



# Morecambe Offshore Windfarm: Generation Assets Environmental Statement

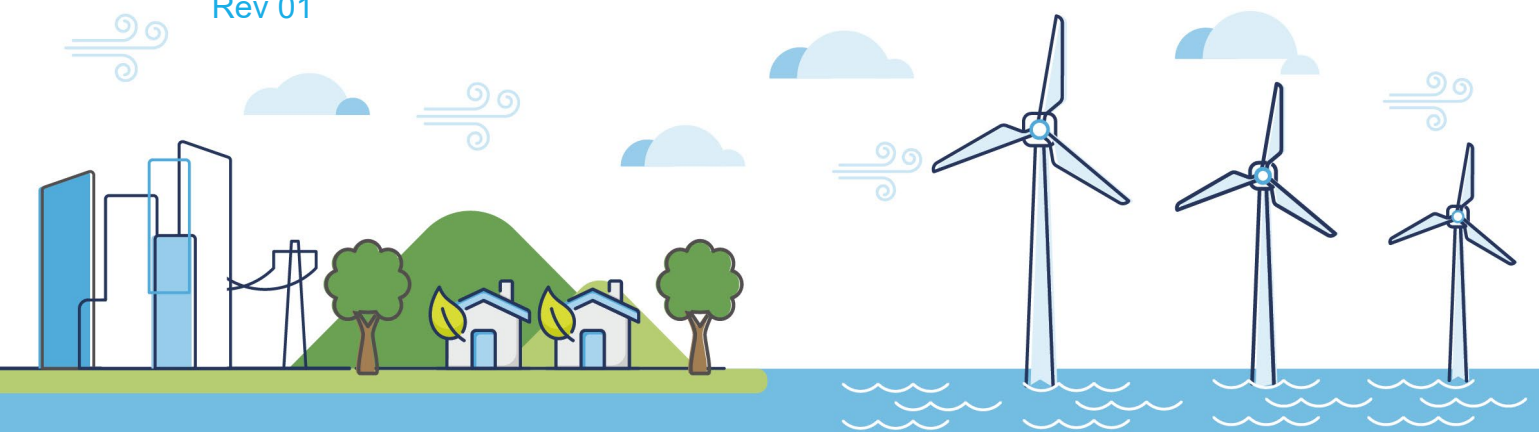
## Volume 5

### Chapter 18 SLVIA Figures (Part 1 of 34)

PINS Document Reference: 5.3.18.1

APFP Regulation: 5(2)(a)

Rev 01

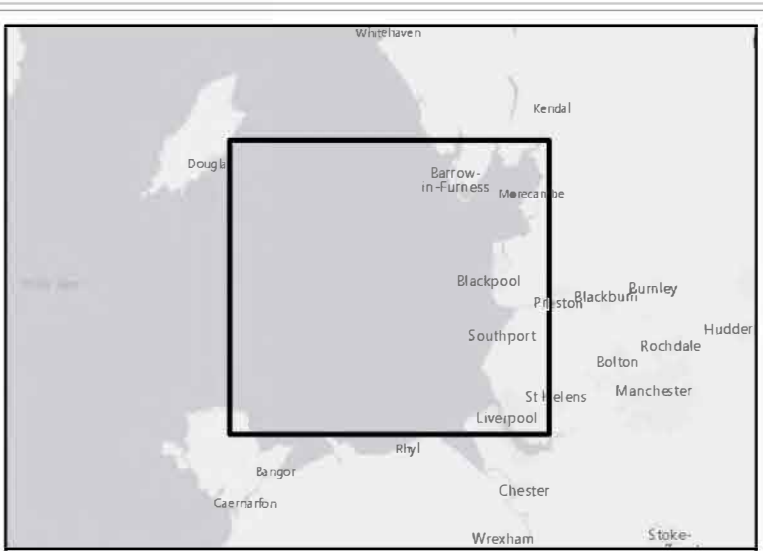
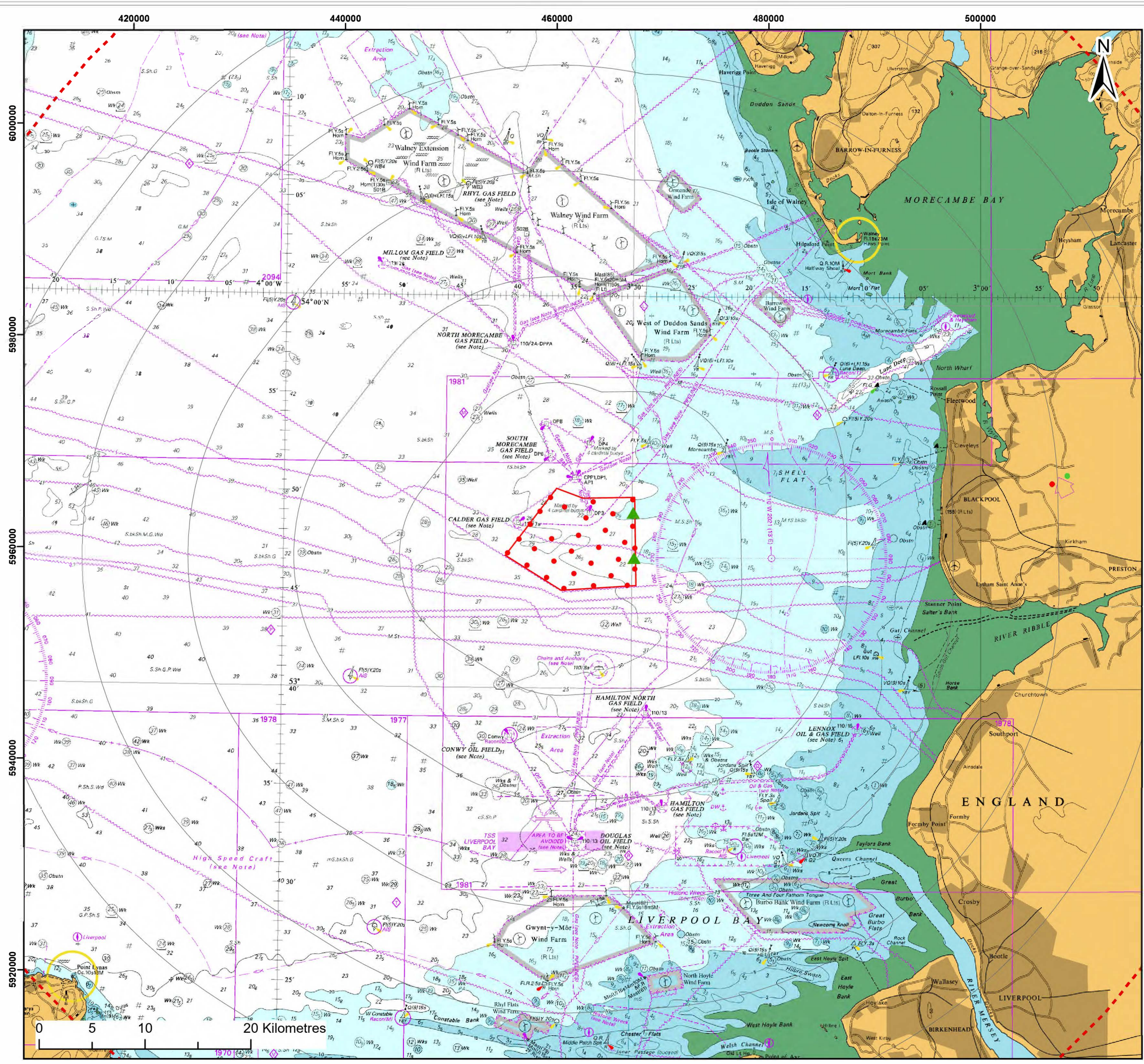


## Document History

<b>Doc No</b>	MOR001-FLO-CON-ENV-FIG-1180	<b>Rev</b>	01
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<b>Rev</b>	<b>Date</b>	<b>Doc Status</b>	<b>Originator</b>	<b>Reviewer</b>	<b>Approver</b>	<b>Modifications</b>
01	May 2024	Approved for Use	Royal HaskoningDHV	Morecambe Offshore Windfarm Ltd	Morecambe Offshore Windfarm Ltd	n/a





**Legend:**

- Morecambe Offshore Wind Farm - Assumed WTG locations (30 x BT 310m(HAT))
- ▲ Morecambe Offshore Wind Farm - Assumed Offshore Substation Location
- Morecambe Offshore Windfarm Site
- 10km Radii
- ⋯ 60km Study Area

EMODnet Bathymetry Consortium (2020): EMODnet Digital  
<https://doi.org/10.12770/bb6a87dd-e579-4036-ab1-e649cea9881a>  
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**Report:**  
 Morecambe Offshore Windfarm: Generation Assets Environmental Statement

**Title:**  
 SLVIA Project Design Envelope - Maximum Height WTGs

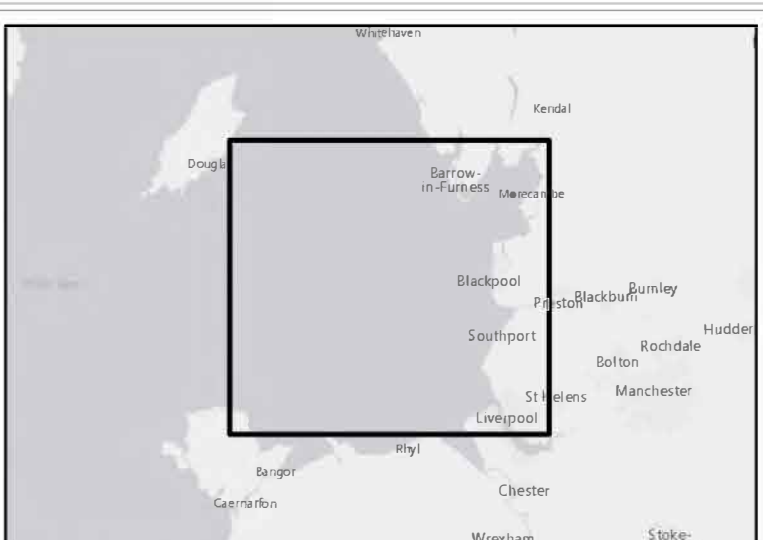
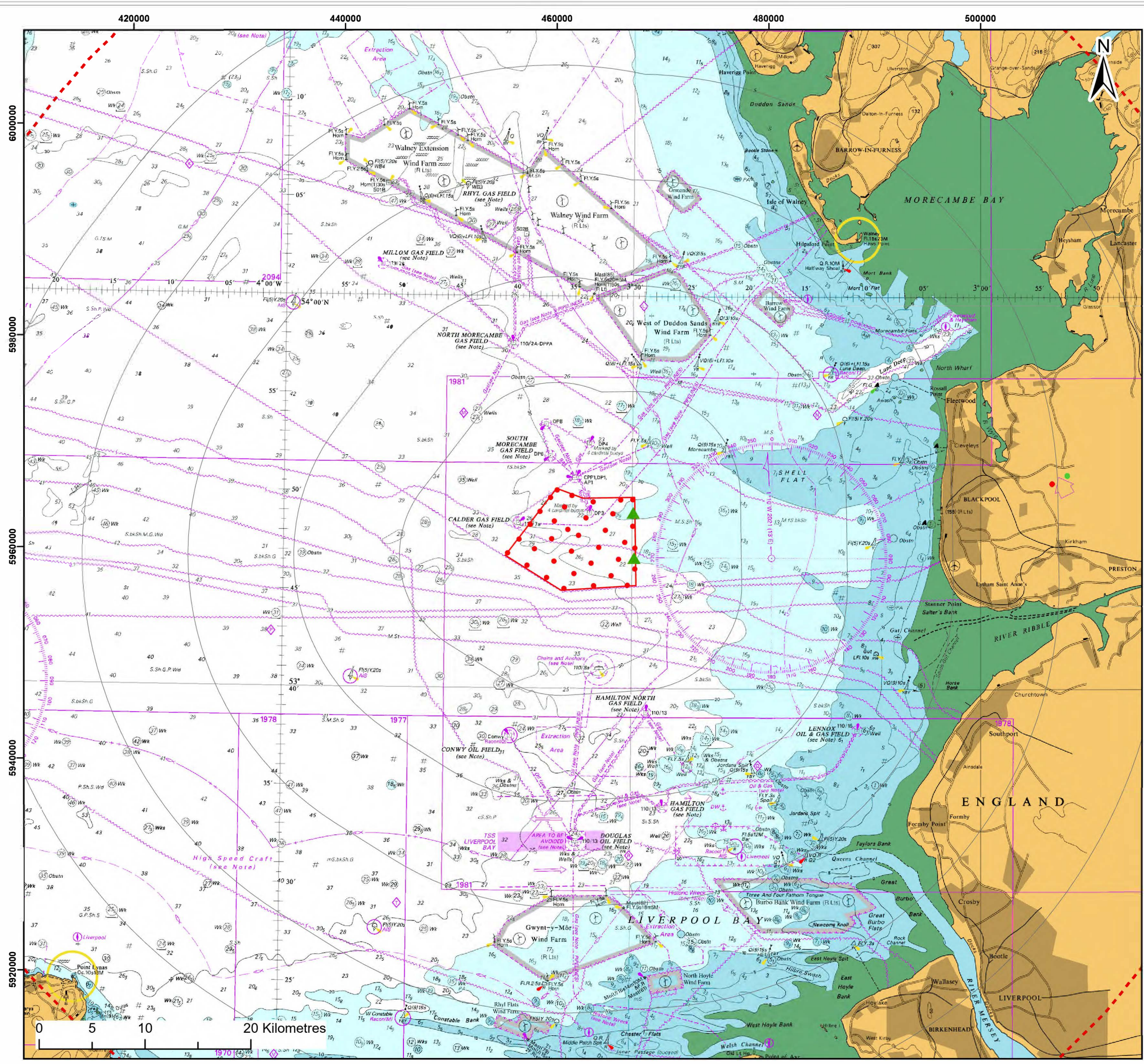
**Figure:** 18.1      **Drawing No.:** 211609

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P02	17/08/2023	RA	SM	A3	1:360,000

Co-ordinate system: WGS 1984 UTM Zone 30N







- Legend:**
- Morecambe Offshore Wind Farm - Assumed WTG locations (35 x BT 290m (HAT))
  - ▲ Morecambe Offshore Wind Farm - Assumed Offshore Substation Location
  - ▭ Morecambe Offshore Windfarm Site
  - 10km Radii
  - ⋯ 60km Study Area

EMODnet Bathymetry Consortium (2020): EMODnet Digital  
<https://doi.org/10.12770/bb6a87dd-e579-4036-ab1-e649cea9881a>  
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**Report:**  
 Morecambe Offshore Windfarm: Generation Assets Environmental Statement

**Title:**  
 SLVIA Project Design Envelope - Maximum Number WTGs

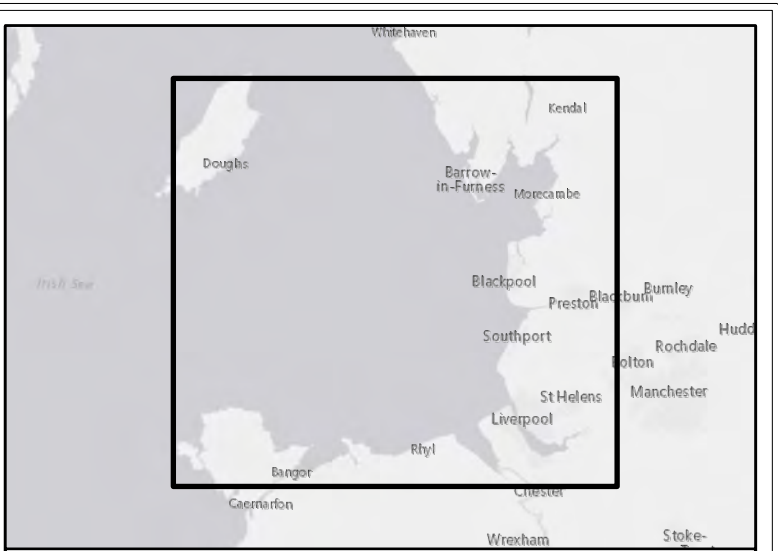
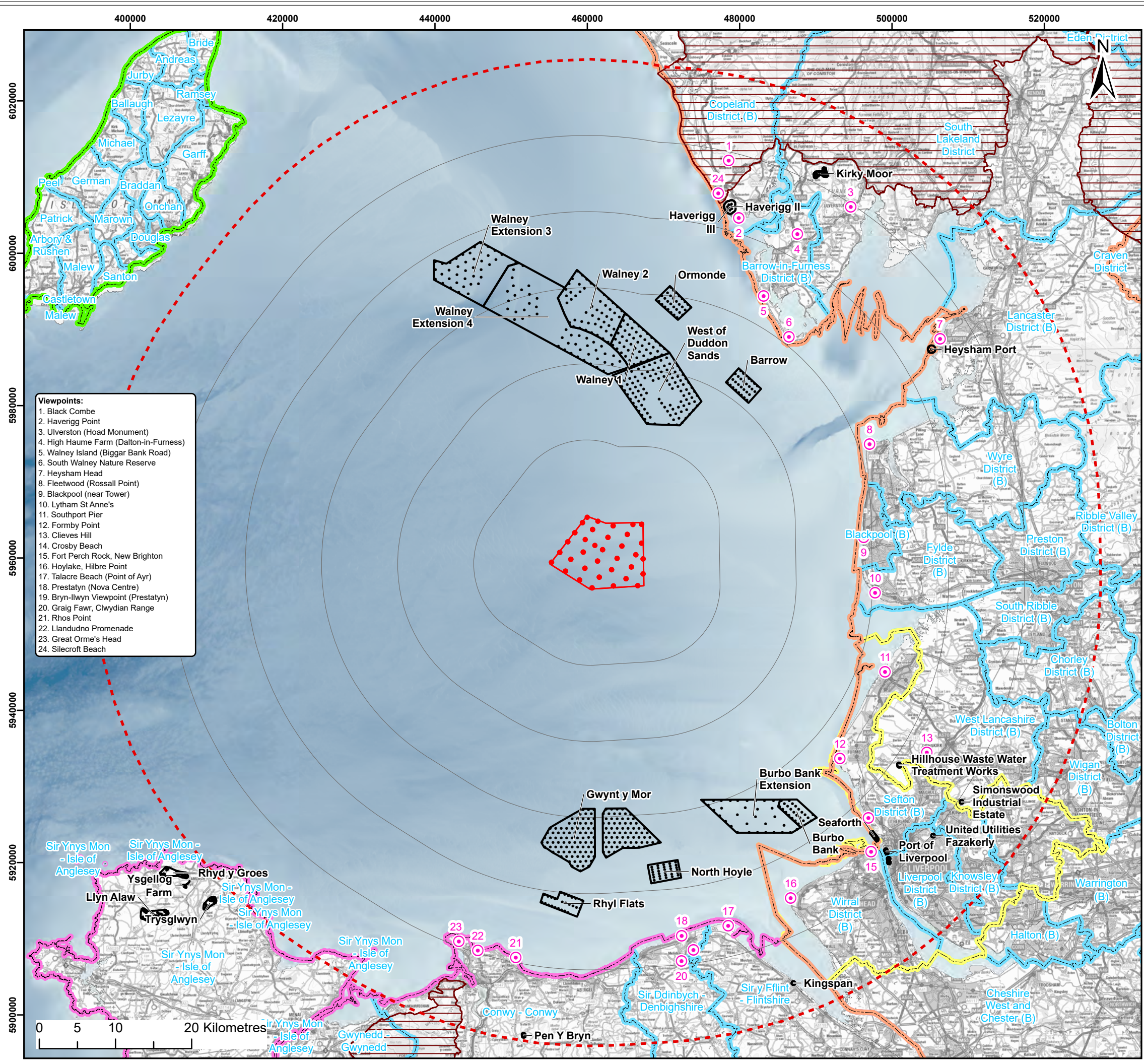
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Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P02	17/08/2023	RA	SM	A3	1:360,000

Co-ordinate system: WGS 1984 UTM Zone 30N







**Legend:**

- Operational WTG
- ▭ Operational Windfarm boundary
- Morecambe Offshore Wind Farm - Assumed WTG locations (30 x BT 310m(HAT))
- ▭ Morecambe Offshore Windfarm Site
- ⊙ Viewpoints
- 10km Radii
- ▭ 60km Study Area
- ▭ National Parks
- ▭ Local Authority
- ▭ Isle of Man
- ▭ North Wales
- ▭ North West England
- ▭ Merseyside

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 EMOdnet Bathymetry Consortium (2020): EMOdnet Digital Bathymetry (DTM).  
<https://doi.org/10.12770/bb6a87dd-e579-4036-abe1-e649cea9881a>  
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**Report:**  
 Morecambe Offshore Windfarm: Generation Assets  
 Environmental Statement

**Title:**  
 ES SLVIA Study Area -  
 Maximum Height Scenario

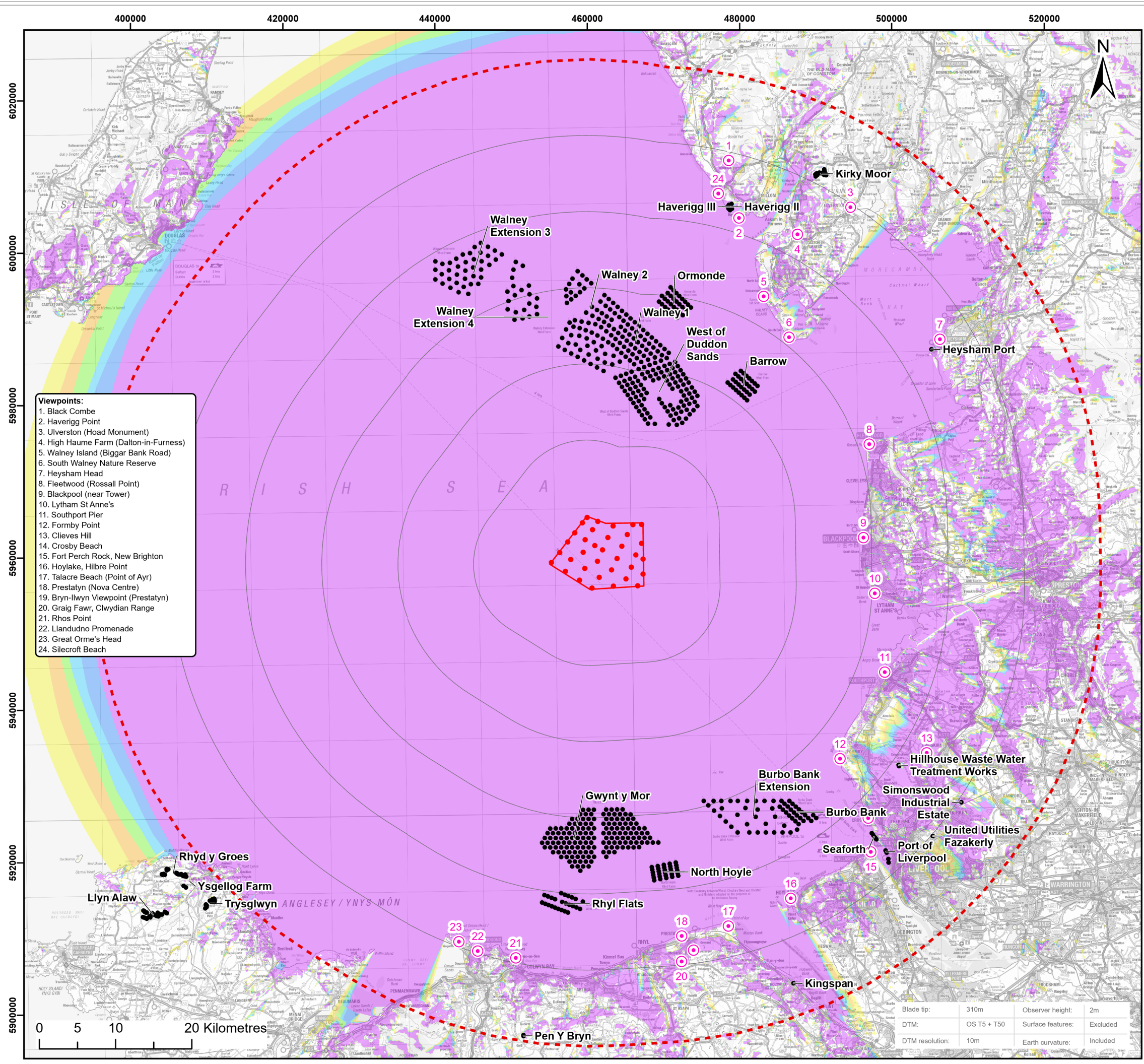
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Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P02	17/08/2023	RA	SM	A3	1:500,000

**Co-ordinate system:** WGS 1984 UTM Zone 30N







- Viewpoints:**
1. Black Combe
  2. Haverigg Point
  3. Ulverston (Hoad Monument)
  4. High Haume Farm (Dalton-in-Furness)
  5. Walney Island (Biggar Bank Road)
  6. South Walney Nature Reserve
  7. Heysham Head
  8. Fleetwood (Rossall Point)
  9. Blackpool (near Tower)
  10. Lytham St Anne's
  11. Southport Pier
  12. Formby Point
  13. Clieves Hill
  14. Crosby Beach
  15. Fort Perch Rock, New Brighton
  16. Hoylake, Hilbre Point
  17. Talacre Beach (Point of Ayr)
  18. Prestatyn (Nova Centre)
  19. Bryn-Ilwyn Viewpoint (Prestatyn)
  20. Graig Fawr, Clwydian Range
  21. Rhos Point
  22. Llandudno Promenade
  23. Great Orme's Head
  24. Silecroft Beach

**Legend:**

- Farm - Assumed WTG locations (35 x BT 290m(HAT))
- ⊙ Viewpoints
- Operational WTG
- ▭ Morecambe Offshore Windfarm Site
- 10km Radii
- ⋯ 60km Study Area

**No. Blade Tips Theoretically Visible**

- 1 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 25
- 26 - 30

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**Report:**  
Morecambe Offshore Windfarm: Generation Assets Environmental Statement

**Title:**  
Blade Tip Zone of Theoretical Visibility - Maximum Number WTGs

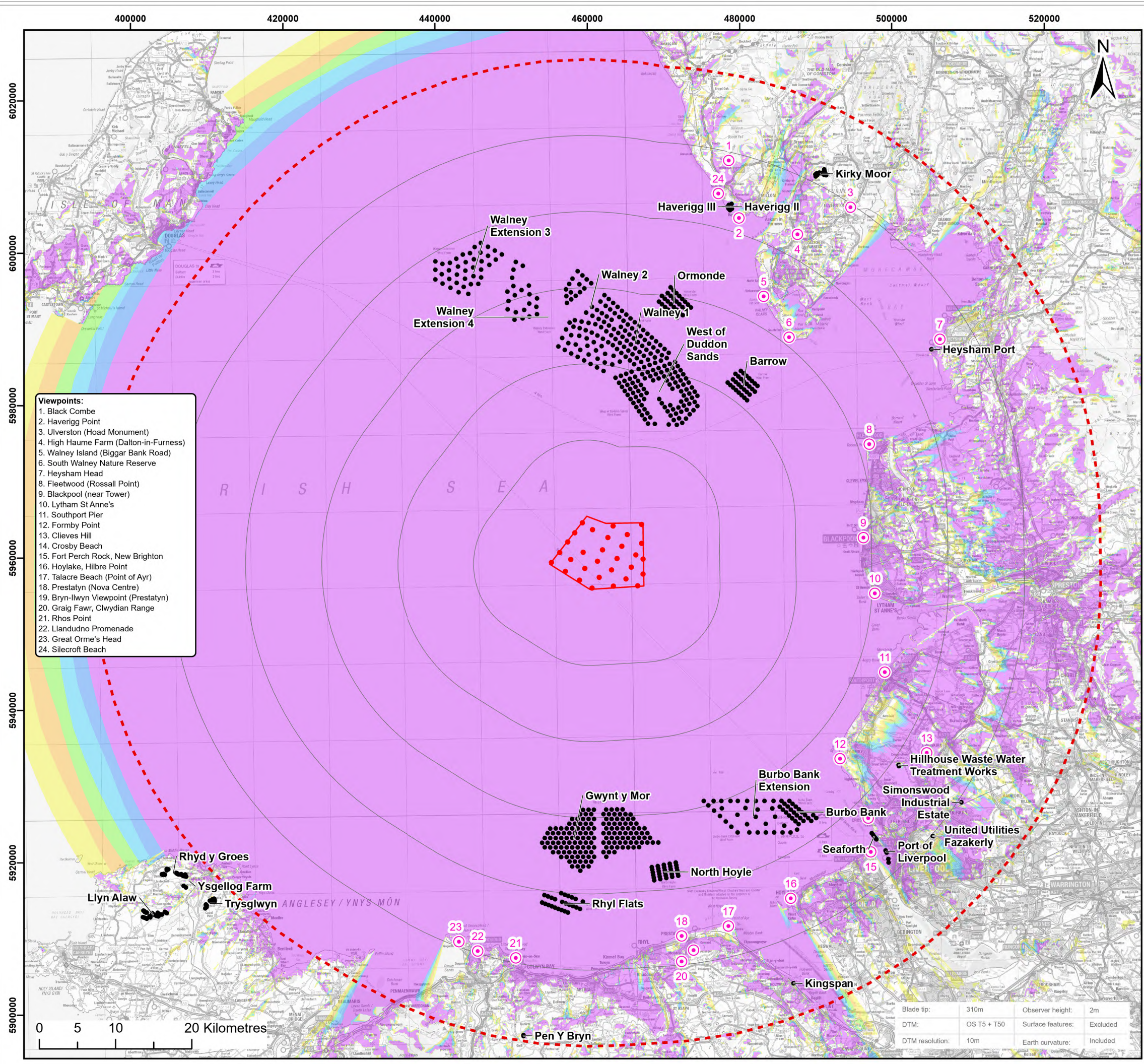
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Revision: P02	Date: 18/09/2023	Drawn: RA	Checked: SM	Size: A3	Scale: 1:500,000

Co-ordinate system: WGS 1984 UTM Zone 30N

Blade tip:	310m	Observer height:	2m
DTM:	OS T5 + T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included







- Viewpoints:**
1. Black Combe
  2. Haverigg Point
  3. Ulverston (Hoad Monument)
  4. High Haume Farm (Dalton-in-Furness)
  5. Walney Island (Biggar Bank Road)
  6. South Walney Nature Reserve
  7. Heysham Head
  8. Fleetwood (Rossall Point)
  9. Blackpool (near Tower)
  10. Lytham St Anne's
  11. Southport Pier
  12. Formby Point
  13. Clieves Hill
  14. Crosby Beach
  15. Fort Perch Rock, New Brighton
  16. Hoylake, Hilbre Point
  17. Talacre Beach (Point of Ayr)
  18. Prestatyn (Nova Centre)
  19. Bryn-Ilwyn Viewpoint (Prestatyn)
  20. Graig Fawr, Clwydian Range
  21. Rhos Point
  22. Llandudno Promenade
  23. Great Orme's Head
  24. Silecroft Beach

**Legend:**

- Farm - Assumed WTG locations (30 x BT 310m(HAT))
- ⊙ Viewpoints
- Operational WTG
- ▭ Morecambe Offshore Windfarm Site
- 10km Radii
- ⋯ 60km Study Area

**No. Blade Tips Theoretically Visible**

- 1 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 25
- 26 - 30

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Report:  
Morecambe Offshore Windfarm: Generation Assets  
Environmental Statement

Title:  
Blade Tip Zone of Theoretical Visibility -  
Maximum Height WTGs

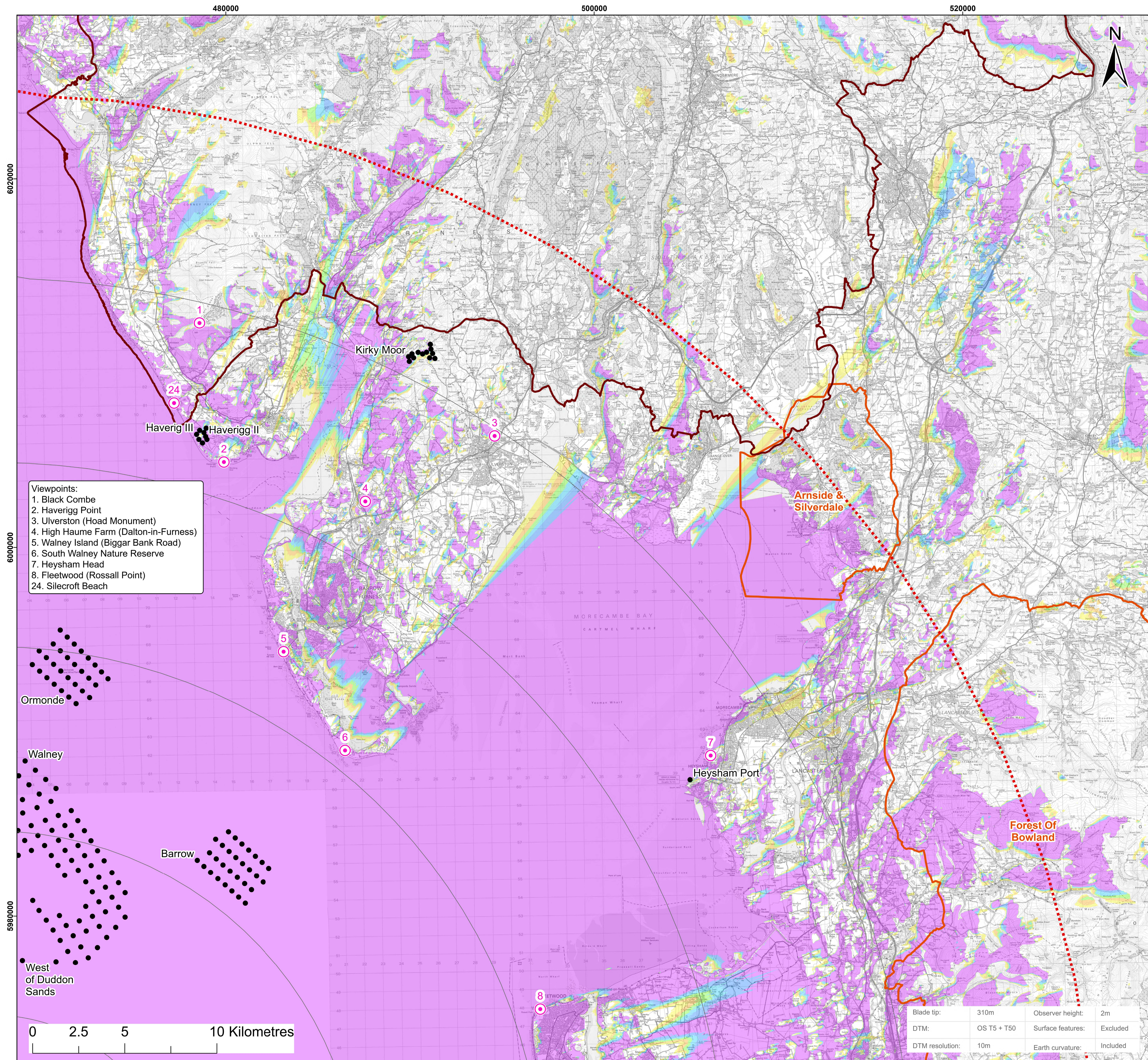
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Revision: P02	Date: 18/09/2023	Drawn: RA	Checked: SM	Size: A3	Scale: 1:500,000

Co-ordinate system: WGS 1984 UTM Zone 30N

Blade tip:	310m	Observer height:	2m
DTM:	OS T5 + T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included







- Viewpoints:
1. Black Combe
  2. Haverigg Point
  3. Ulverston (Hoad Monument)
  4. High Haume Farm (Dalton-in-Furness)
  5. Walney Island (Biggar Bank Road)
  6. South Walney Nature Reserve
  7. Heysham Head
  8. Fleetwood (Rossall Point)
  24. Silecroft Beach



- Legend:
- Morecambe Offshore Wind Farm - Assumed WTG locations (30 x BT 310m(HAT))
  - Viewpoints
  - Operational WTG
  - ▭ Morecambe Offshore Windfarm Site
  - ▭ 10km Radii
  - ▭ 60km Study Area
  - ▭ Lake District National Park
  - ▭ Area of Outstanding Natural Beauty
- No. Blade Tips Theoretically Visible
- 1 - 5
  - 6 - 10
  - 11 - 15
  - 16 - 20
  - 21 - 25
  - 26 - 30

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Report:  
Morecambe Offshore Windfarm: Generation Assets  
Environmental Statement

Title:  
Blade Tip Zone of Theoretical Visibility:  
Lake District National Park

Figure: 18.5a Drawing No: 211609

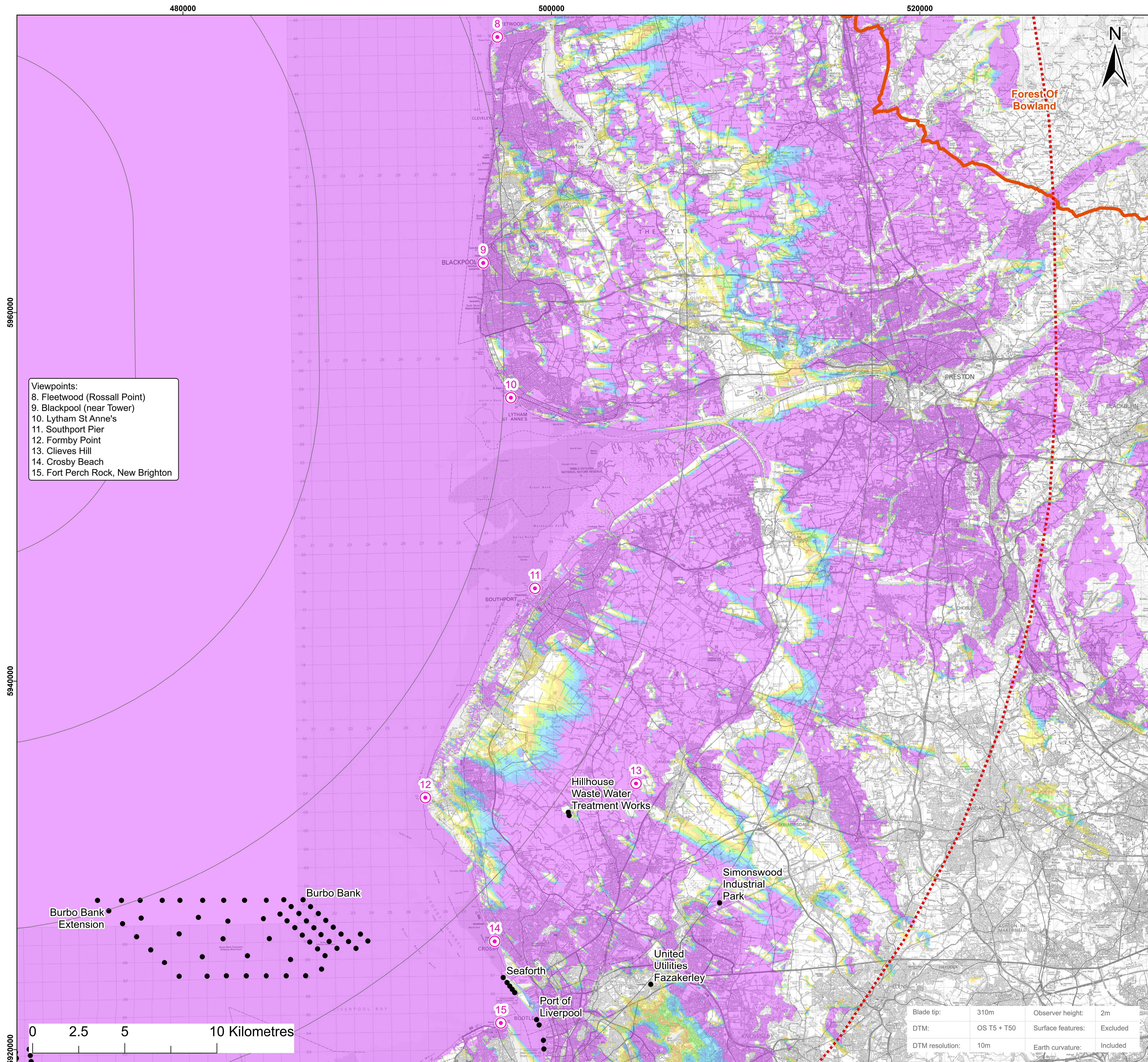
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P02	25/09/2023	RA	SM	A1	1:100,000

Co-ordinate system: WGS 1984 UTM Zone 30N

Blade tip:	310m	Observer height:	2m
DTM:	OS T5 + T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included







Viewpoints:  
 8. Fleetwood (Rossall Point)  
 9. Blackpool (near Tower)  
 10. Lytham St Anne's  
 11. Southport Pier  
 12. Formby Point  
 13. Clieves Hill  
 14. Crosby Beach  
 15. Fort Perch Rock, New Brighton



- Legend:
- Morecambe Offshore Wind Farm - Assumed WTG locations (30 x BT 310m(HAT))
  - Viewpoints
  - Operational WTG
  - ▭ Morecambe Offshore Windfarm Site
  - ▭ 10km Radii
  - ⋯ 60km Study Area
  - ▭ Area of Outstanding Natural Beauty
- No. Blade Tips Theoretically Visible
- 1 - 5
  - 6 - 10
  - 11 - 15
  - 16 - 20
  - 21 - 25
  - 26 - 30

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Report:  
 Morecambe Offshore Windfarm: Generation Assets  
 Environmental Statement

Title:  
 Blade Tip Zone of Theoretical Visibility:  
 North West England

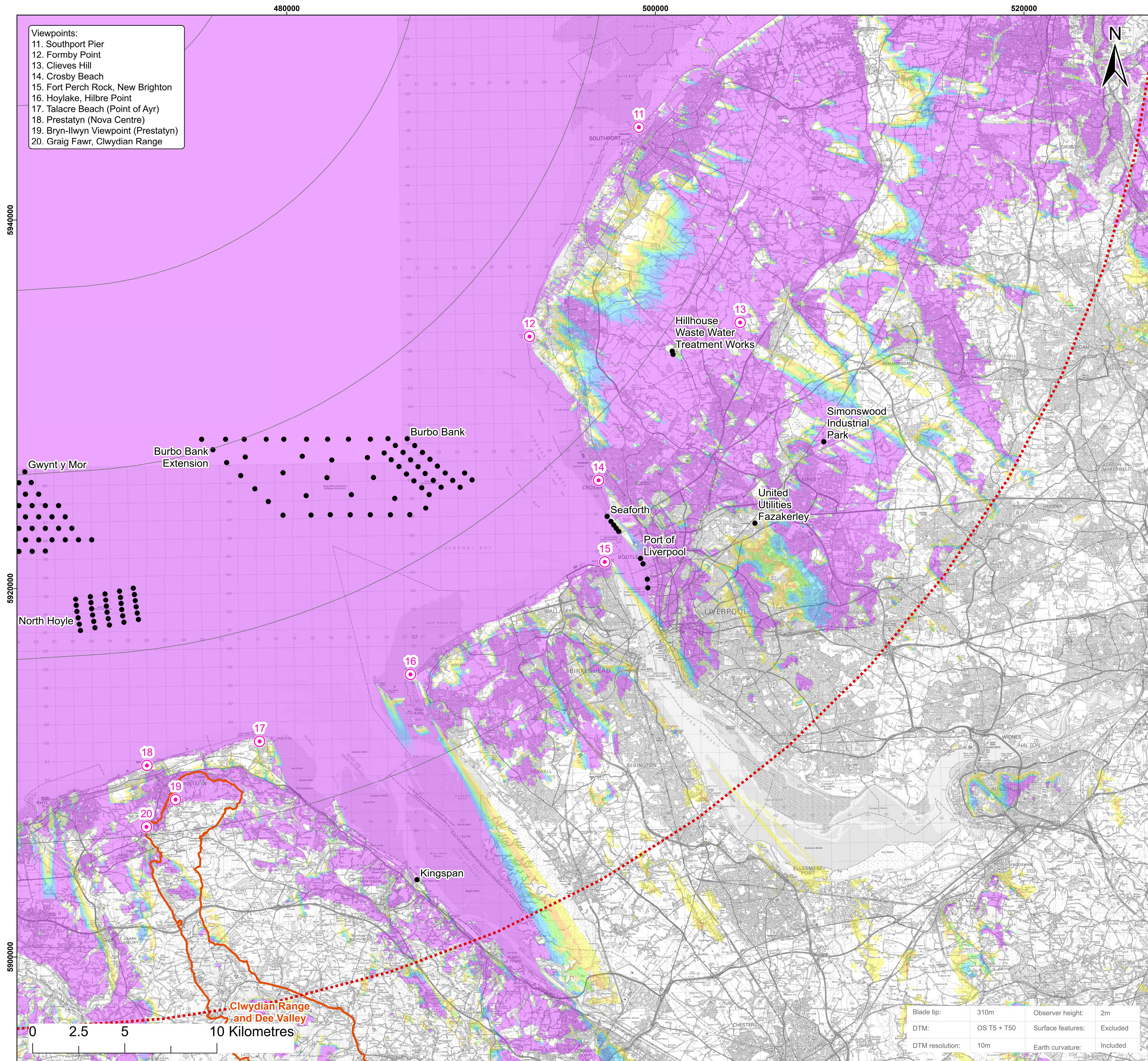
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Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P02	25/09/2023	RA	SM	A1	1:100,000

Co-ordinate system: WGS 1984 UTM Zone 30N

Blade tip:	310m	Observer height:	2m
DTM:	OS T5 + T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included







- Viewpoints:**
11. Southport Pier
  12. Formby Point
  13. Clieves Hill
  14. Crosby Beach
  15. Fort Perch Rock, New Brighton
  16. Hoylake, Hilbre Point
  17. Talacre Beach (Point of Ayr)
  18. Prestatyn (Nova Centre)
  19. Bryn-Ilwyn Viewpoint (Prestatyn)
  20. Graig Fawr, Clwydian Range



- Legend:**
- Morecambe Offshore Wind Farm - Assumed WTG locations (30 x BT 310m(HAT))
  - Viewpoints
  - Operational WTG
  - Morecambe Offshore Windfarm Site
  - 10km Radii
  - ⋯ 60km Study Area
  - Area of Outstanding Natural Beauty
- No. Blade Tips Theoretically Visible**
- 1 - 5
  - 6 - 10
  - 11 - 15
  - 16 - 20
  - 21 - 25
  - 26 - 30

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**Report:**  
Morecambe Offshore Windfarm: Generation Assets  
Environmental Statement

**Title:**  
Blade Tip Zone of Theoretical Visibility:  
Merseyside

**Figure:** 18.5c      **Drawing No:** 211609

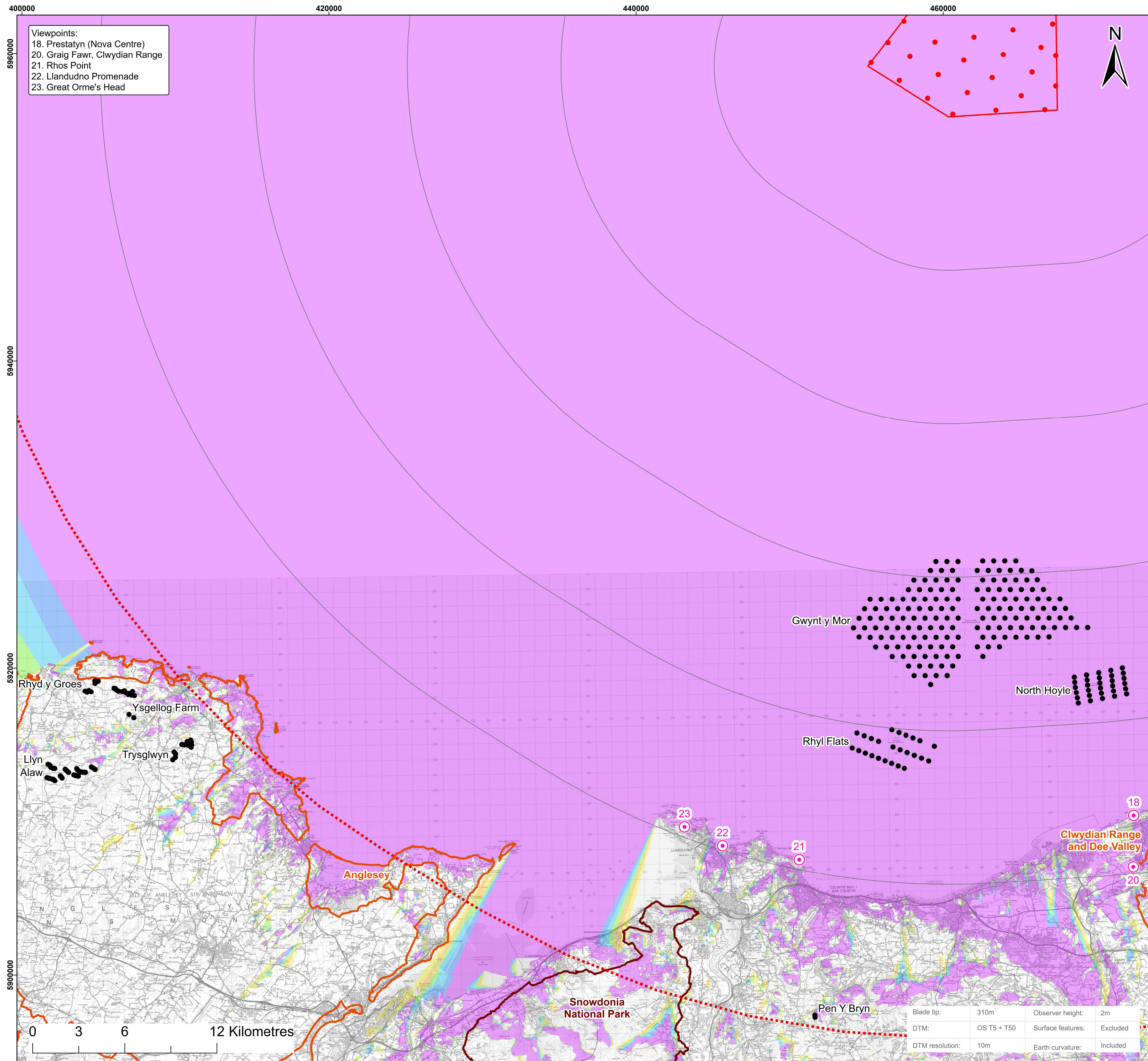
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P02	25/09/2023	RA	SM	A1	1:100,000

**Co-ordinate system:** WGS 1984 UTM Zone 30N

Blade tip:	310m	Observer height:	2m
DTM:	OS T5 + T50	Surface features:	Excluded
DTM resolution:	10m	Earth curvature:	Included







Viewpoints:  
 18. Prestatyn (Nova Centre)  
 20. Graig Fawr, Clwydian Range  
 21. Rhos Point  
 22. Llandudno Promenade  
 23. Great Orme's Head



Legend:

- Morecambe Offshore Wind Farm - Assumed WTG locations (30 x BT 310m(HAT))
  - Viewpoints
  - Operational WTG
  - ▭ Morecambe Offshore Windfarm Site
  - ▭ 10km Radii
  - ▭ 60km Study Area
  - ▭ Snowdonia National Park
  - ▭ Area of Outstanding Natural Beauty
- No. Blade Tips Theoretically Visible
- 1 - 5
  - 6 - 10
  - 11 - 15
  - 16 - 20
  - 21 - 25
  - 26 - 30

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Report:  
 Morecambe Offshore Windfarm: Generation Assets  
 Environmental Statement

Title:  
 Blade Tip Zone of Theoretical Visibility:  
 North Wales

Figure: 18.5d Drawing No: 211609

Revision:	Date:	Drawn:	Checked:	Size:	Scale:
P02	25/09/2023	RA	SM	A1	1:120,000

Co-ordinate system: WGS 1984 UTM Zone 30N





