

Key:

Consented Turbine Location

10km Radii

45km Study Area

Theoretical Visibility of Consented Turbines (2 x 198.5m Blade Tip)

Consented Blade Tip:	198.5m	Observer height:	2m
DTM:	OS T5 / T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included

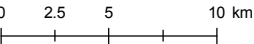
FORTHWIND

CONSENT AMENDMENT

Figure:  
Consented Blade Tip ZTV  
(2 x 198.5m 2B6 Turbines)

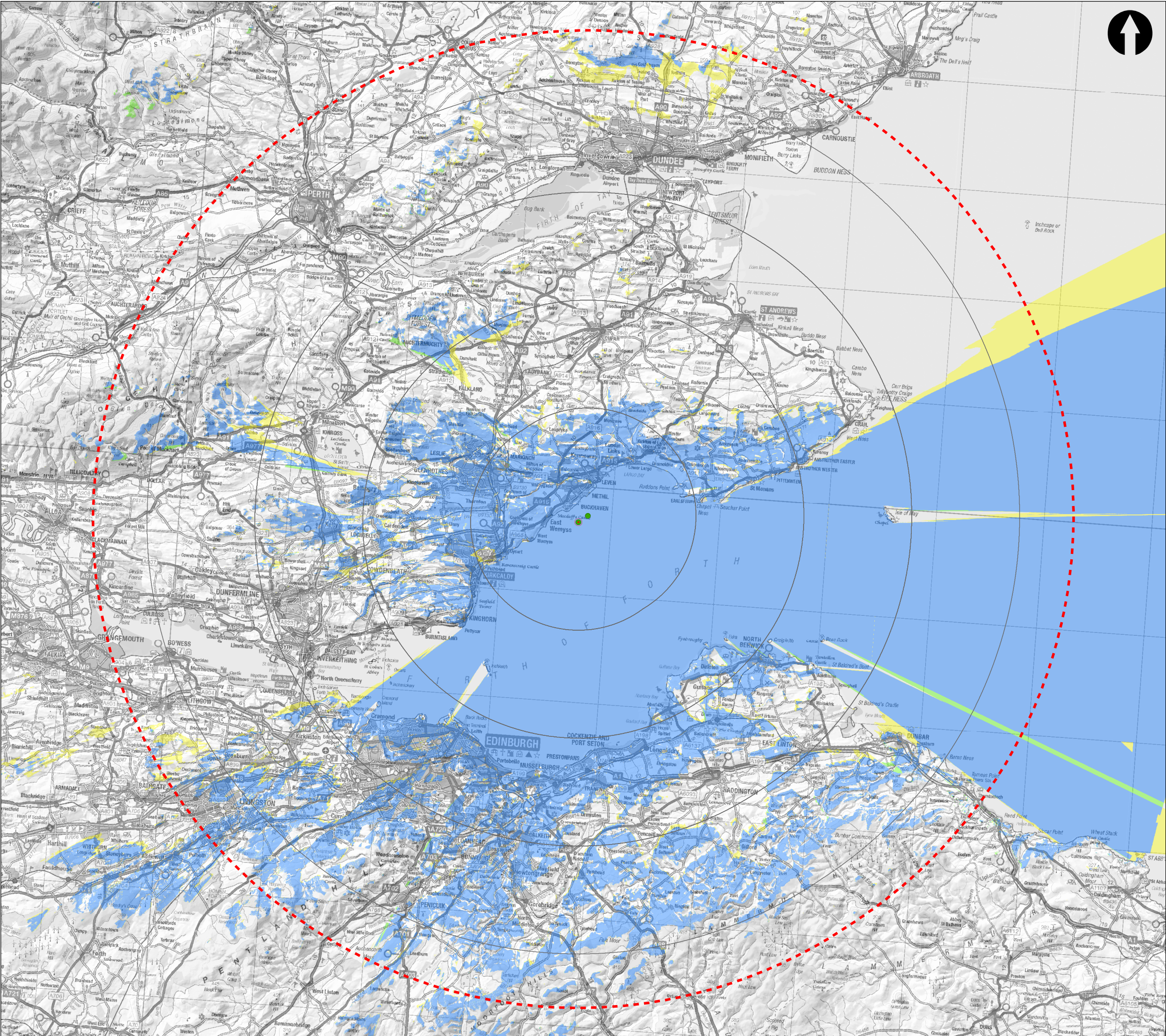


Scale: 1:350,000



Plot Size: A3	Co-ordinate System: WGS_1984_UTM_Zone_31N	Figure No: 1	Rev. 2
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**Key:**

- Consented Turbine Location
- Proposed Turbine Location
- 10km Radii
- 45km Study Area

**Comparative Blade Tip ZTV**

- Theoretical Visibility of the 2 x 198.5m Blade Tip Consented Turbines
- Theoretical Visibility of the Proposed Single 245m Blade Tip 2BX Turbine
- Theoretical Visibility of both 2 x 198.5m Blade Tip Consented Turbines and Proposed Single 245m Blade Tip 2BX Turbine

Consented Blade Tip:	198.5m	Observer height:	2m
Proposed Blade Tip:	245m	DTM:	OS T5 / T50
DTM:	OS T5 / T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included

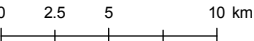
FORTHWIND

CONSENT AMENDMENT

Figure:  
Comparative ZTV -  
Proposed Single 245m Blade Tip 2BX Turbine

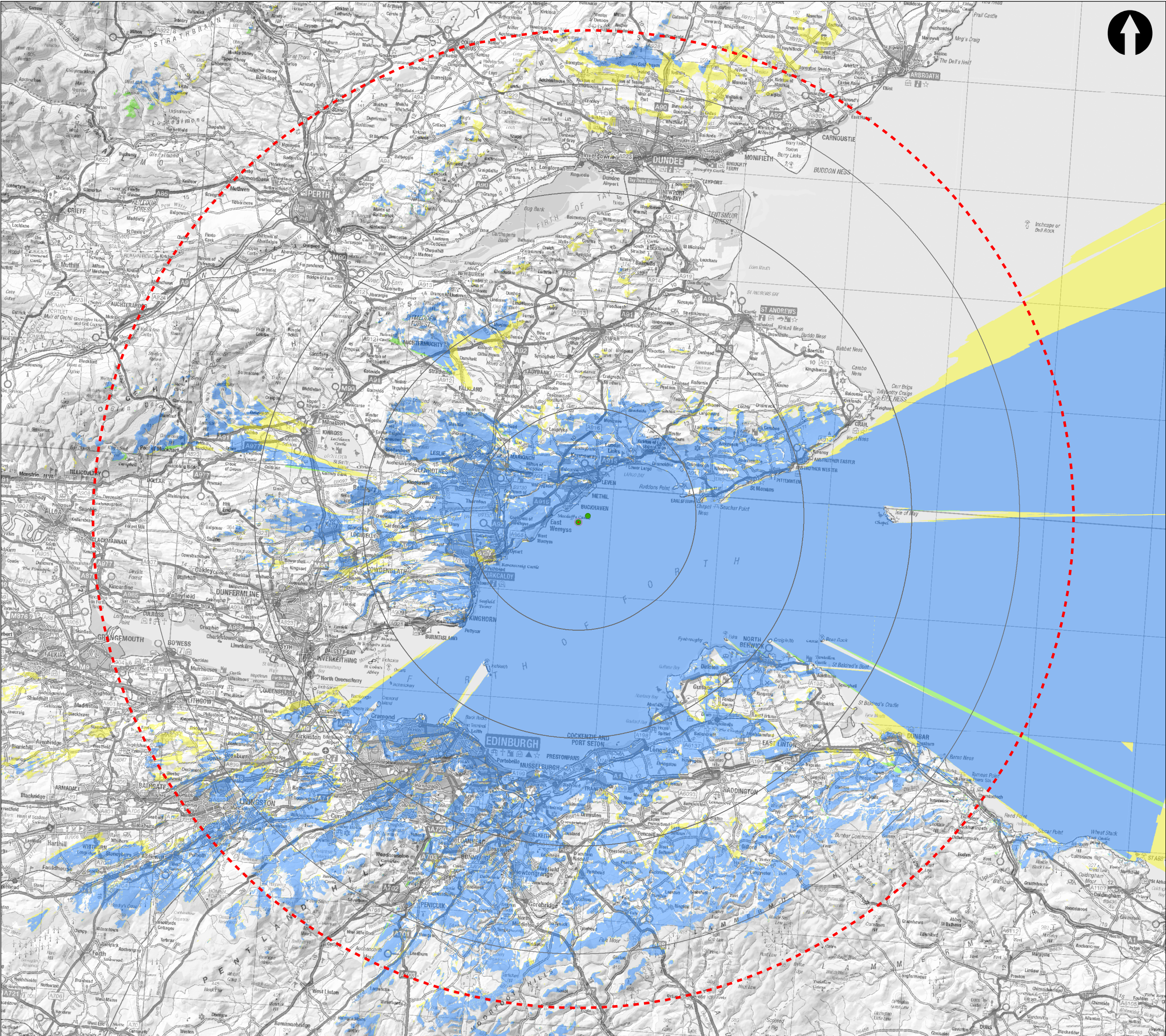


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Plot Size: A3	Co-ordinate System: WGS_1984_UTM_Zone_31N	Figure No: 2	Rev. 2
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Key:

Consented Turbine Location

Proposed Turbine Location

10km Radii

45km Study Area

Comparative Blade Tip ZTV

Theoretical Visibility of the 2 x 198.5m Blade Tip Consented Turbines

Theoretical Visibility of the Proposed Single 260m Blade Tip Turbine

Theoretical Visibility of both 2 x 198.5m Blade Tip Consented Turbines and Proposed Single 260m Blade Tip Turbine

Consented Blade Tip:	198.5m	Observer height:	2m
Proposed Blade Tip:	260m	DTM:	OS T5 / T50
DTM:	OS T5 / T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included

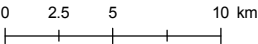
FORTHWIND

CONSENT AMENDMENT

Figure:  
Comparative ZTV -  
Proposed Single 260m Blade Tip Turbine

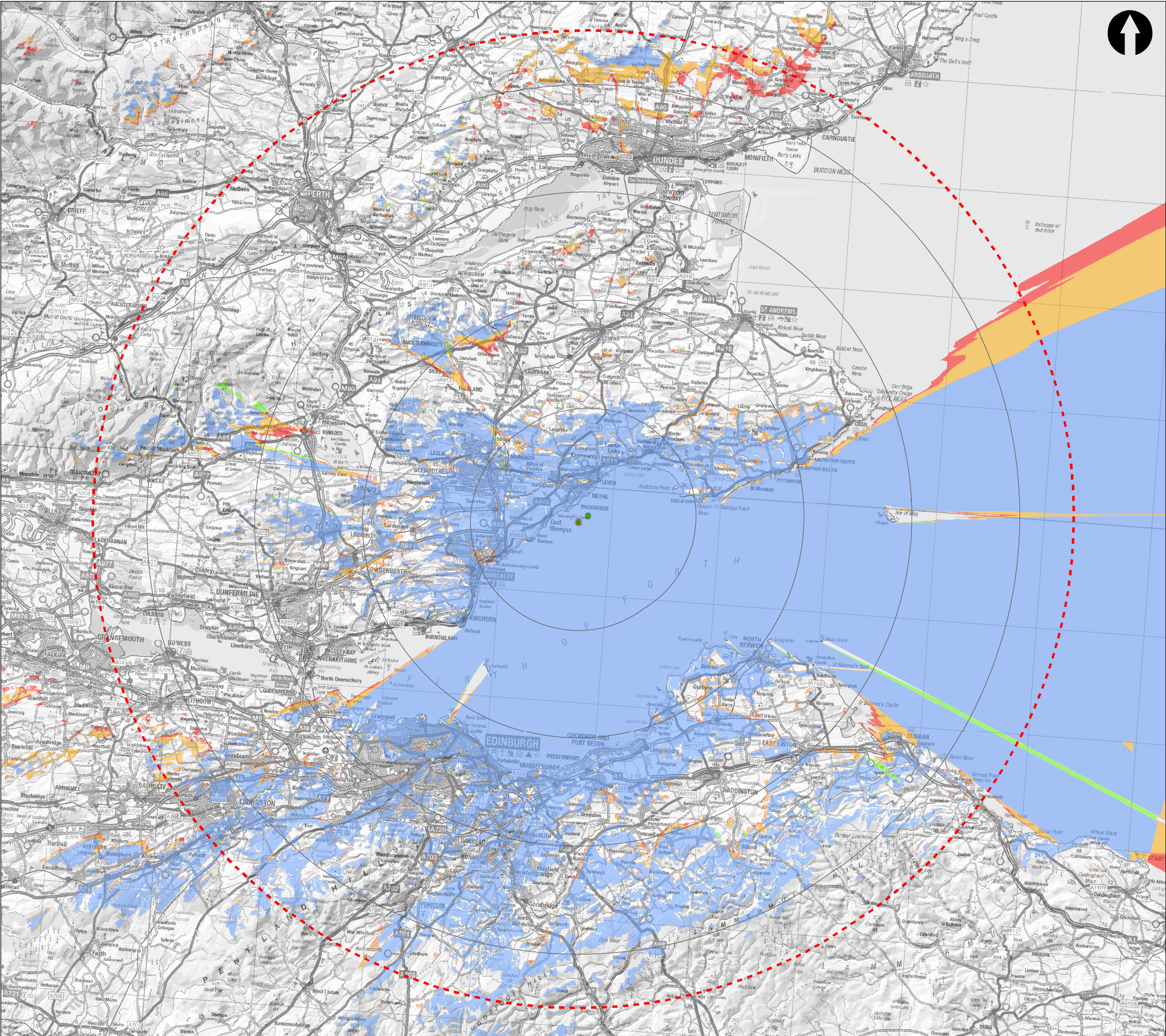


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Plot Size:	Co-ordinate System:	Figure No:	Rev.
A3	WGS_1984_UTM_Zone_31N	3	2





Key:

Consented Turbine Location

Proposed Turbine Location

10km Radii

45km Study Area

Comparative Blade Tip ZTV

Theoretical Visibility of the Consented Turbines (2 x 198.5m) Only

Theoretical Visibility of Both Consented Turbines (2 x 198.5m) and Proposed 245m Turbine

Theoretical Visibility of Both Proposed 245m and 260m Turbines

Theoretical Visibility of the Proposed 260m Turbine Only

Combined Theoretical Visibility of the Consented Turbines and the Proposed 245m and 260m Turbine\*

\* The ZTV indicates that the zone of theoretical visibility is very similar for the 2 x 198.5m consented turbines and the proposed 245m and 260m blade tip turbines, as they are largely visible from the same areas.


Consented Blade Tip:	198.5m	Observer height:	2m
Proposed Blade Tip:	245m	Surface features:	Excluded
	260m	Earth curvature:	Included
DTM:	OS T5 / T50		
DTM resolution:	10m		

FORTHWIND

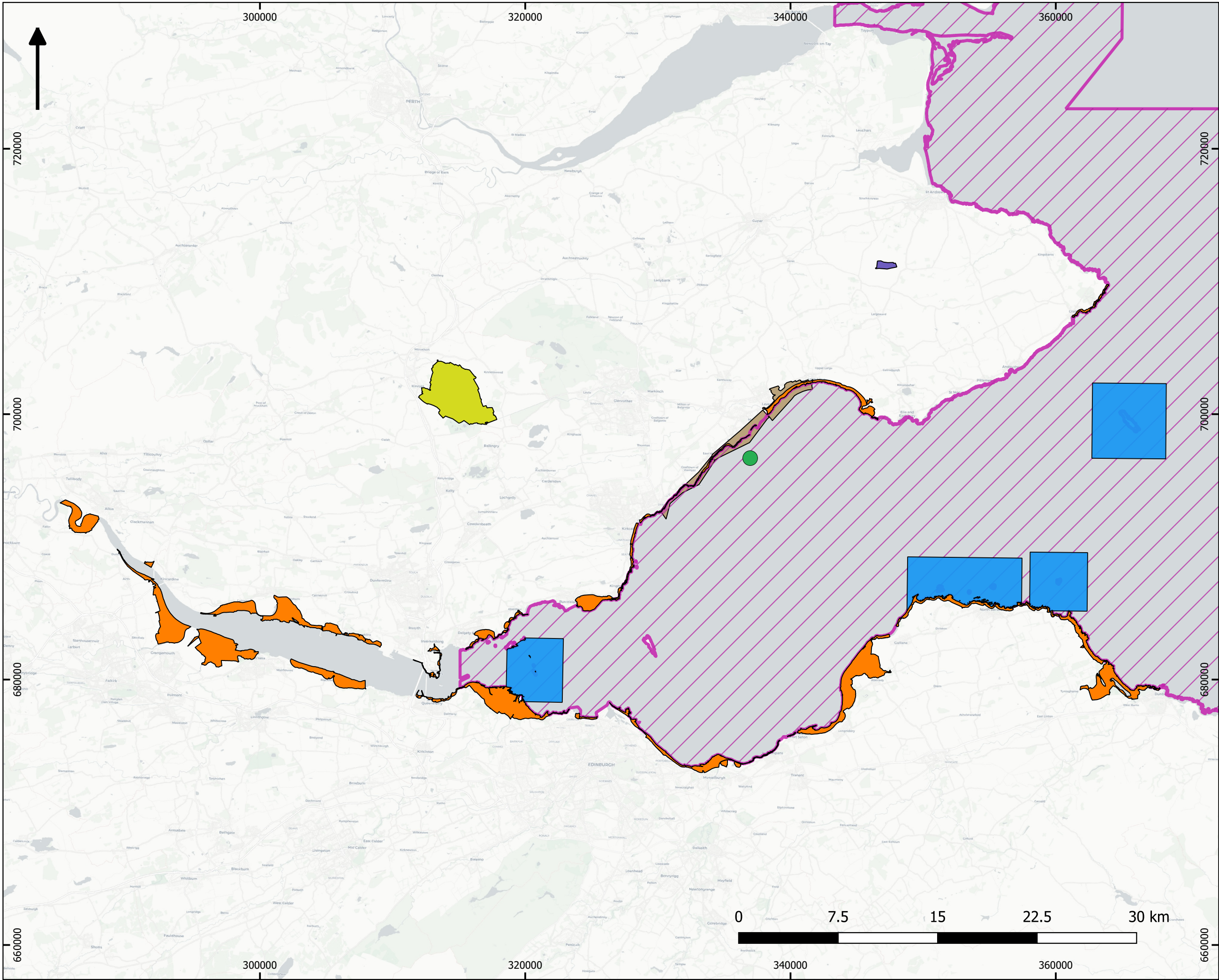
CONSENT AMENDMENT

Figure:  
Comparative ZTV - Consented and Proposed  
245m and 260m Blade Tip Turbines



Scale: 1:350,000			
Plot Size: <b>A3</b>	Co-ordinate System: WGS_1984_UTM_Zone_31N	Figure No: <b>4</b>	Rev. <b>2</b>

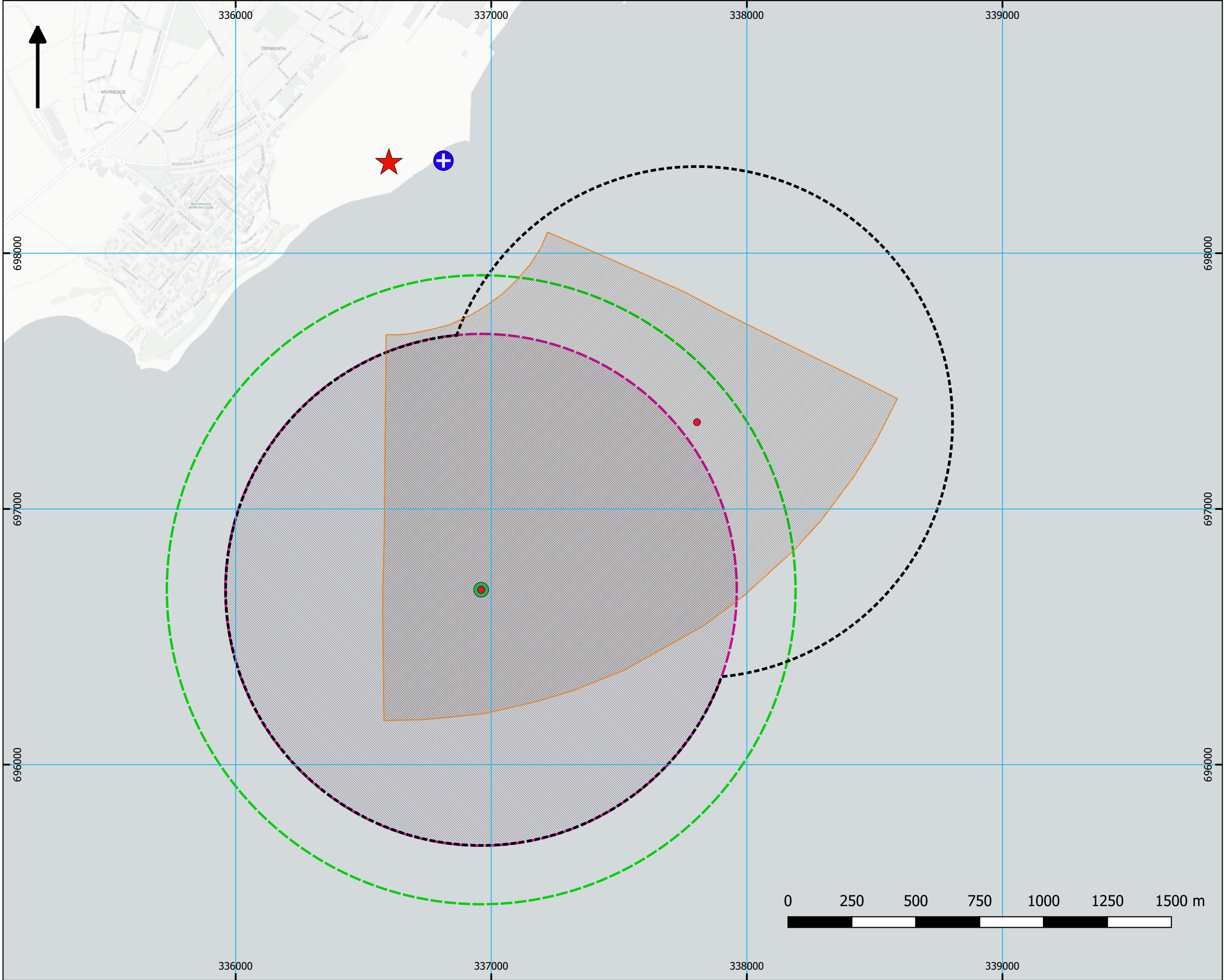




- Legend**
- Variation Turbine Location
  - Forth Islands SPA
  - Firth of Forth SPA and RAMSAR
  - Loch Leven SPA and RAMSAR
  - ▨ Outer Firth of Forth and St Andrews Bay Complex (Proposed SPA)
  - Cameron Reservoir SPA

<b>Project:</b> Forthwind Variation HRA		
<b>Client:</b> Forthwind Ltd		
<b>Title:</b> Figure 1: Designated Sites with Bird Interest		
<b>Status:</b> Final	<b>Revision:</b> 0.3	<b>Page Size:</b> A3
<b>Drawn By:</b> KM	<b>Reviewed By:</b> CN	<b>Date:</b> 27/08/18
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### Legend


- Consented Forth Wind Turbines
- Consented Turbines 1km Buffer
- Variation Turbine Location
- Variation Turbine 1km Buffer
- Variation Turbine 1.23km Buffer
- Original Red Line Boundary (Core Survey Area)
- Vantage Point
- Survey Area
- Levenmouth Demonstration Turbine

**Project:**  
Forthwind Variation HRA

**Client:**  
Forthwind Ltd

**Title:**  
Figure 2: Baseline Survey Area,  
Consented and Variation  
Development Locations

<b>Status:</b> FINAL	<b>Revision:</b> 0.3	<b>Page Size:</b> A3
<b>Drawn By:</b> KM	<b>Reviewed By:</b> CN	<b>Date:</b> 27/08/18



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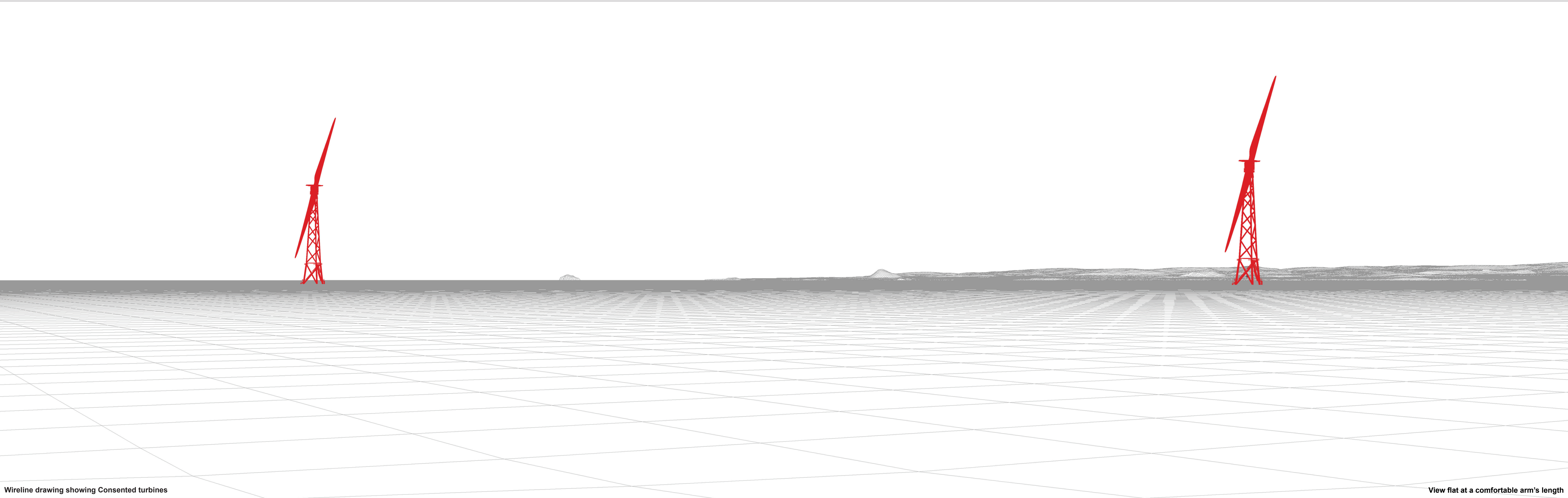


Existing View

View flat at a comfortable arm's length

OS reference:	335930 E 697809 N	Horizontal field of view:	53.5° (planar projection)	Camera:	Canon EOS 5D Mark II	<b>Figure: 5a</b> <b>Viewpoint 1: Buckhaven, Shore Street</b>
Eye level:	6.12 m AOD	Principal distance	812.5 mm	Lens:	50mm (Canon EF 50mm f/1.4)	
Direction of view:	170°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m AGL	
Nearest turbine:	1.650 km	Correct printed image size:	820 x 260 mm	Date and time:	23/06/16, 15:04	





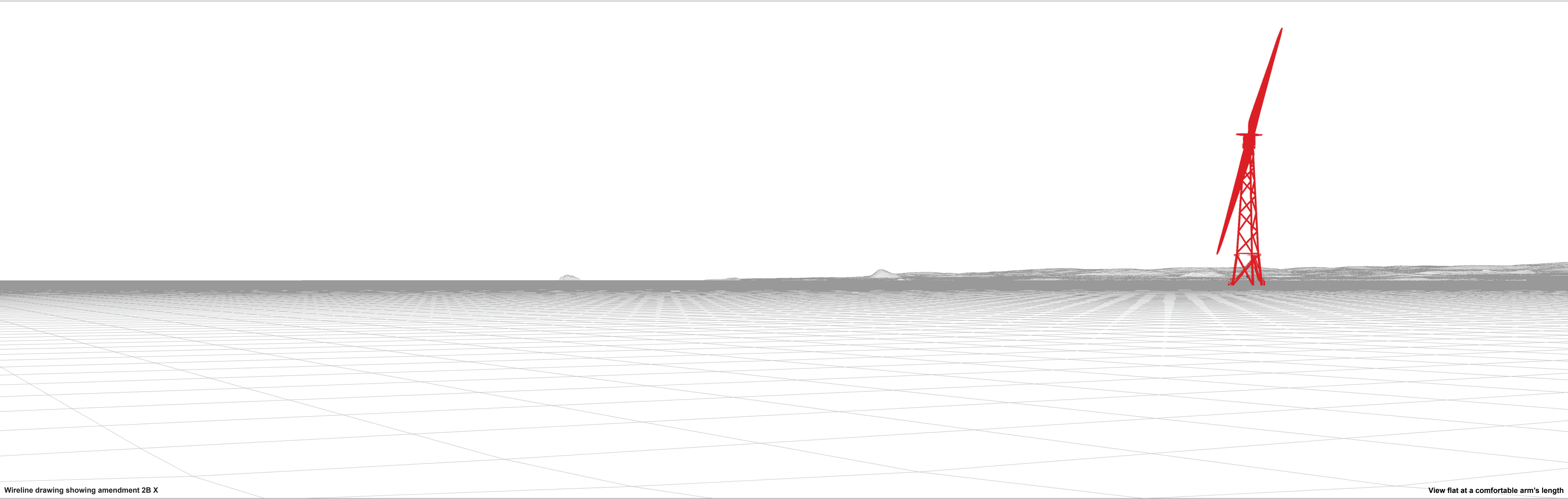
Wireline drawing showing Consented turbines

View flat at a comfortable arm's length

OS reference:	335930 E 697809 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	6.12 m AOD	Principal distance	812.5 mm
Direction of view:	170°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	1.650 km	Correct printed image size:	820 x 260 mm

Figure: 5b  
Viewpoint 1: Buckhaven, Shore Street





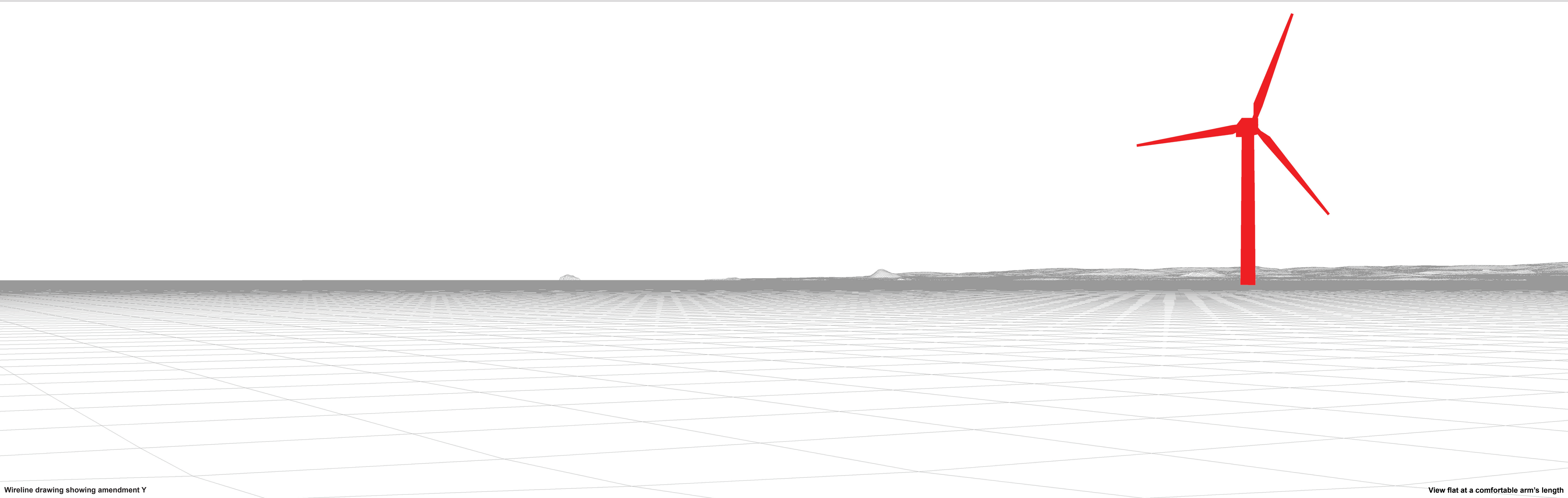
Wireline drawing showing amendment 2B X

View flat at a comfortable arm's length

OS reference:	335930 E 697809 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	6.12 m AOD	Principal distance	812.5 mm
Direction of view:	170°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	1.650 km	Correct printed image size:	820 x 260 mm

**Figure: 5c**  
**Viewpoint 1: Buckhaven, Shore Street**





<b>OS reference:</b>	335930 E 697809 N	<b>Horizontal field of view:</b>	53.5° (planar projection)	<b>Figure: 5d</b> <b>Viewpoint 1: Buckhaven, Shore Street</b>
<b>Eye level:</b>	6.12 m AOD	<b>Principal distance</b>	812.5 mm	
<b>Direction of view:</b>	170°	<b>Paper size:</b>	841 x 297 mm (half A1)	
<b>Nearest turbine:</b>	1.650 km	<b>Correct printed image size:</b>	820 x 260 mm	



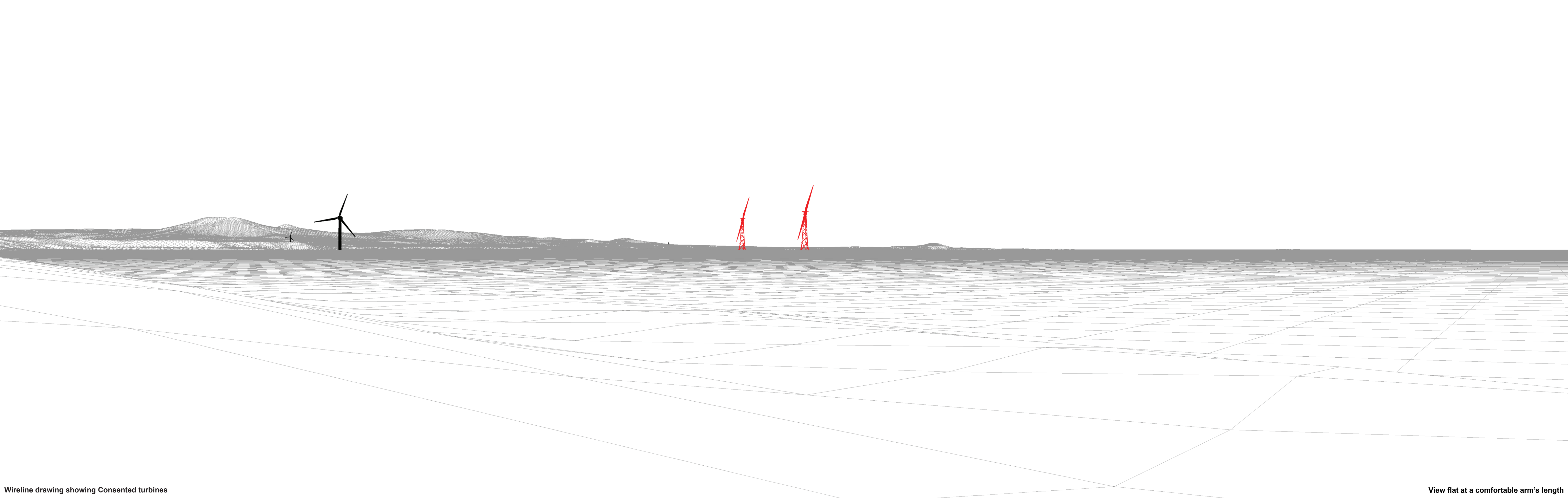


Existing View

View flat at a comfortable arm's length

OS reference:	332696 E 694664 N	Horizontal field of view:	53.5° (planar projection)	Camera:	Canon EOS 5D Mark II	<b>Figure: 6a</b> <b>Viewpoint 2: West Wemyss, Fife Coastal Path</b>
Eye level:	5.62 m AOD	Principal distance	812.5 mm	Lens:	50mm (Canon EF 50mm f/1.4)	
Direction of view:	82°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m AGL	
Nearest turbine:	3.153 km	Correct printed image size:	820 x 260 mm	Date and time:	23/06/16, 14:13	





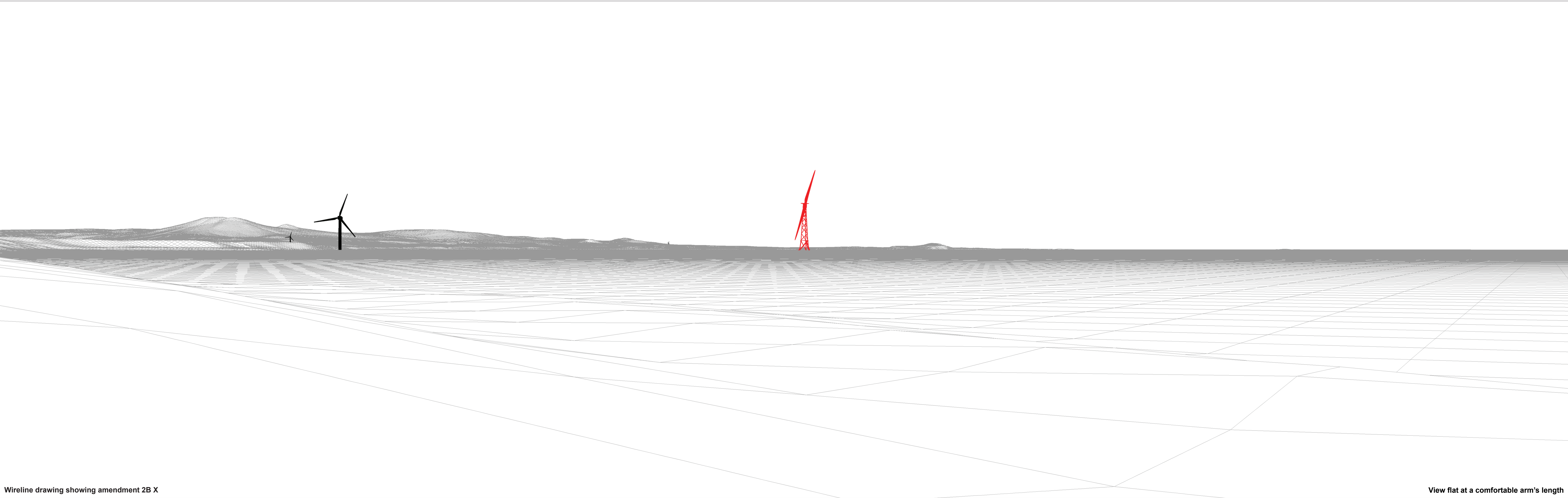
Wireline drawing showing Consented turbines

View flat at a comfortable arm's length

OS reference:	332696 E 694664 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	5.62 m AOD	Principal distance	812.5 mm
Direction of view:	82°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	3.153 km	Correct printed image size:	820 x 260 mm

Figure: 6b  
Viewpoint 2: West Wemyss, Fife Coastal Path





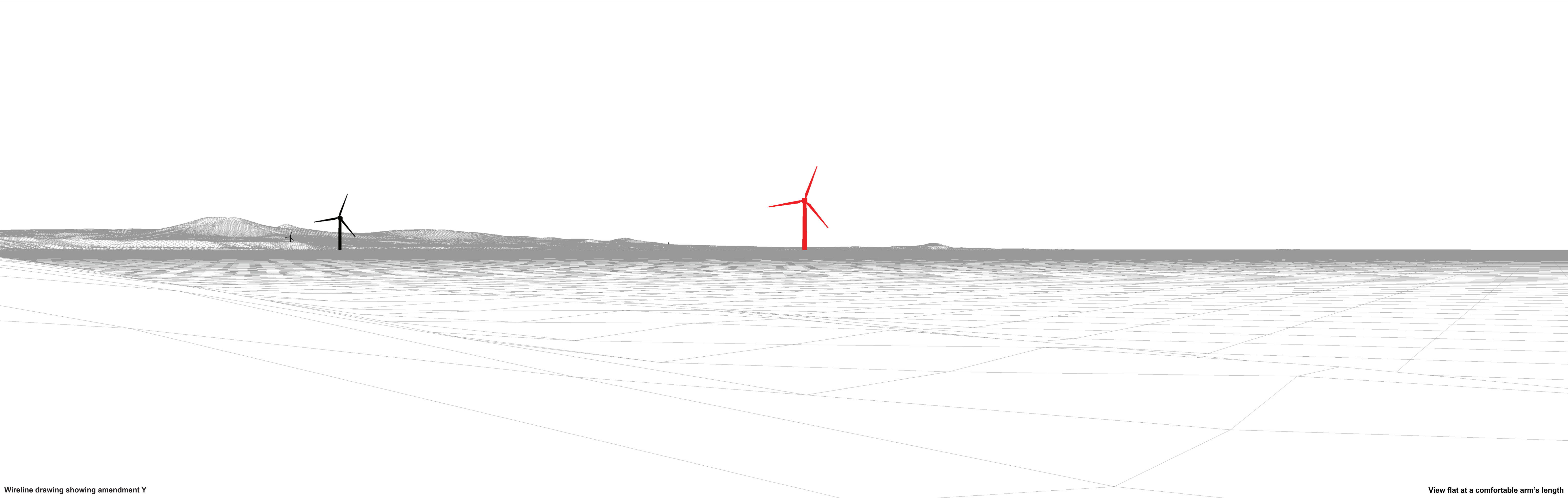
Wireline drawing showing amendment 2B X

View flat at a comfortable arm's length

OS reference:	332696 E 694664 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	5.62 m AOD	Principal distance	812.5 mm
Direction of view:	82°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	3.153 km	Correct printed image size:	820 x 260 mm

Figure: 6c  
Viewpoint 2: West Wemyss, Fife Coastal Path





Wireline drawing showing amendment Y

View flat at a comfortable arm's length

OS reference:	332696 E 694664 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	5.62 m AOD	Principal distance	812.5 mm
Direction of view:	82°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	3.153 km	Correct printed image size:	820 x 260 mm

Figure: 6d  
Viewpoint 2: West Wemyss, Fife Coastal Path





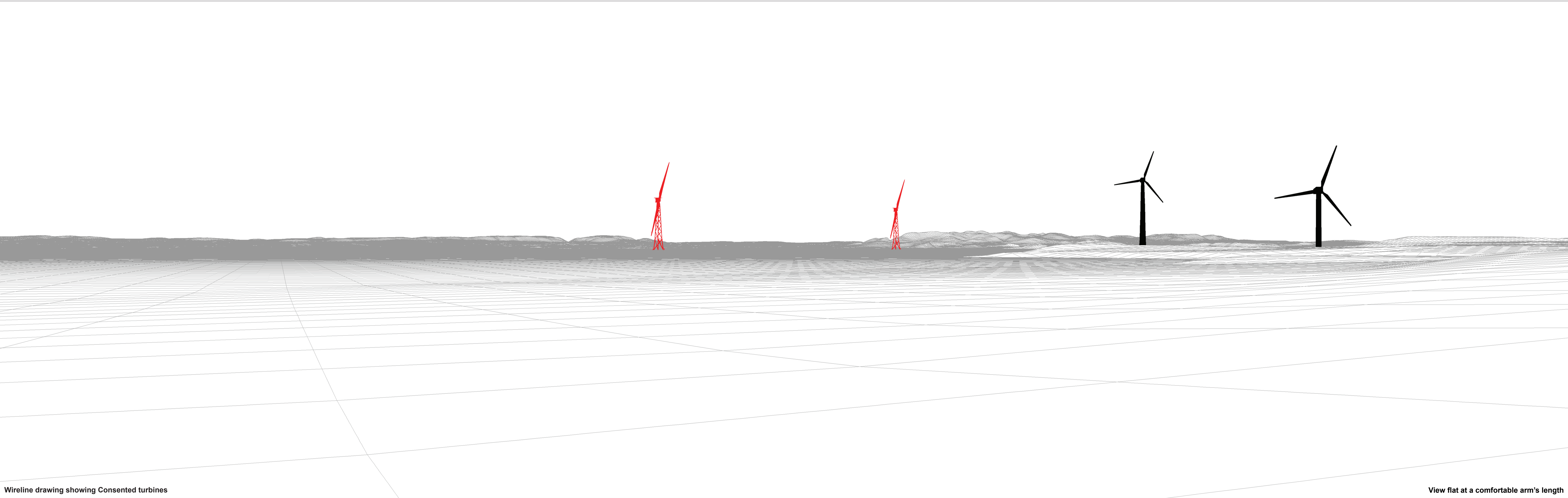
Existing View

View flat at a comfortable arm's length

OS reference:	338631 E 700779 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	5.19 m AOD	Principal distance	812.5 mm
Direction of view:	190°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	3.543 km	Correct printed image size:	820 x 260 mm

**Figure: 7a**  
**Viewpoint 3: Leven, Fife Coastal Path**





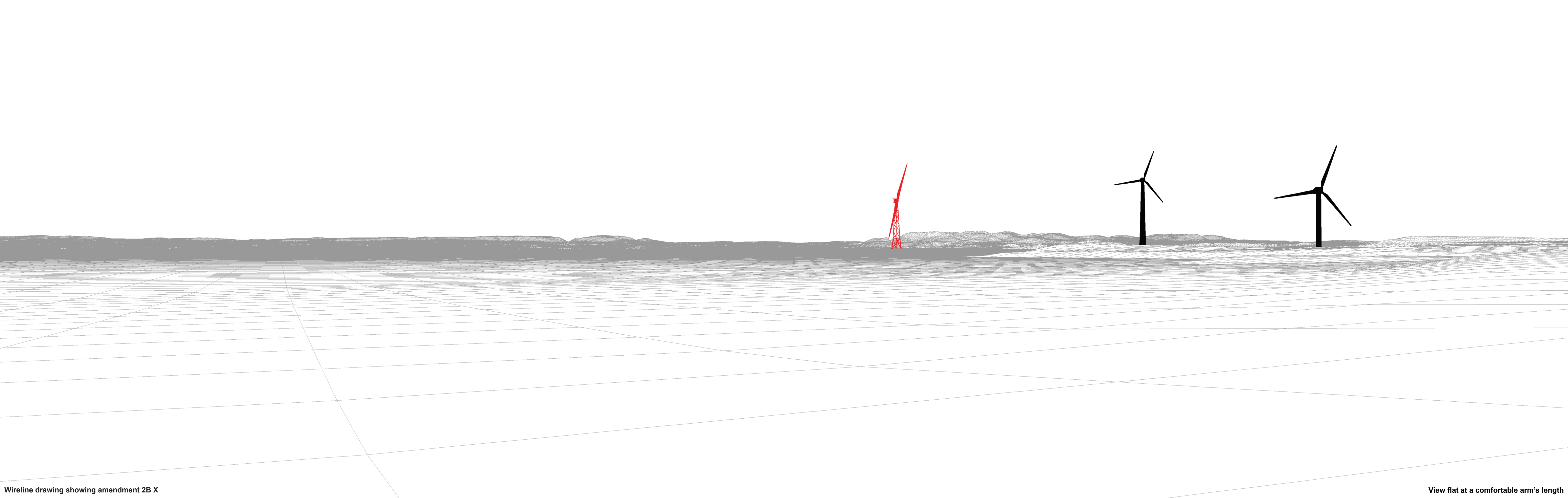
Wireline drawing showing Consented turbines

View flat at a comfortable arm's length

OS reference:	338631 E 700779 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	5.19 m AOD	Principal distance	812.5 mm
Direction of view:	190°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	3.543 km	Correct printed image size:	820 x 260 mm

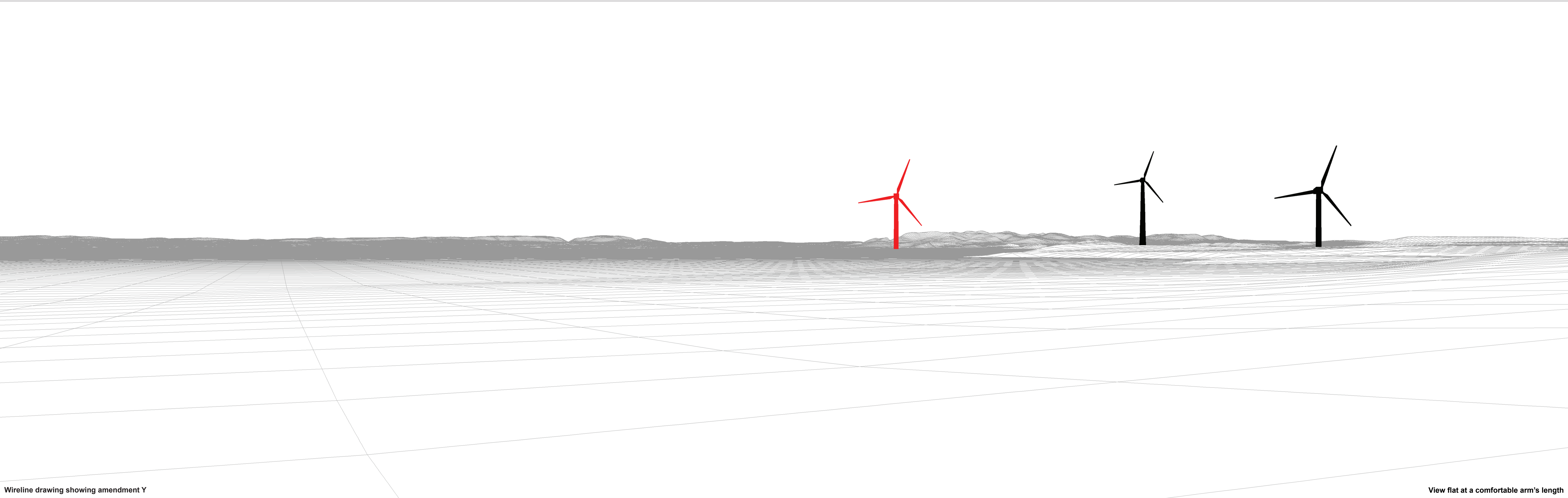
Figure: 7b  
Viewpoint 3: Leven, Fife Coastal Path





<b>OS reference:</b>	338631 E 700779 N	<b>Horizontal field of view:</b>	53.5° (planar projection)	<b>Figure: 7c</b> <b>Viewpoint 3: Leven, Fife Coastal Path</b>
<b>Eye level:</b>	5.19 m AOD	<b>Principal distance</b>	812.5 mm	
<b>Direction of view:</b>	190°	<b>Paper size:</b>	841 x 297 mm (half A1)	
<b>Nearest turbine:</b>	3.543 km	<b>Correct printed image size:</b>	820 x 260 mm	







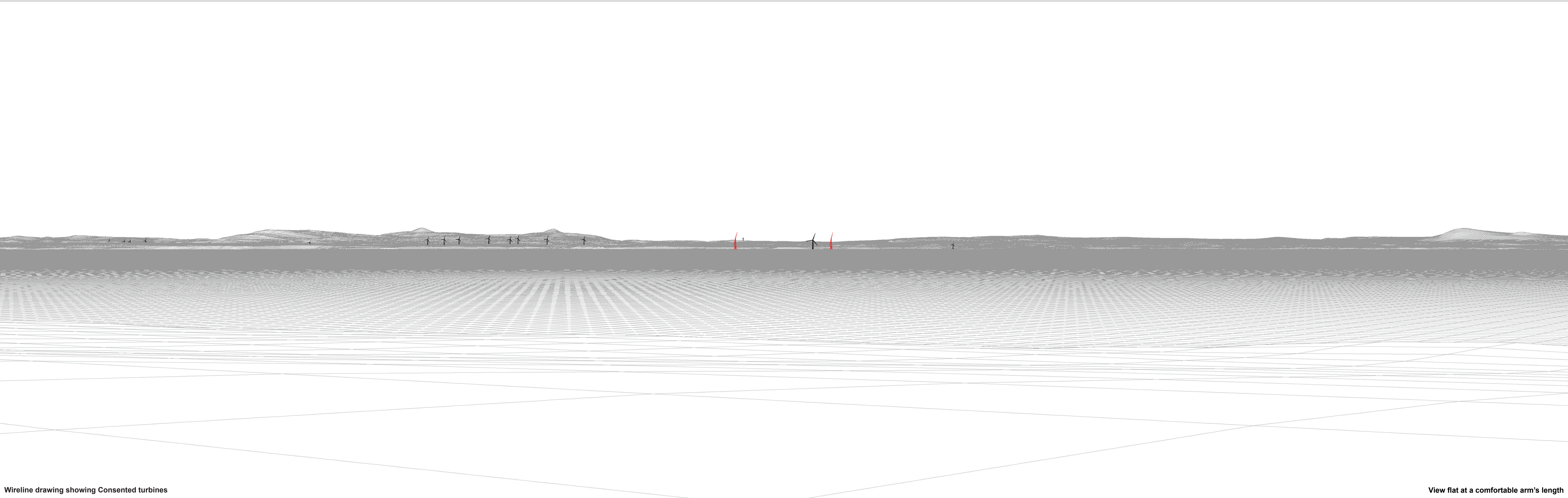


Existing View

View flat at a comfortable arm's length

OS reference:	347897 E 683071 N	Horizontal field of view:	53.5° (planar projection)	Camera:	Canon EOS 5D Mark II	Figure: 8a
Eye level:	28.57 m AOD	Principal distance	812.5 mm	Lens:	50mm (Canon EF 50mm f/1.4)	Viewpoint 4: Gullane, Marine Terrace
Direction of view:	320°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m AGL	
Nearest turbine:	14.527 km	Correct printed image size:	820 x 260 mm	Date and time:	23/06/16, 15:40	





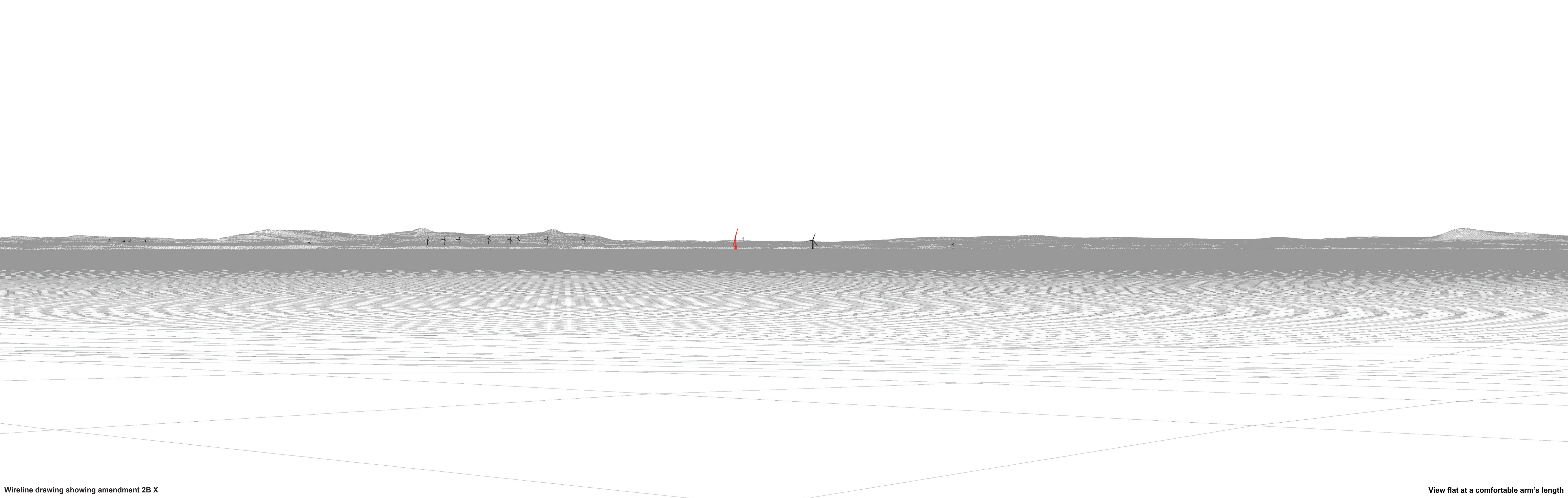
Wireline drawing showing Consented turbines

View flat at a comfortable arm's length

OS reference:	347897 E 683071 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	28.57 m AOD	Principal distance	812.5 mm
Direction of view:	320°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	14.527 km	Correct printed image size:	820 x 260 mm

Figure: 8b  
Viewpoint 4: Gullane, Marine Terrace





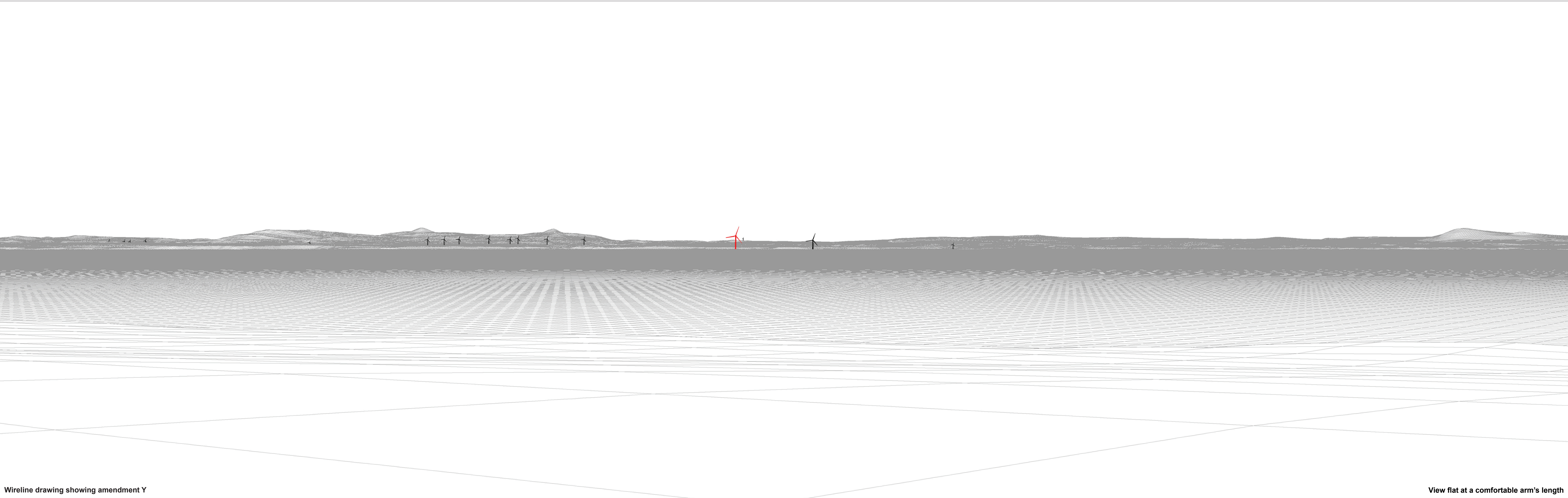
Wireline drawing showing amendment 2B X

View flat at a comfortable arm's length

OS reference:	347897 E 683071 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	28.57 m AOD	Principal distance	812.5 mm
Direction of view:	320°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	14.527 km	Correct printed image size:	820 x 260 mm

Figure: 8c  
Viewpoint 4: Gullane, Marine Terrace





Wireline drawing showing amendment Y

View flat at a comfortable arm's length

OS reference:	347897 E 683071 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	28.57 m AOD	Principal distance	812.5 mm
Direction of view:	320°	Paper size:	841 x 297 mm (half A1)
Nearest turbine:	14.527 km	Correct printed image size:	820 x 260 mm

Figure: 8d  
Viewpoint 4: Gullane, Marine Terrace