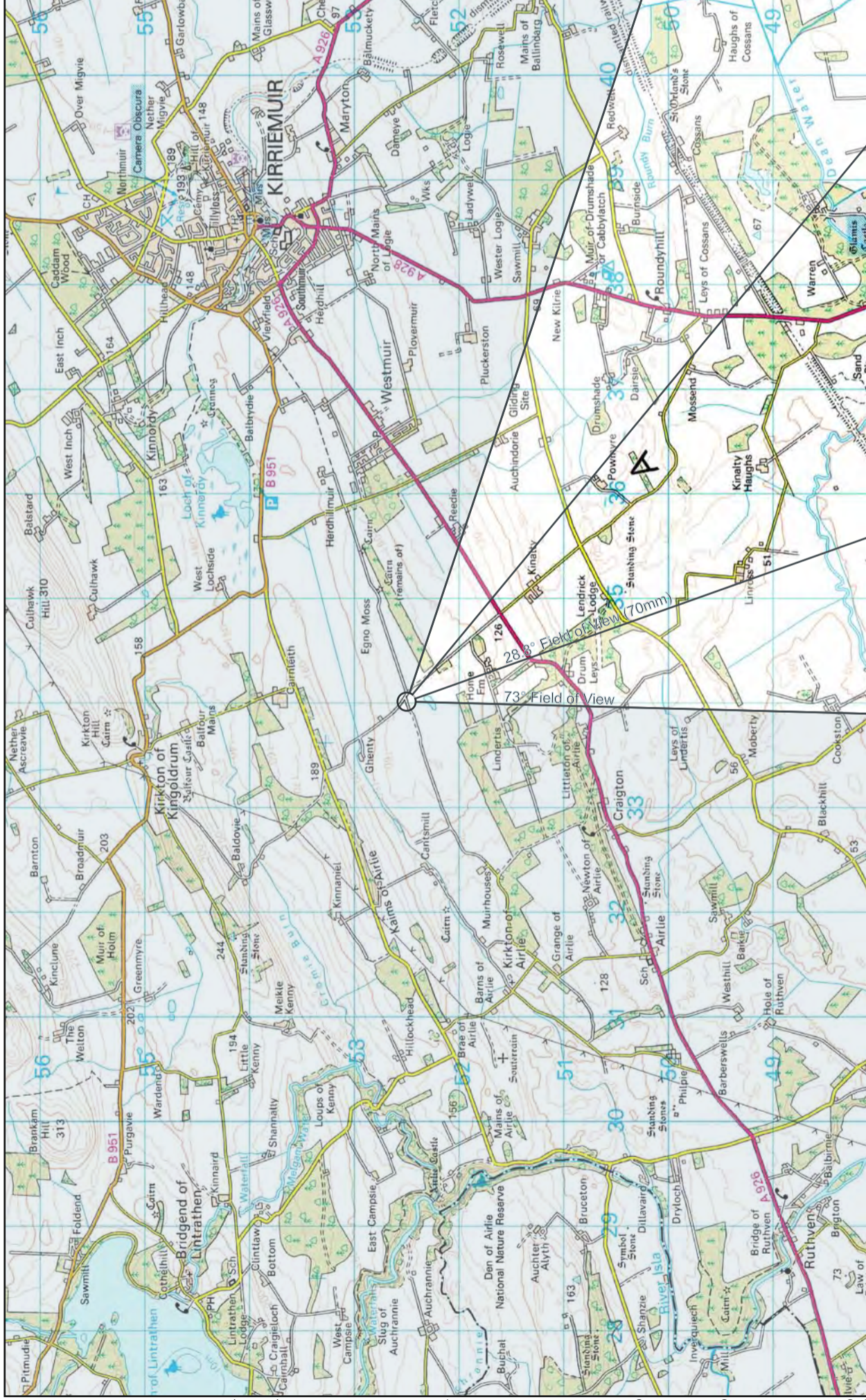
Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
Number of Turbine Hubs Visible
Distance to Nearest Turbine

2
0
12.580m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



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Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



Drawn by SL
Checked by TP
Approved by

TL 02a
18/03/2014
4:03 PM C027b

Existing View

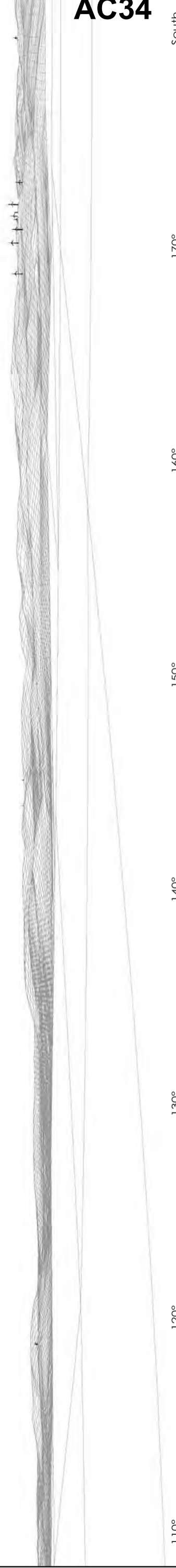


Wester Meathie

Frawney

Ark Hill

Scotston Hill



110°

120°

130°

140°

150°

160°

170°

South



**Polar Energy
(Finlargo) Ltd**

Frawney Wind Farm

Viewpoint 15: Egno Moss to Arlie

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-20b



Drawn by SL
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18/03/2014
4:03 PM C027b

AC34

Predicted View

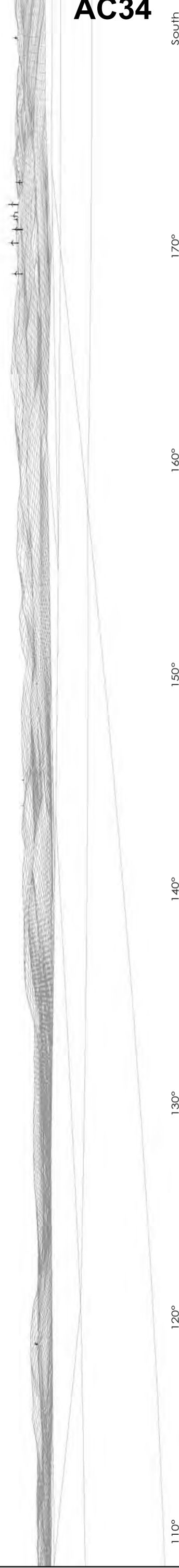


Wester Meathie

Frawney

Ark Hill

Scotston Hill



110°

120°

130°

140°

150°

160°

170°

South



**Polar Energy
(Finlargo) Ltd**

Frawney Wind Farm

Viewpoint 15: Egno Moss to Arlie

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-20c



Drawn by SL
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TL 02a
18/03/2014
4:03 PM C027b

AC34

Predicted View (70mm Focal Length)



Frawney Wind Farm



Figure 6-21a
Viewpoint 16 - Turin Hill

Viewpoint Data
Grid Reference
E351459, N753544
Elevation
250m AOD

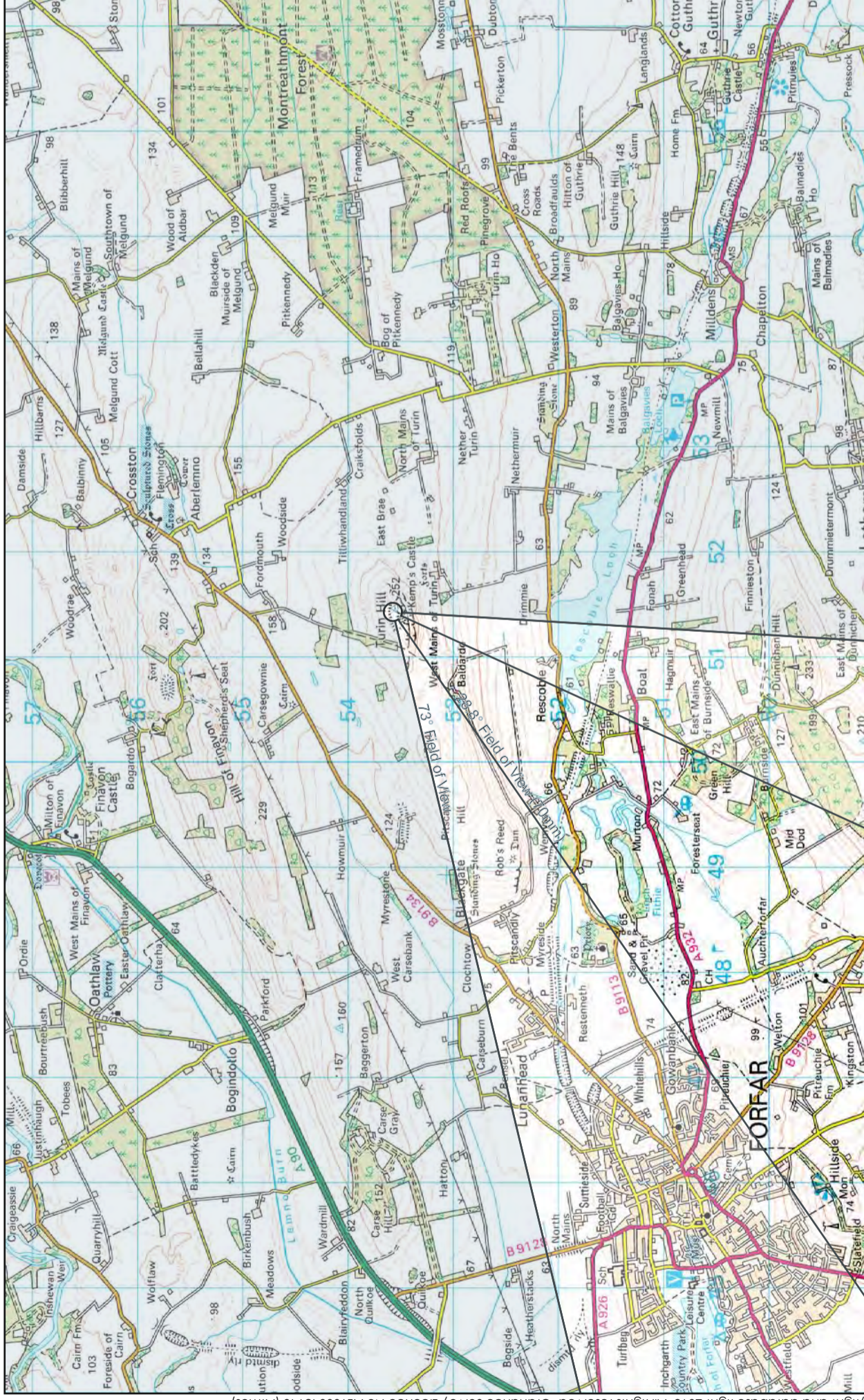
Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
14,720m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



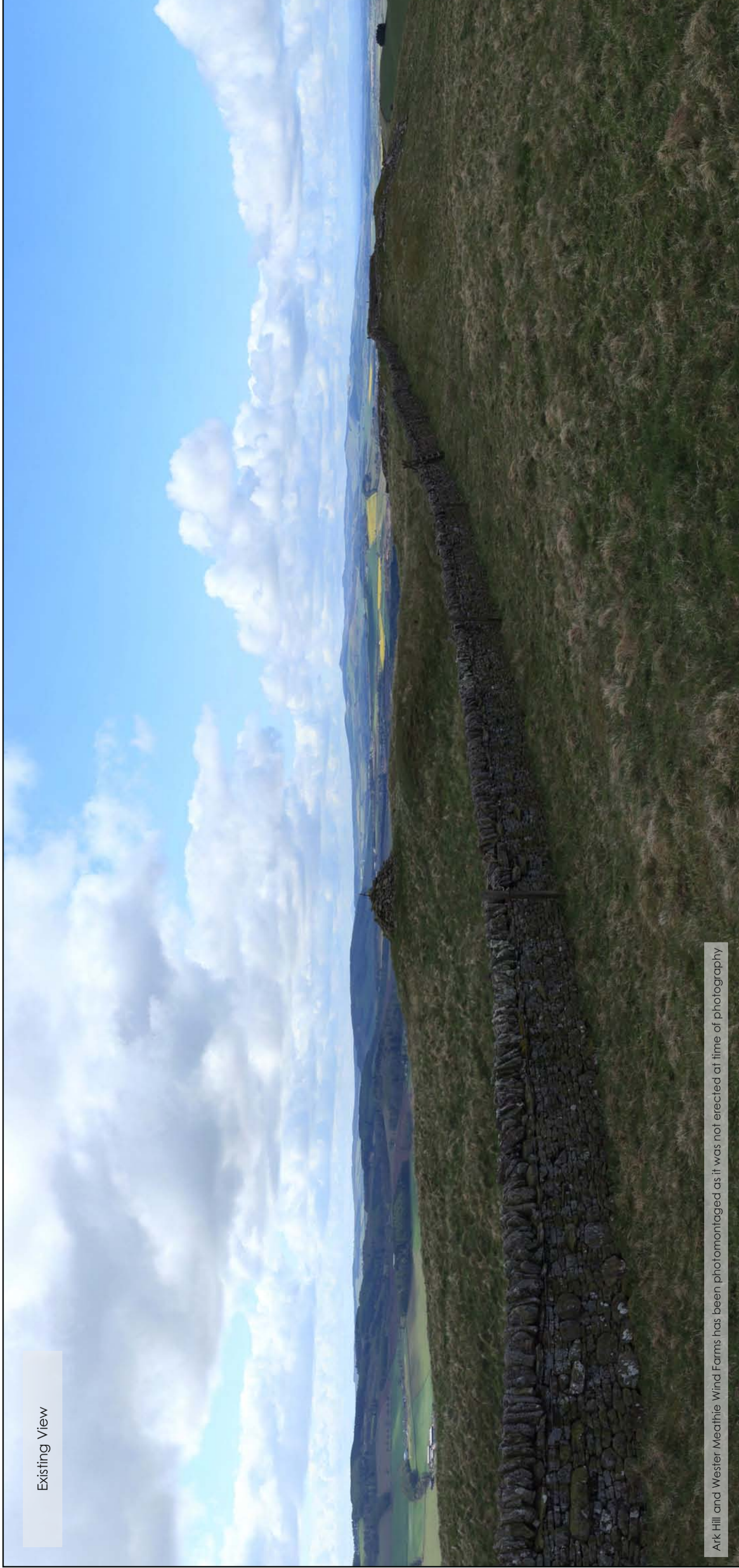
The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



Drawn by SL
Checked by TP
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TL 02a
18/03/2014
4:03 PM C022b

Existing View



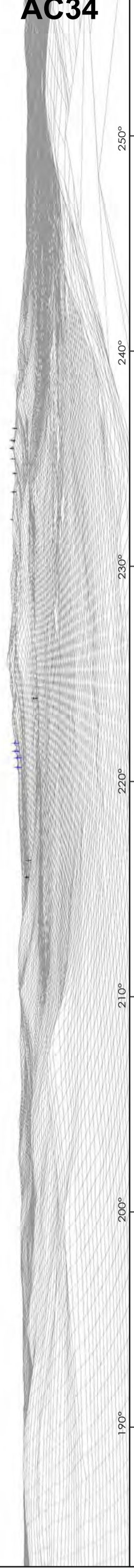
Ark Hill and Wester Meathie Wind Farms has been photomontaged as it was not erected at time of photography

Wester Meathie

FrawneyLour Farm

Ark Hill

Scotston Hill



190°

200°

210°

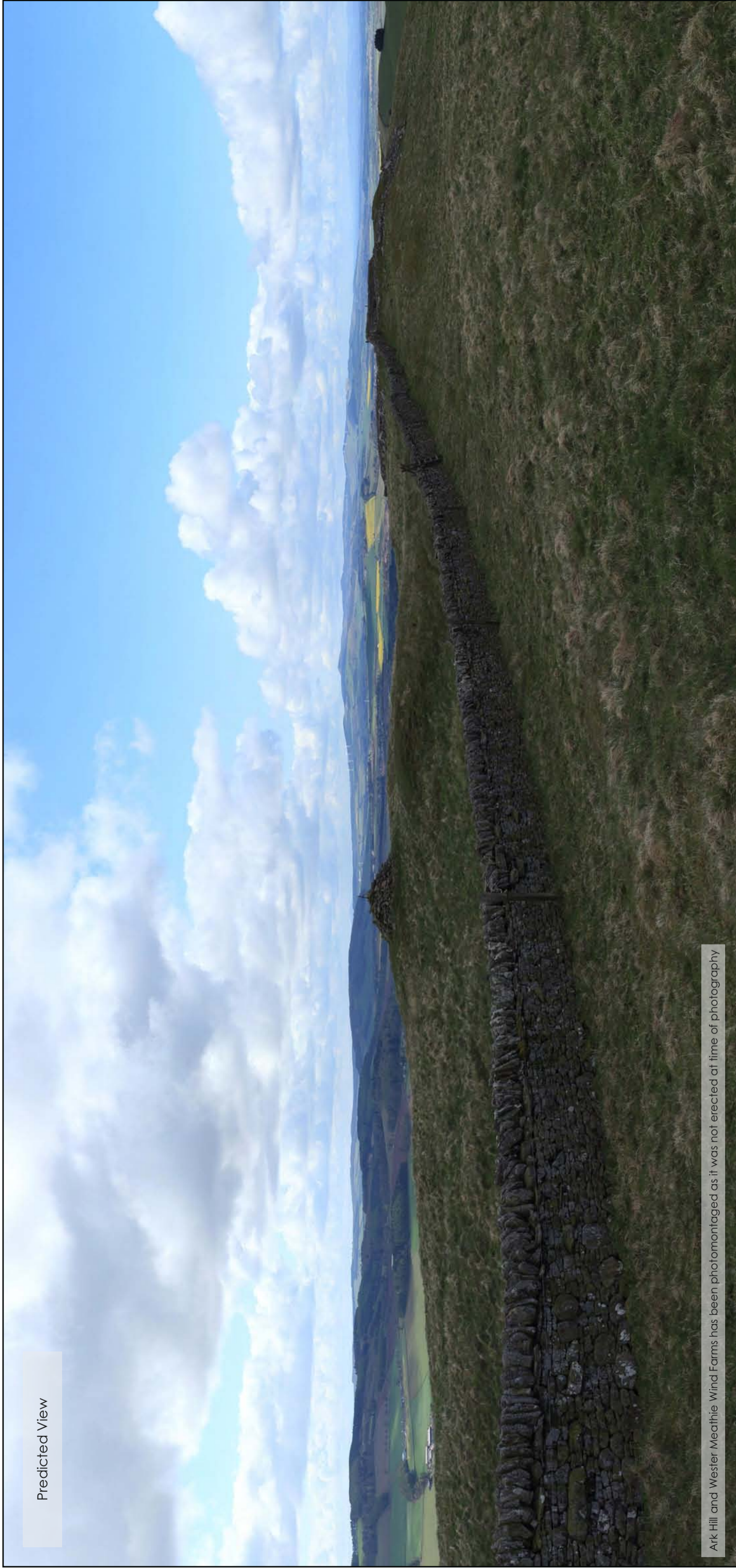
220°

230°

240°

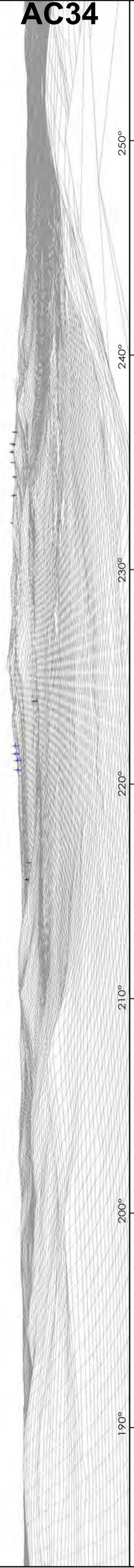
250°

Predicted View



Ark Hill and Wester Meathie Wind Farms has been photomontaged as it was not erected at time of photography

Wester Meathie FrawneyLour Farm Scotston Hill Ark Hill



atmos CONSULTING	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 16: Turin Hill	Horizontal View Angle Approximate Viewing Distance	73° 31.5mm	Figure 6-21c		Drawn by SL Checked by TP Approved by	TL 02a 18/03/2014 4:03 PM C022b
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AC34

Predicted View (70mm Focal Length)



Ark Hill and Wester Meathie Wind Farms has been photomontaged as it was not erected at time of photography

Frawney Wind Farm



Figure 6-22a
Viewpoint 17 - Tentismuir

Viewpoint Data
Grid Reference
E349566, N728240
Elevation
1m AOD

Wireframe/Photograph
Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility
Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
15,914m



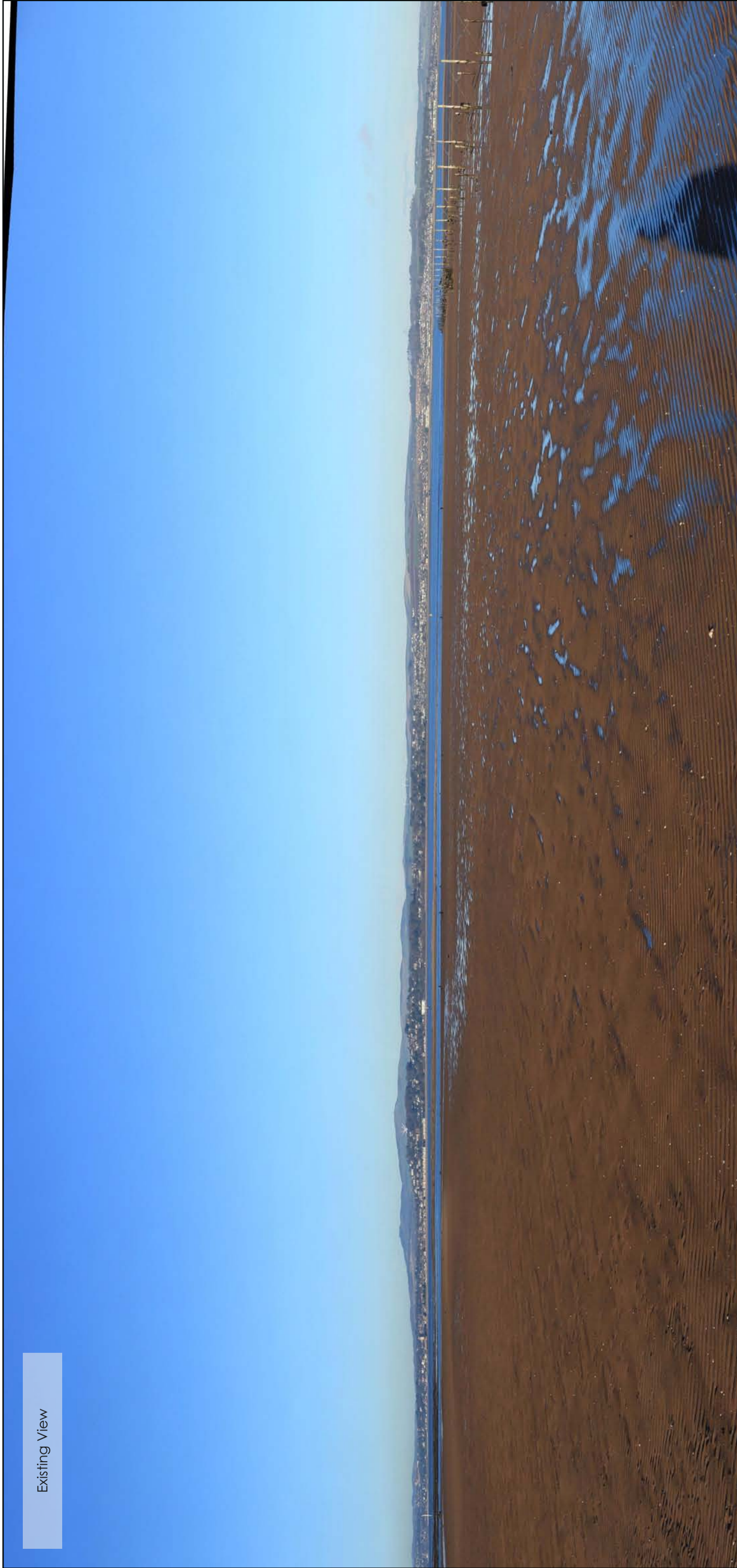
Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



Existing View



Scotsfon Hill

Michelin Tyre Factory

Frawney

300°

310°

320°

330°

340°

350°

North

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Polar Energy
(Finlargo) Ltd

Frawney Wind Farm

Viewpoint 17: Tentismuir

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-22b



Drawn by SL
Checked by TP
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TL 02a
18/03/2014
4:03 PM C028b

AC34

Frawney Wind Farm



Figure 6-23a
Viewpoint 18 - A933, North of Fricockheim

Viewpoint Data

Grid Reference
 E358892, N750830
 Elevation
 60m AOD

Wireframe/Photograph

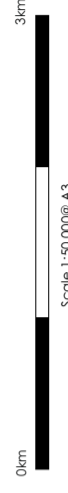
Height above ground
 1.6m
 Camera and Lens
 Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

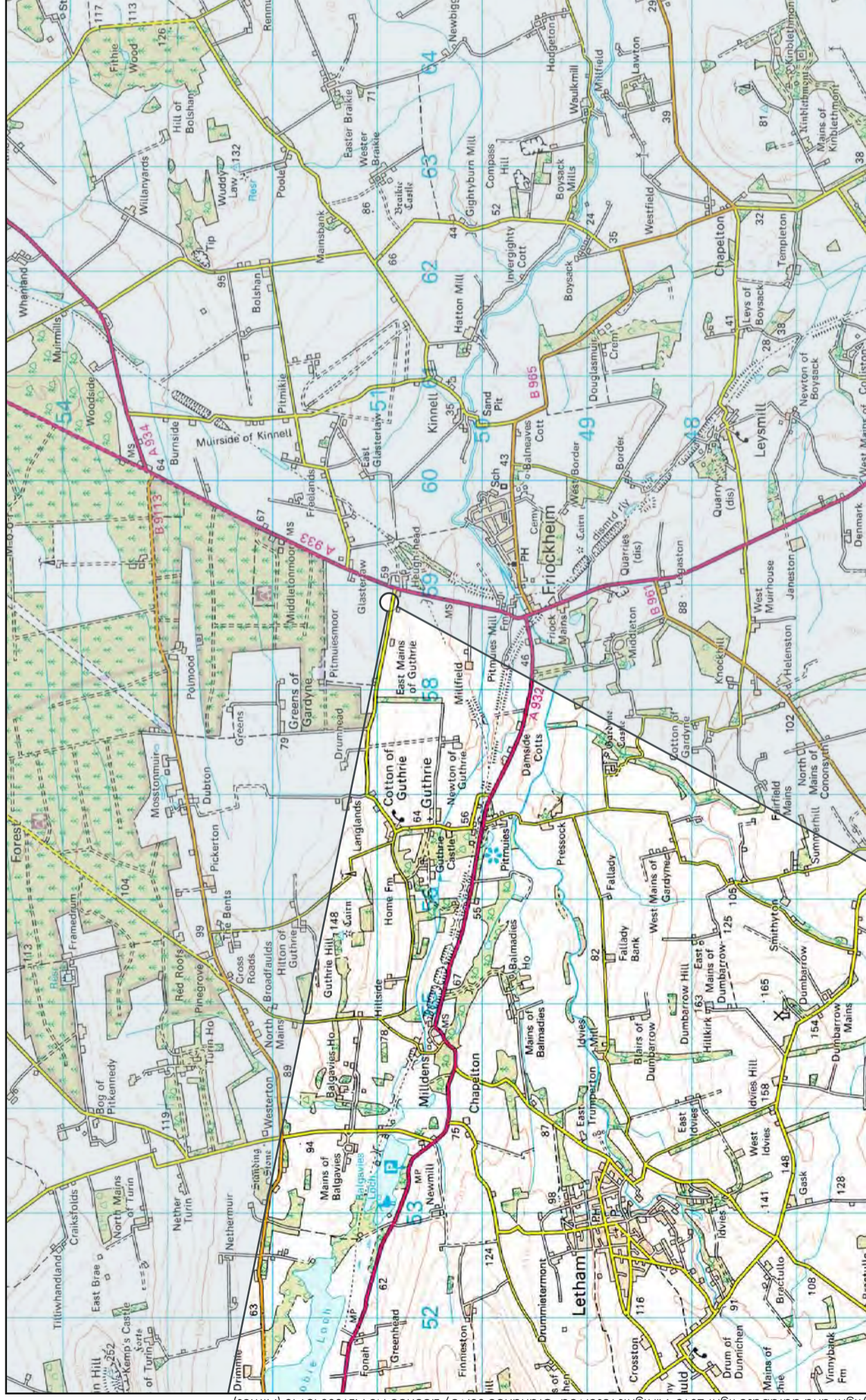
Hub Height
 57m
 Blade Tip Height
 92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
 4
 Number of Turbine Hubs Visible
 4
 Distance to Nearest Turbine
 18,958m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm

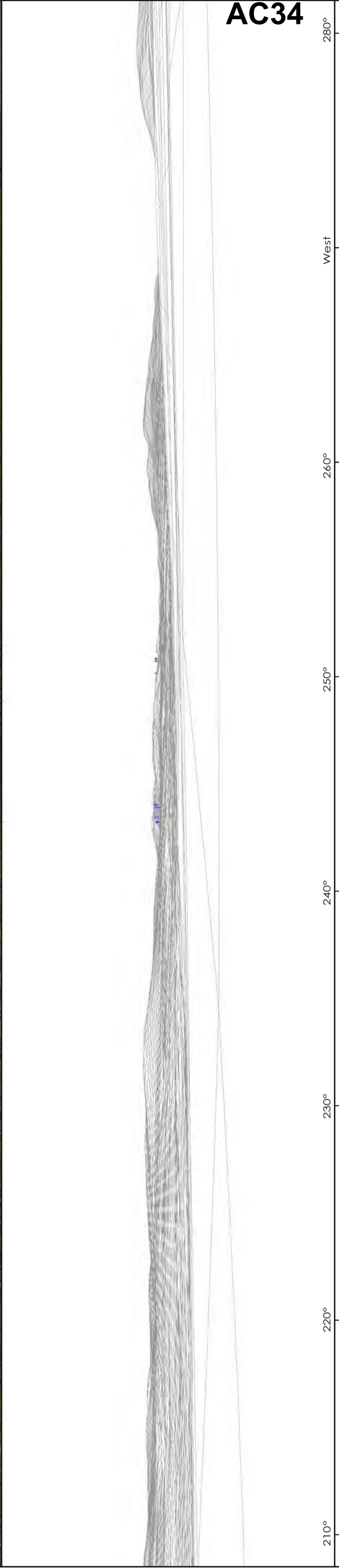


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 Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
 *Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



Existing View



AC34

	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 18: A933, North of Fricockheim	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-23b		Drawn by SL Checked by TP Approved by TP TL 02a 20/03/2014 4:03 PM C029b
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Frawney Wind Farm



Figure 6-24a
Viewpoint 19 - Cat Law

Viewpoint Data

Grid Reference E331888, N760993
Elevation 669m AOD

Wireframe/Photograph

Height above ground 1.6m
Camera and Lens Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

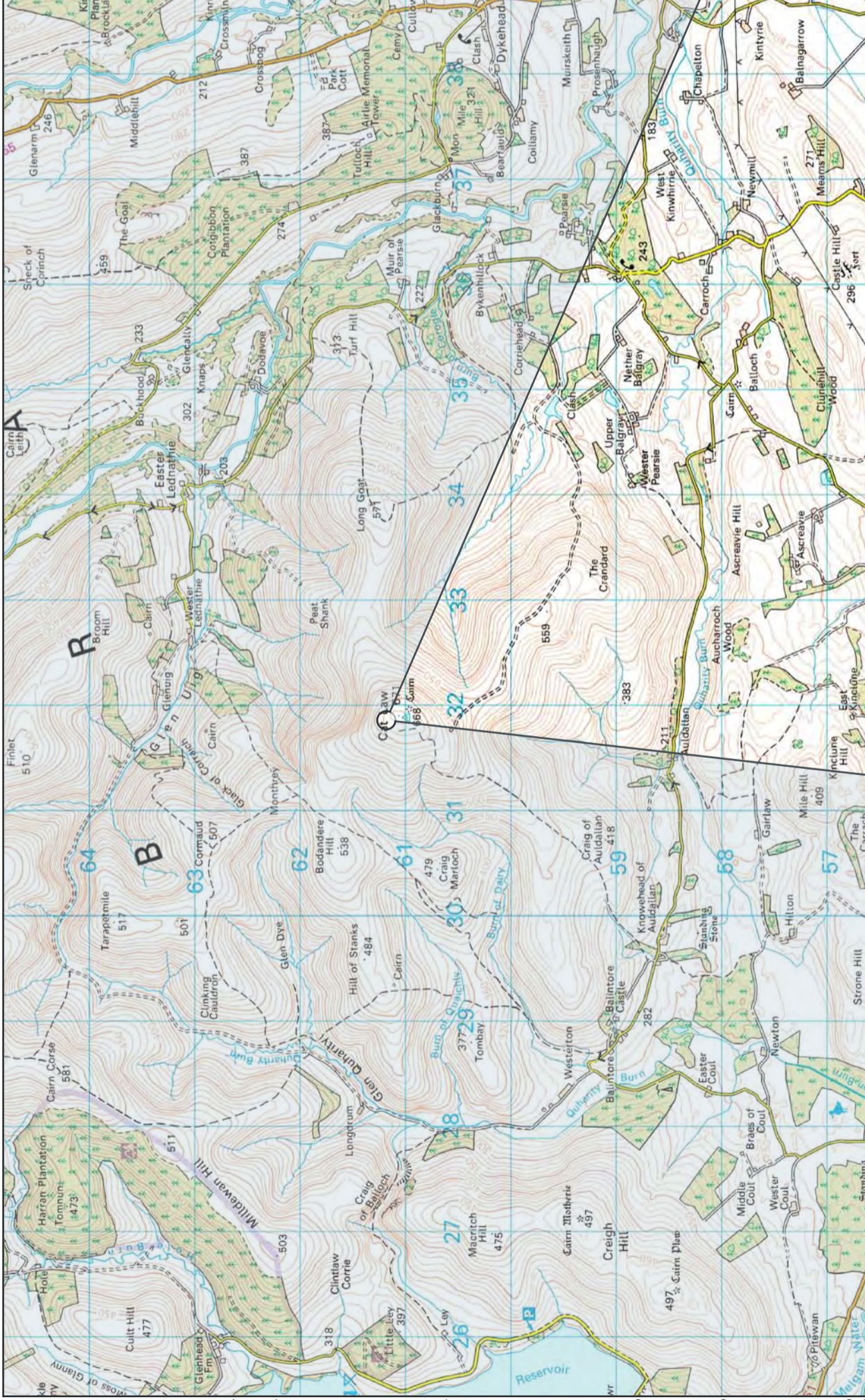
Hub Height 57m
Blade Tip Height 92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible* 4
Number of Turbine Hubs Visible 3
Distance to Nearest Turbine 20,971m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.

Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.

*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



Drawn by SL
Checked by TP
Approved by

TL 02a
20/03/2014
4:03 PM C023b

Existing View



North Mains of Cononsyth

Lour Farm

Wester Meathie

Frawney

Ark Hill

Scotston Hill

AC34

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Polar Energy
(Finlargo) Ltd

Frawney Wind Farm

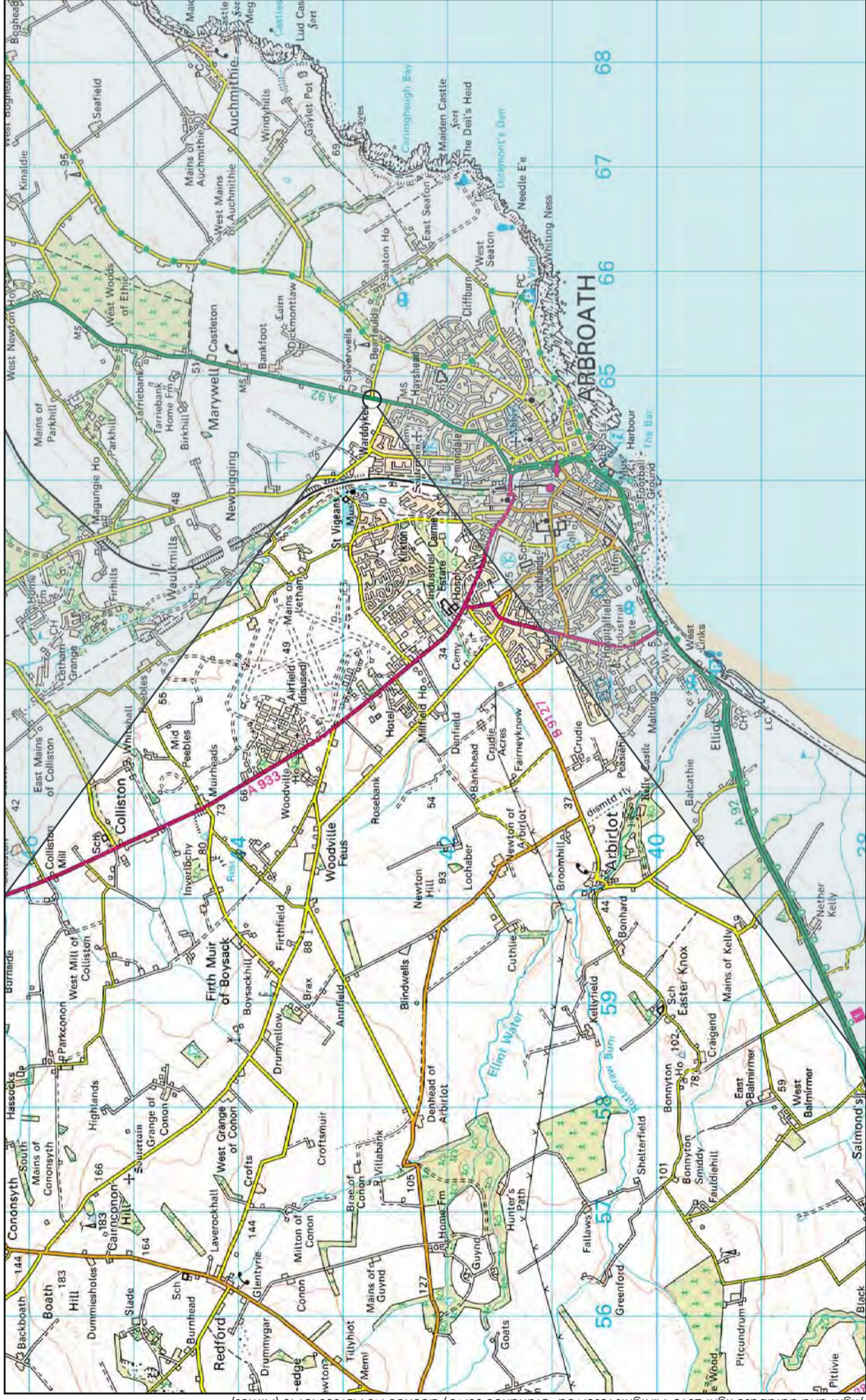
Viewpoint 19: Cat Law

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-24b



Drawn by SL
Checked by TP
Approved by
TL 02a
20/03/2014
4:03 PM C023b



Frawney Wind Farm

Polar Energy (Finlarg) Ltd



Figure 6-25a Viewpoint 20 - Arbroath - Montrose Rd

Viewpoint Data

Grid Reference
E364751, N742696
Elevation
42m AOD

Wireframe/Photograph

Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
2
Number of Turbine Hubs Visible
0
Distance to Nearest Turbine
22.762m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.

Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.

*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.

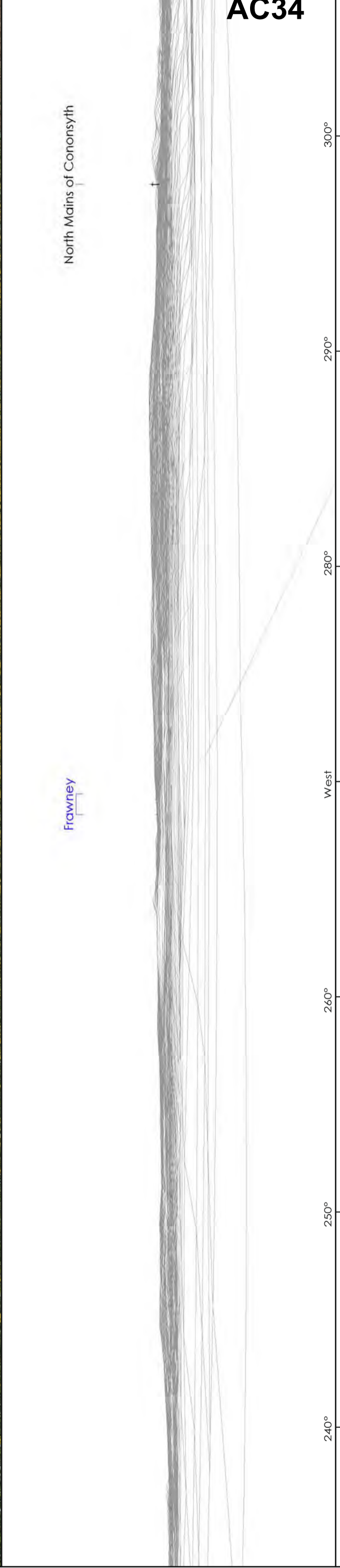
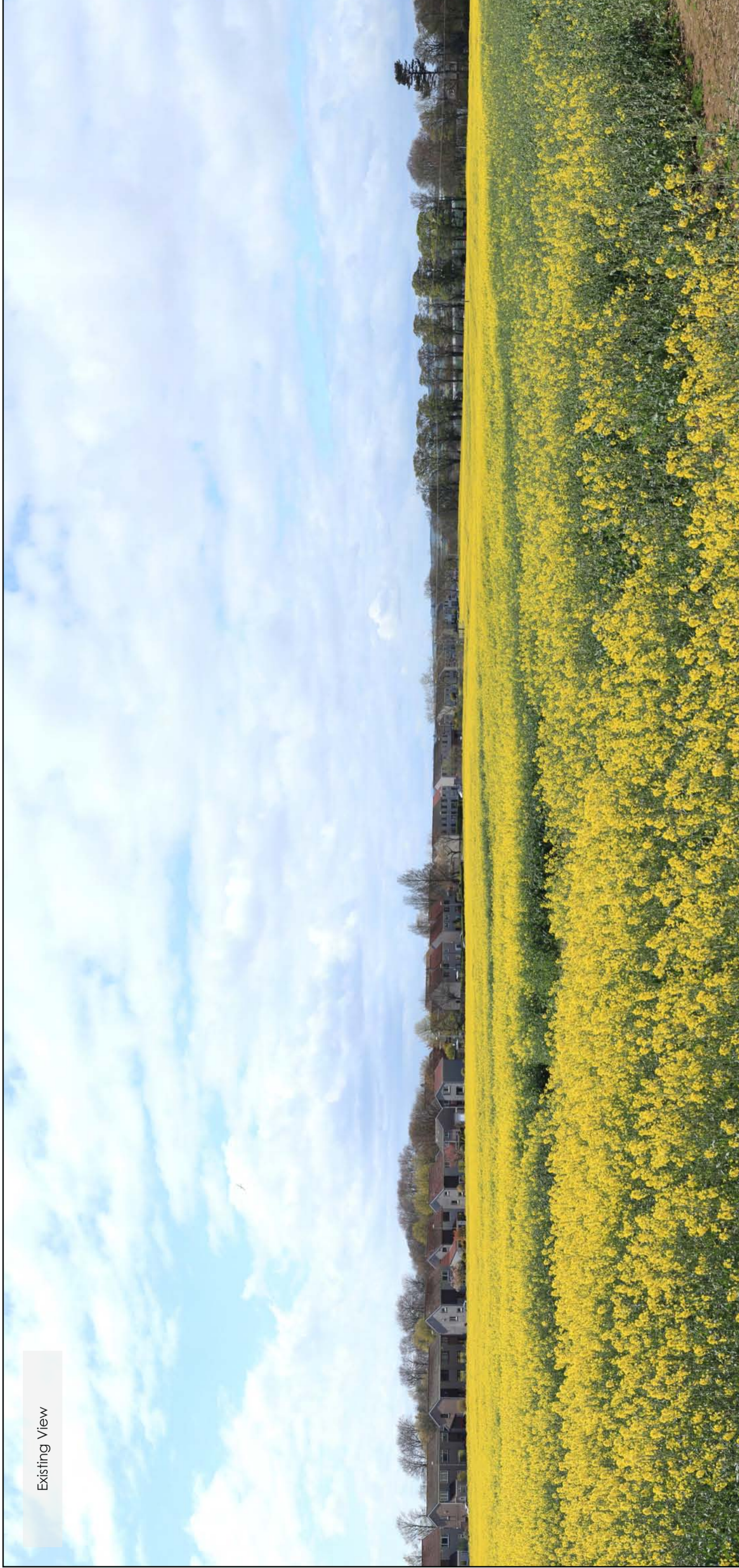


Drawn by SL
Checked by TP
Approved by

TL 02a
20/03/2014
4:03 PM C024b

AC34

Existing View



AC34



**Polar Energy
(Finlargo) Ltd**

Frawney Wind Farm

Viewpoint 20: Arbroath - Montrose Rd

West

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-25b



Drawn by SL
Checked by TP
Approved by

TL 02a
20/03/2014
4:03 PM C024b

Frawney Wind Farm

Polar Energy (Finlarg) Ltd



Figure 6-26a
Viewpoint 21 - Megginch

Viewpoint Data

Grid Reference E323805, N742681
Elevation 15m AOD

Wireframe/Photograph

Height above ground 1.6m
Camera and Lens Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

Hub Height 57m
Blade Tip Height 92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible* 1
Number of Turbine Hubs Visible 0
Distance to Nearest Turbine 24,679m



► Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



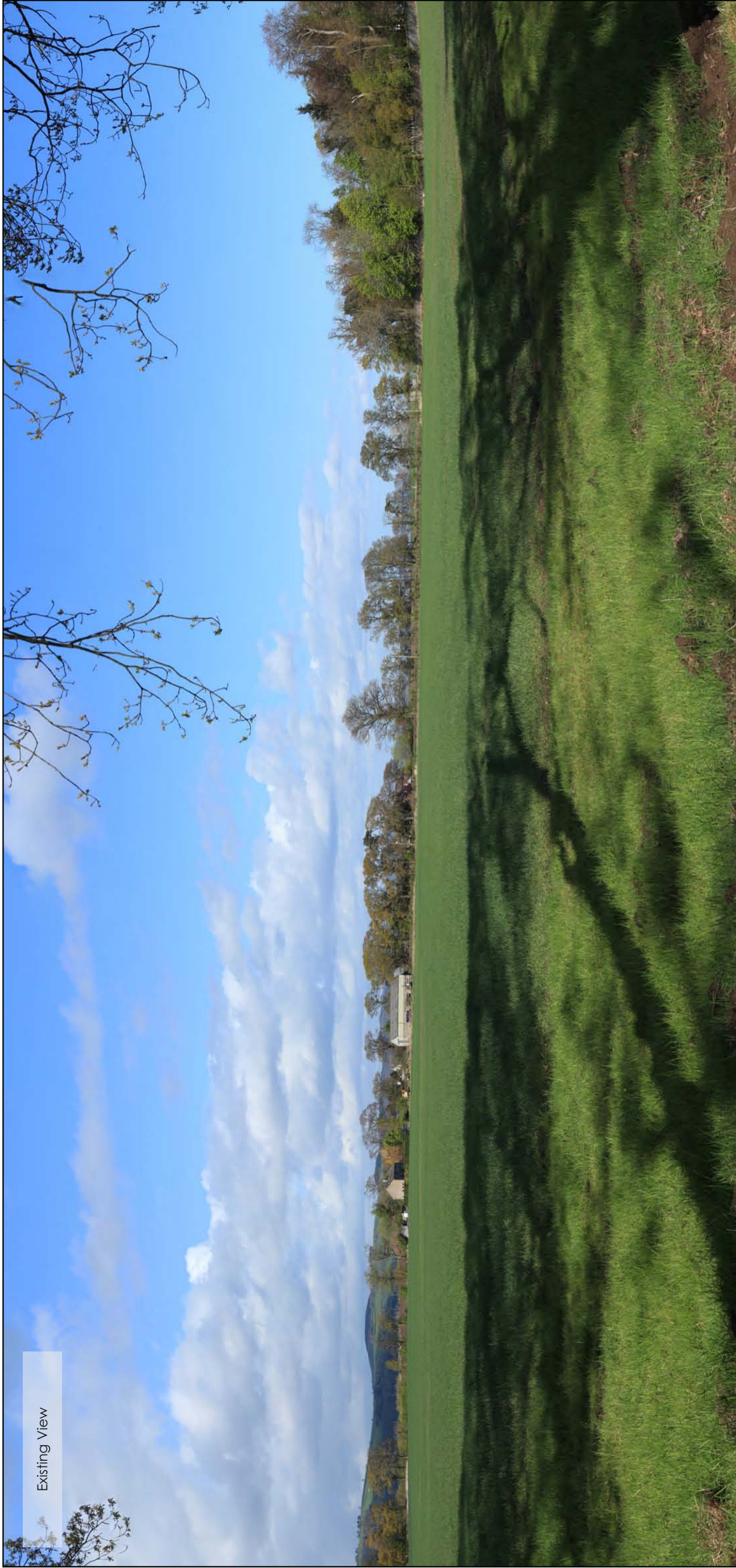
The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.
Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.
*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.



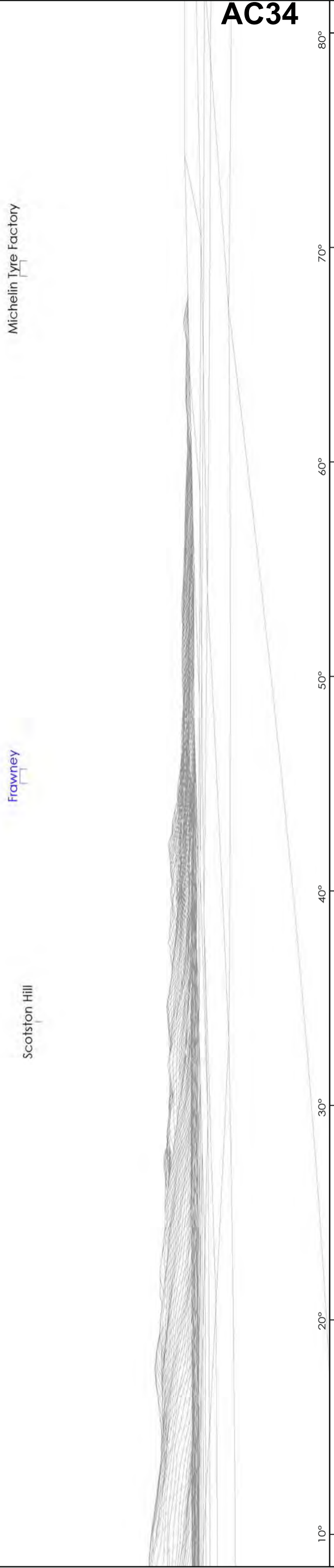
Drawn by SL
Checked by TP
Approved by

TL 02a
20/03/2014
4:03 PM C025b

AC34



Existing View



AC34

	Polar Energy (Finlargo) Ltd	Frawney Wind Farm	Viewpoint 21: Magginch	Horizontal View Angle 73° Approximate Viewing Distance 315mm	Figure 6-26b		Drawn by SL Checked by TP Approved by TL 02a 20/03/2014 4:03 PM C025b
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Frawney Wind Farm



Figure 6-27a
Viewpoint 22 - White Caterthun

Viewpoint Data

Grid Reference
E354786, N766030
Elevation
292m AOD

Wireframe/Photograph

Height above ground
1.6m
Camera and Lens
Canon 5D dSLR with fixed 50mm lens

Proposed Turbine Information

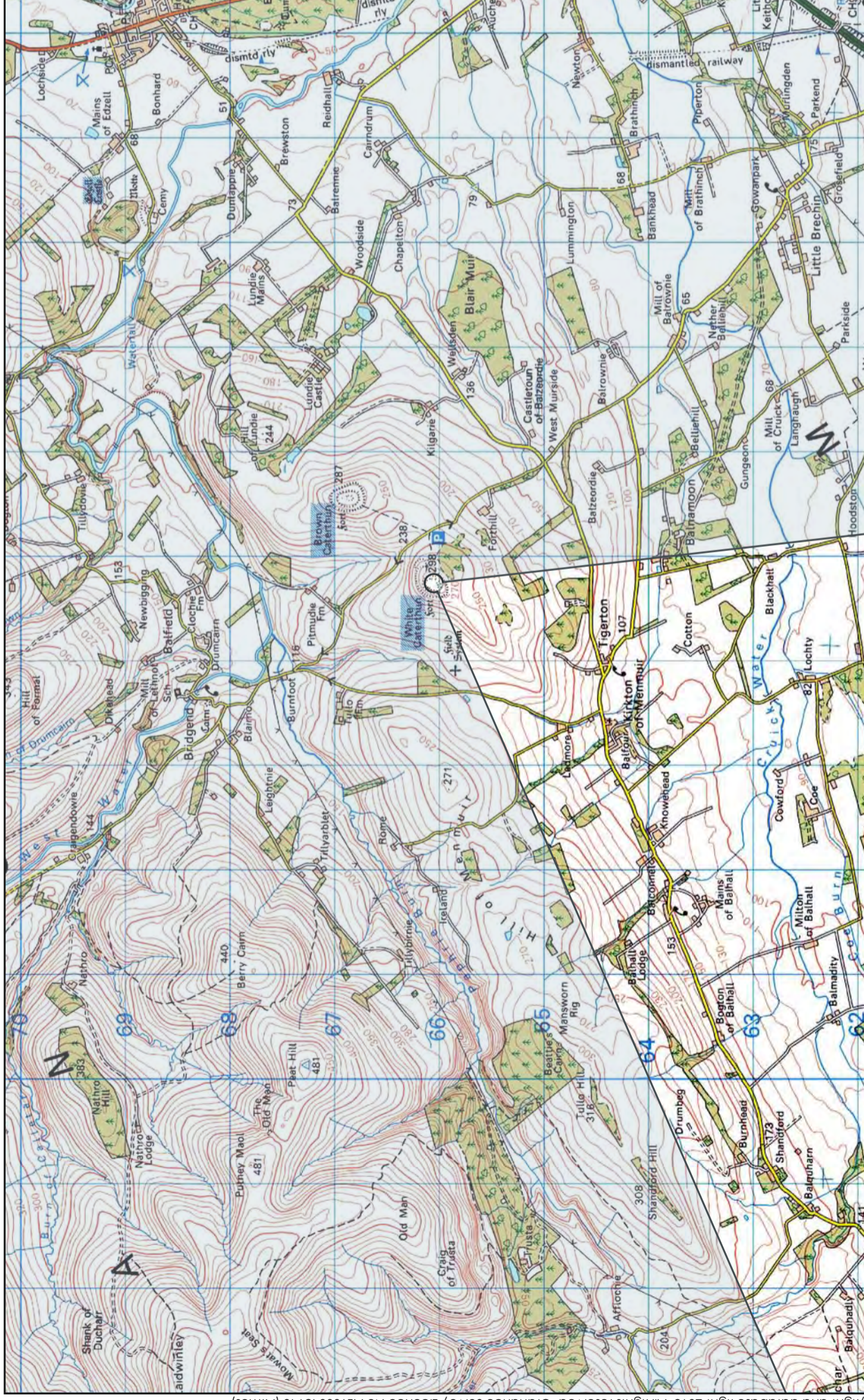
Hub Height
57m
Blade Tip Height
92.5m

Predicted Wireframe Turbine Visibility

Number of Turbine Tips Visible*
4
Number of Turbine Hubs Visible
4
Distance to Nearest Turbine
26,929m



Wide Angle Photo of Existing View Included Angle 110° Approximate Viewing Distance 210mm



The following images can only be accurately assessed from the correct Viewing Distance, where the curvature of the earth has been accounted for.

Wireframes are generated using Ordnance Survey's Landform Panorama Dataset which does not take in to account the screening effects of buildings or vegetation.

*Refers to the number of turbines that blade tips can be seen rather than the number of individual tips seen from the viewpoint.

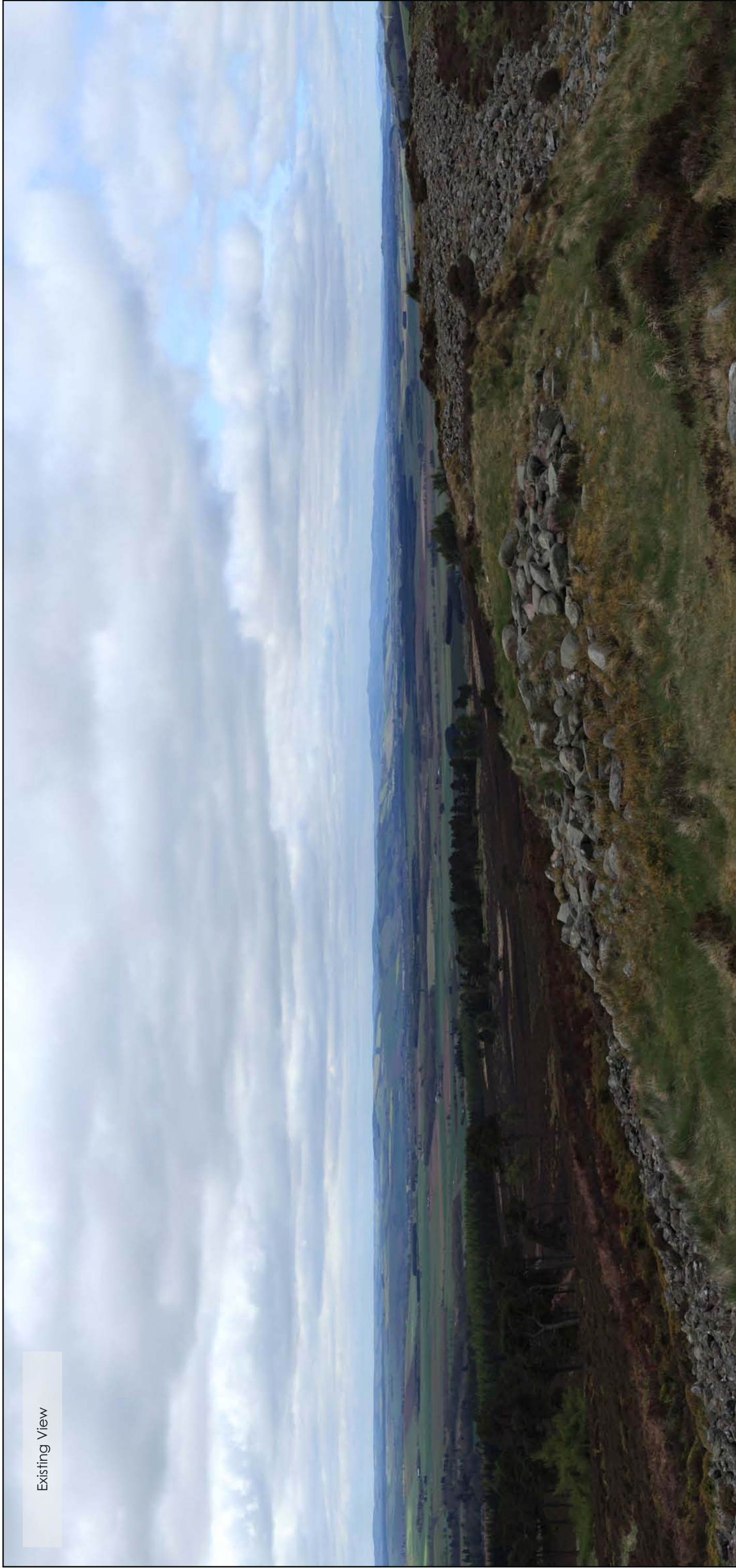


Drawn by SL
Checked by TP
Approved by

TL 02a
20/03/2014
4:03 PM C026b

AC34

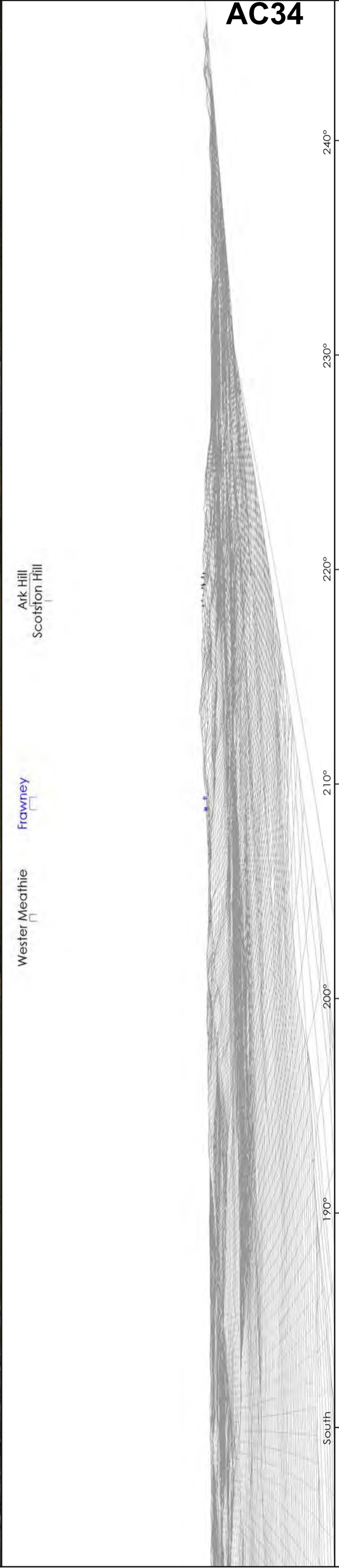
Existing View



Wester Meathie

Frawney

Ark Hill
Scotsfon Hill



South

190°

200°

210°

220°

230°

240°

atmos
CONSULTING

Polar Energy
(Finlargo) Ltd

Frawney Wind Farm

Viewpoint 22: White Caterthun

Horizontal View Angle 73°
Approximate Viewing Distance 315mm

Figure 6-27b



Drawn by SL
Checked by TP
Approved by

TL 02a
20/03/2014
4:03 PM C028b

AC34

Frawney Wind Farm

Polar Energy (Finlary) Ltd

Figure 6-28a
Cumulative Wind Farms to 60km

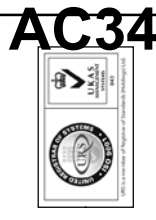
Key

- Turbine location
- 30 and 60km from turbines
- Cumulative Wind Farms
- Above 50m to tip
- Wind farm in planning
- Refused wind farm, appealed
- Approved wind farm
- Operational wind farm
- Turbine in planning
- Refused turbine, appealed
- Approved turbine
- Operational turbine

Cumulative data statuses
correct as of 28th February 2014



Scale @ A3:
1:450,000



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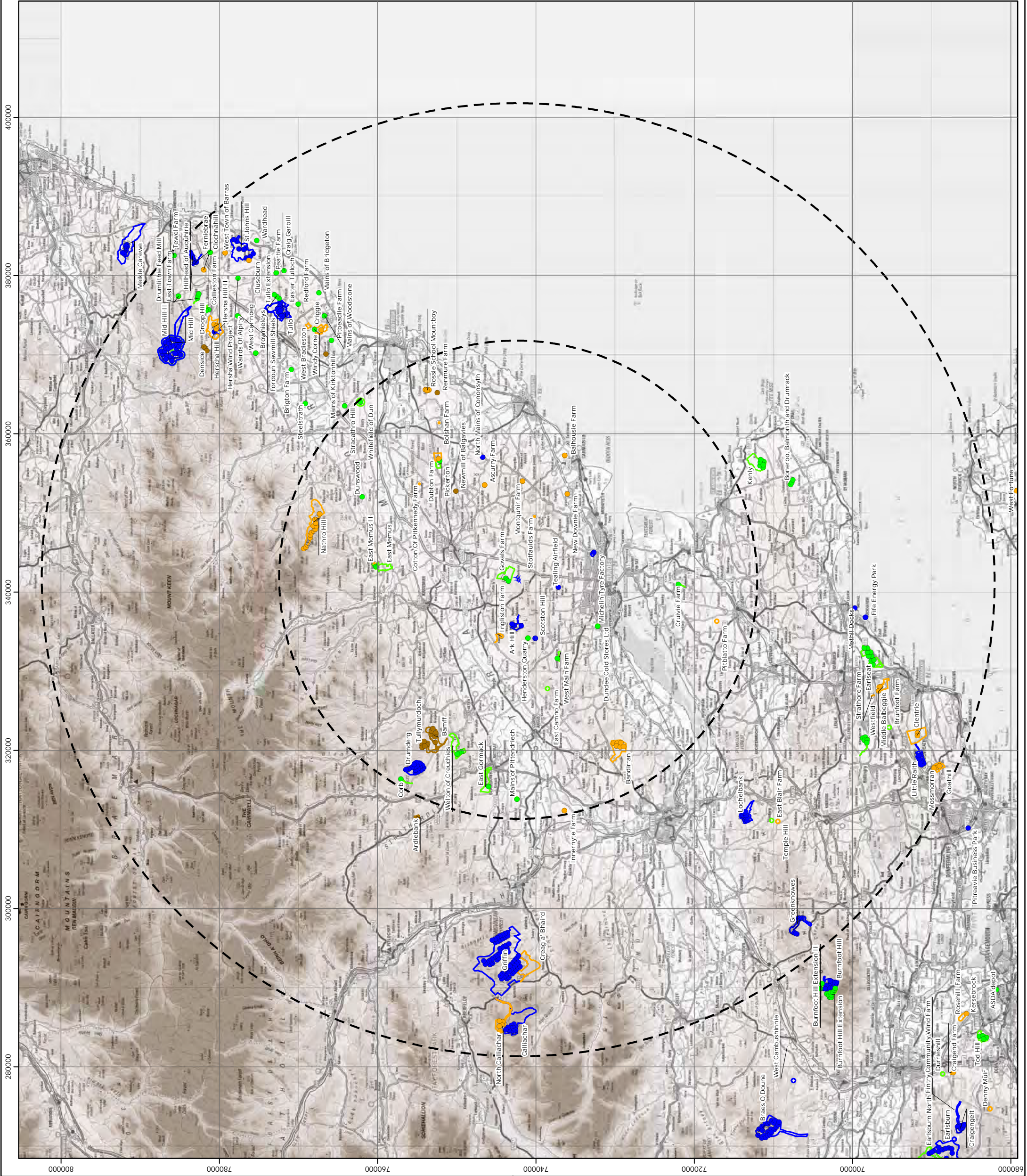
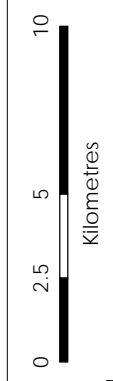


Figure 6-28b
Cumulative Wind Farms to 30km

Key

- Site boundary
- ▲ Turbine location
- 5, 10, 20 and 30km from turbines
- Cumulative Wind Farms**
- Wind farm in planning
- Refused wind farm, appealed
- Approved wind farm
- Operational wind farm
- Above 50m to tip
- Turbine in planning
- Refused turbine, appealed
- Approved turbine
- Operational turbine
- ◆ Turbine in planning
- ◆ Approved turbine
- ◆ Operational turbine
- ▼ Below 30m to tip & within 5km
- ▼ Approved turbine
- ▼ Operational turbine

Cumulative data statuses
correct as of 28th February 2014



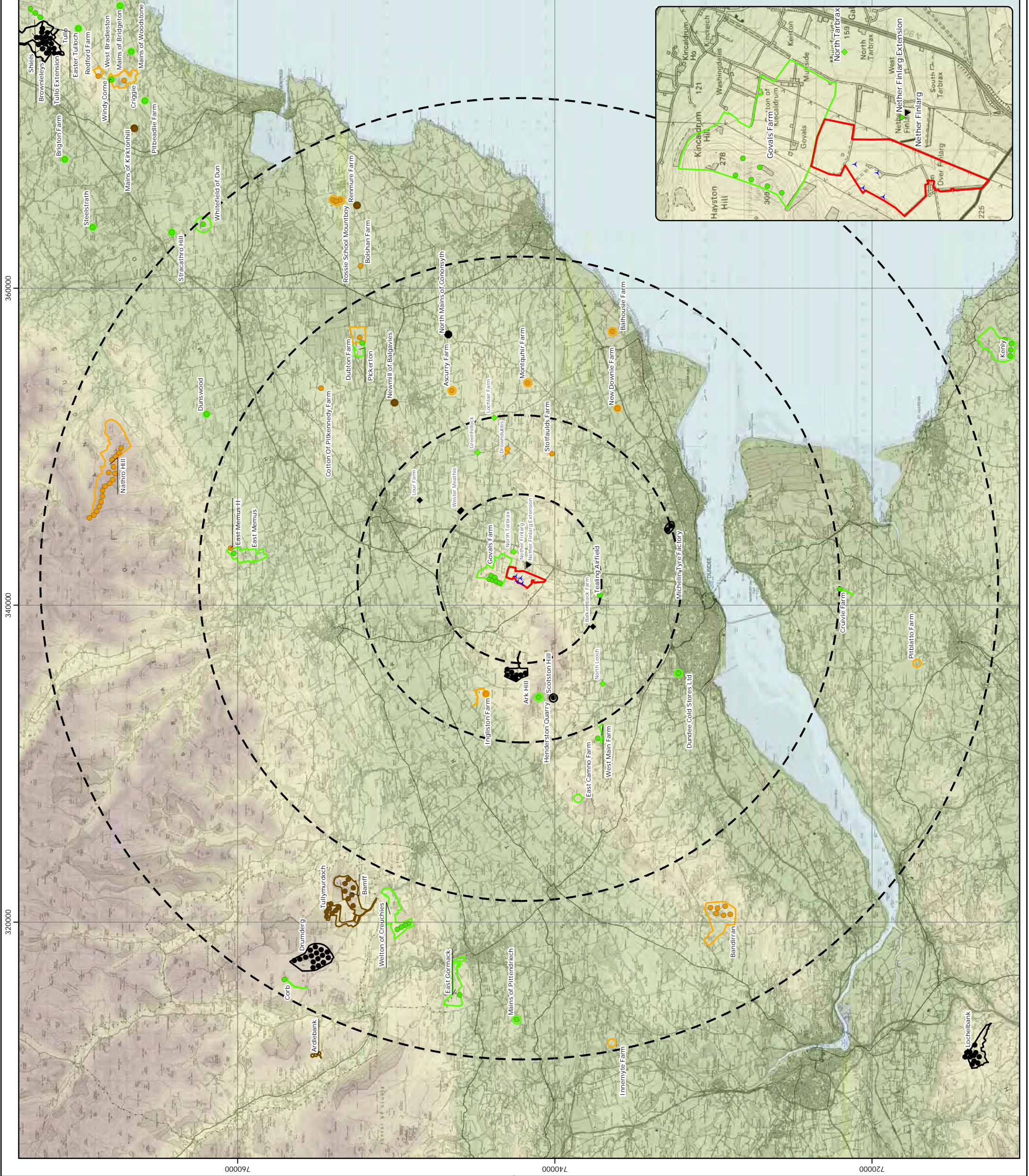
Scale @ A3:
1:225,000

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29/05/2014 TL02a 4603/LS/051C
Drawn by: TH Checked by: TH Approved by: TP



Frawney Wind Farm

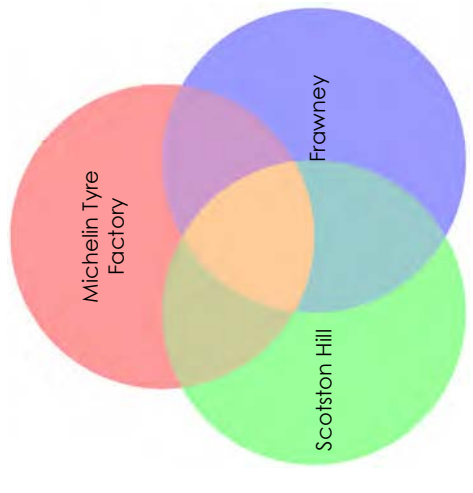
Polar Energy (Finlarg) Ltd

6-29a

Cumulative ZTV - Operational - Frawney with Scotston Hill and Michelin Tyre Factory

Key

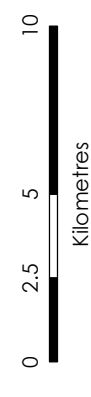
- Frawney turbine (92.5m)
- Frawney 30km turbine buffer
- Scotston Hill turbine (80m)
- Scotston Hill 25km turbine buffer
- Michelin Tyre Factory turbine (120.5m)
- Michelin Tyre Factory 35km turbine buffer



Generated using Ordnance Survey's Terrain50 dataset which does not take in to account the screening effects of buildings or vegetation.

Curvature of the Earth allowed for.
Observer eye height 2m above ground.

Distance of ZTV calculations based on SNH guidelines
51 to 70 m tip - 20 km
71 to 85 m tip - 25 km
86 to 100 m tip - 30 km
101 m to tip and above - 35 km

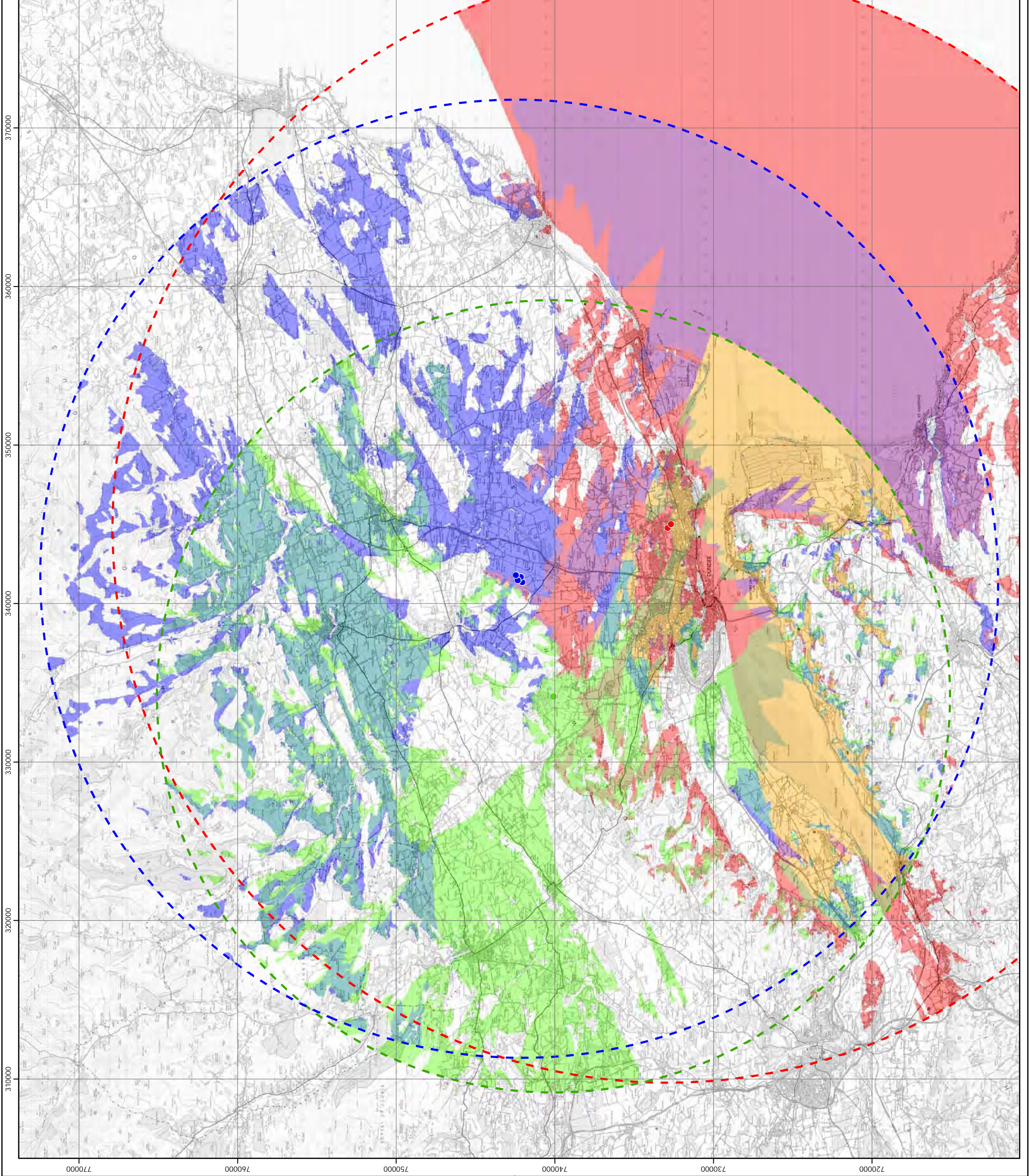


Scale @ A3:
1:225,000

AC34

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04/03/2014 T102a 4603/ZV/084a
Drawn by: AA Checked by: TH Approved by: TG



Frawney Wind Farm

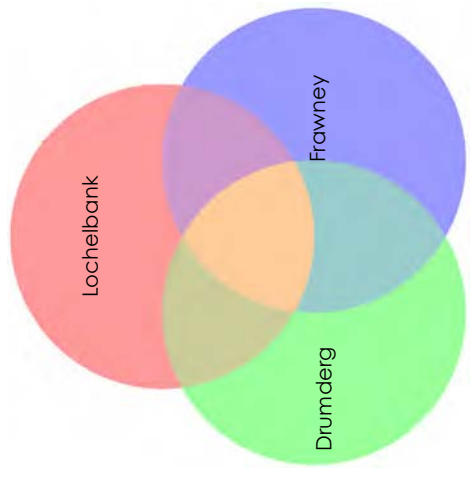
Polar Energy (Finlarg) Ltd

6-29b

Cumulative ZTV - Operational - Frawney
with Drumderg and Lochelbank

Key

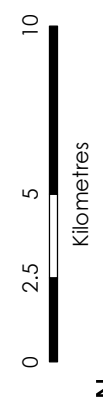
- Frawney turbine (92.5m)
- Frawney 30km turbine buffer
- Drumderg turbine (107m)
- Drumderg 35km turbine buffer
- Lochelbank turbine (91m)
- Lochelbank 30km turbine buffer



Generated using Ordnance Survey's Terrain50 dataset which does not take in to account the screening effects of buildings or vegetation.

Curvature of the Earth allowed for.
Observer eye height 2m above ground.

Distance of ZTV calculations based on SNH guidelines
51 to 70 m tip - 20 km
71 to 85 m tip - 25 km
86 to 100 m tip - 30 km
101 m to tip and above - 35 km

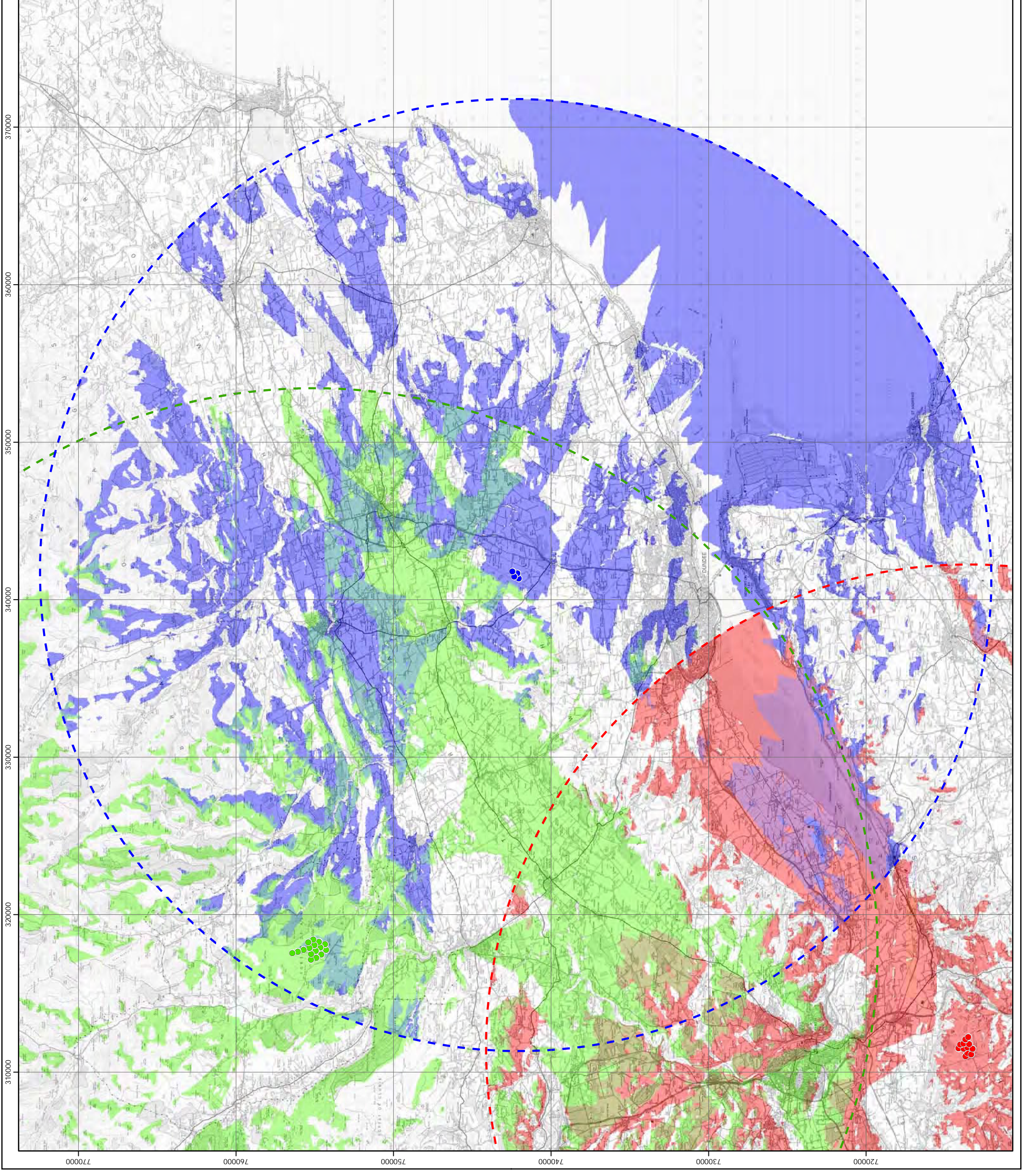


Scale @ A3:
1:225,000



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04/03/2014 T102a 4603/ZV/084a
Drawn by: AA Checked by: TH Approved by: TG



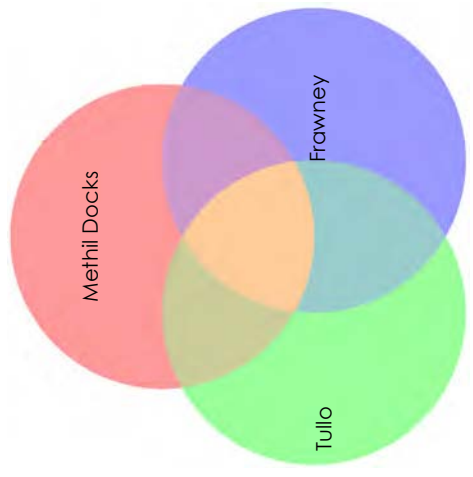
Frawney Wind Farm

Polar Energy (Finlarg) Ltd

6-29c
Cumulative ZTV - Operational - Frawney
with Tullo and Methil Docks

Key

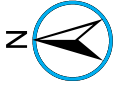
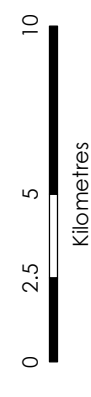
- Frawney turbine (92.5m)
- Frawney 30km turbine buffer
- Tullo turbine (100m)
- Tullo 30km turbine buffer
- Methil Docks turbine (81m)
- Methil Docks 25km turbine buffer



Generated using Ordnance Survey's Terrain50 dataset which does not take in to account the screening effects of buildings or vegetation.

Curvature of the Earth allowed for.
Observer eye height 2m above ground.

Distance of ZTV calculations based on SNH guidelines
51 to 70 m tip - 20 km
71 to 85 m tip - 25 km
86 to 100 m tip - 30 km
101 m to tip and above - 35 km



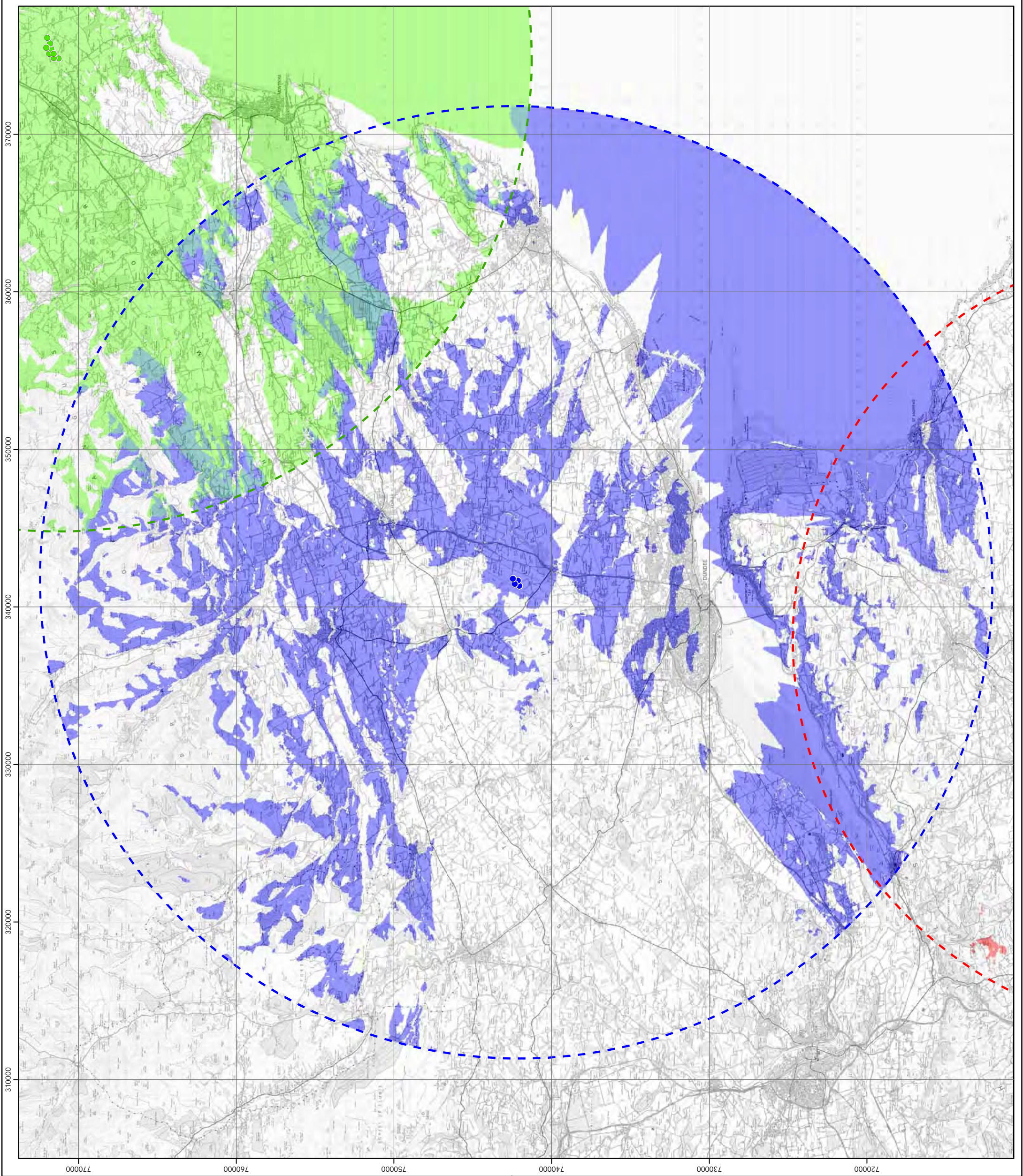
Scale @ A3:
1:225,000

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04/03/2014 TL02a 4603/ZV/084a
Drawn by: AA Checked by: TH Approved by: TG



Frawney Wind Farm

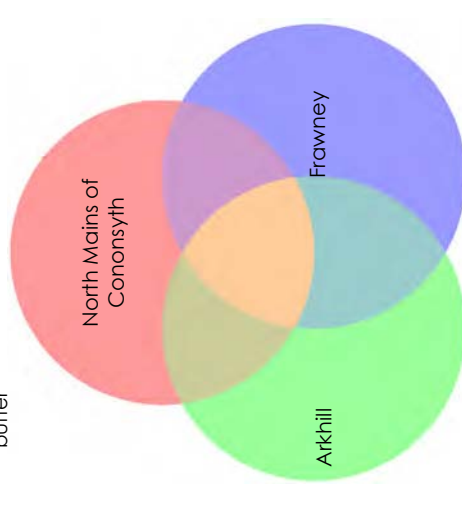
Polar Energy (Finlarg) Ltd

6-29d

Cumulative ZTV - Operational - Frawney with Arkhill and North Mains of Cononsyth

Key

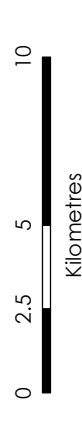
- Frawney turbine (92.5m)
- Frawney 30km turbine buffer
- Arkhill turbine (81m)
- Arkhill 25km turbine buffer
- North Mains of Cononsyth turbine (66.7m)
- North Mains of Cononsyth 20km turbine buffer



Generated using Ordnance Survey's Terrain50 dataset which does not take in to account the screening effects of buildings or vegetation.

Curvature of the Earth allowed for.
Observer eye height 2m above ground.

Distance of ZTV calculations based on SNH guidelines
51 to 70 m tip - 20 km
71 to 85 m tip - 25 km
86 to 100 m tip - 30 km
101 m to tip and above - 35 km



Scale @ A3:
1:225,000

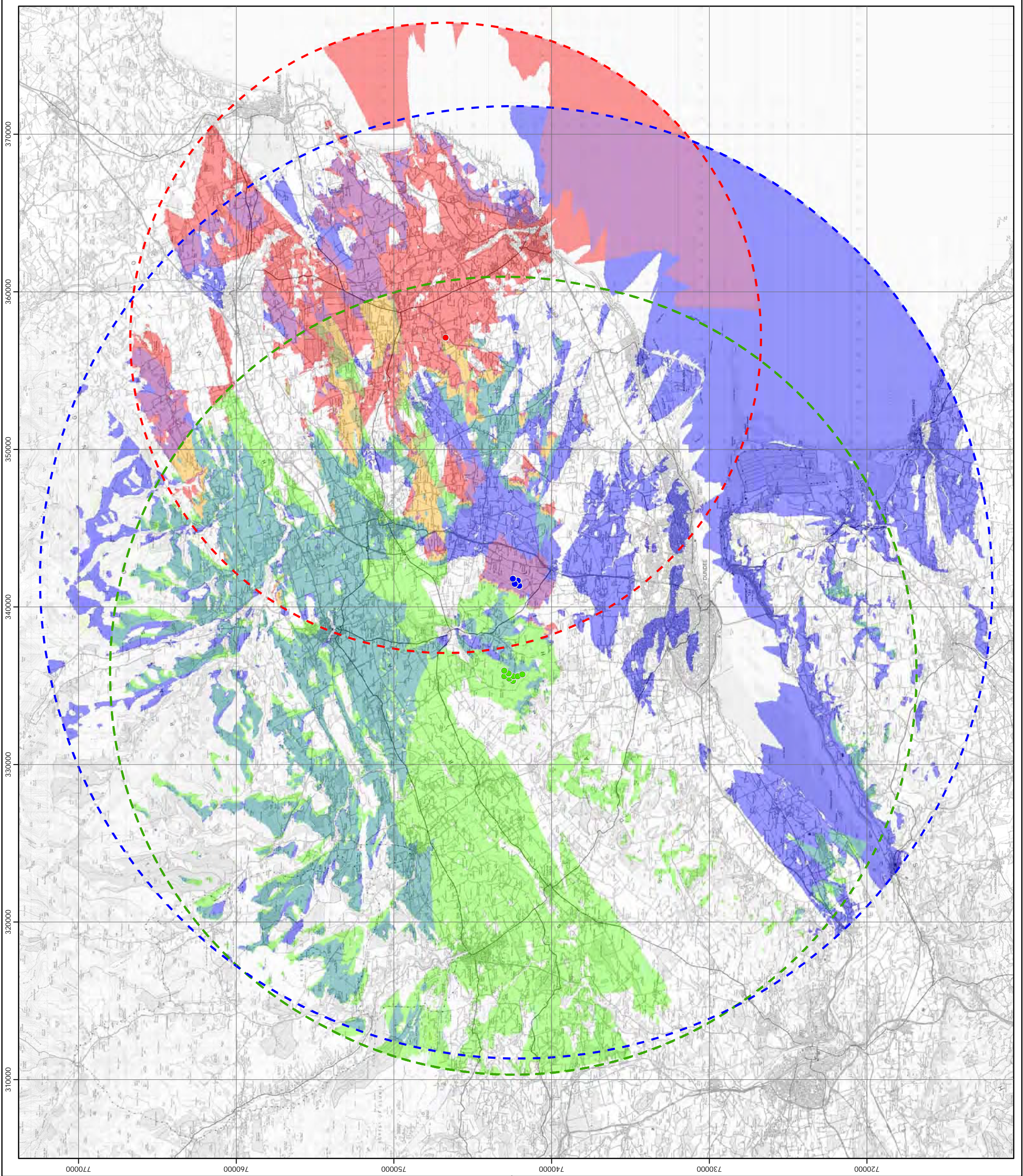


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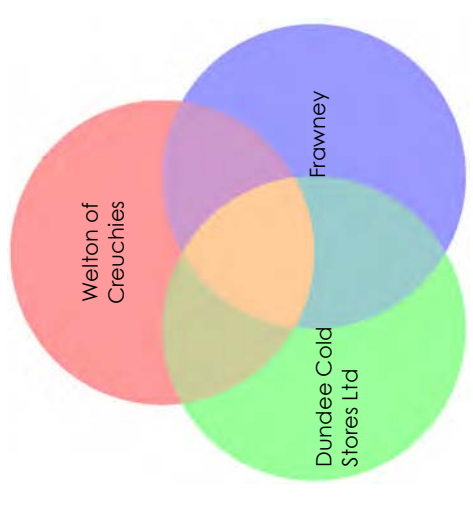
Frawney Wind Farm

Polar Energy (Finlarg) Ltd

6-30a
Cumulative ZTV - Approved - Frawney with Dundee Cold Stores Ltd and Welton of Creuchies

Key

- Frawney turbine (92.5m)
- Frawney 30km turbine buffer
- Dundee Cold Stores Ltd turbine (91m)
- Dundee Cold Stores Ltd 30km turbine buffer
- Welton of Creuchies turbine (99.5m)
- Welton of Creuchies 30km turbine buffer



Generated using Ordnance Survey's Terrain50 dataset which does not take in to account the screening effects of buildings or vegetation.

Curvature of the Earth allowed for.
Observer eye height 2m above ground.

Distance of ZTV calculations based on SNH guidelines
51 to 70 m tip - 20 km
71 to 85 m tip - 25 km
86 to 100 m tip - 30 km
101 m to tip and above - 35 km



0 2.5 5 10
Kilometres

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1:225,000

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