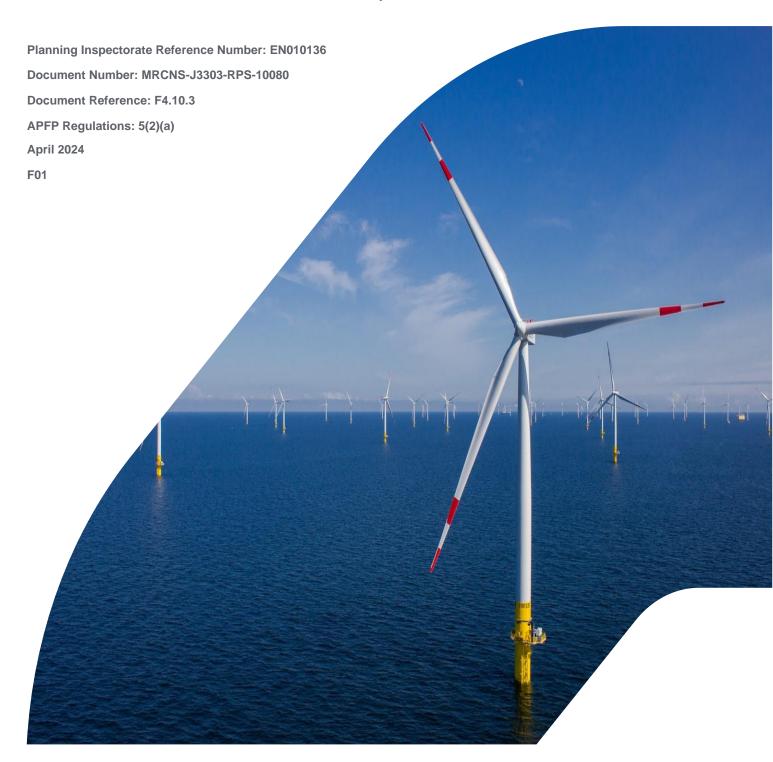


Environmental Statement

Volume 4, Annex 10.3: Visual baseline technical report





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Glossary

Term	Meaning
Visual receptors	People within the study area with potential views of the Morgan Generation Assets.
Zone of Theoretical Visibility	A map, usually digitally produced, showing areas of land within which, a development is theoretically visible.

Acronyms

Acronym	Description
GPS	Global Positioning System
HFoV	Horizontal Field of View
LI	Landscape Institute
PRoW	Public Right of Way
SLR	Single Lens Reflex
SLVIA	Seascape Landscape and Visual Impact Assessment
TGN	Technical Guidance Note
ZTV	Zone of Theoretical Visibility

Units

Unit	Description
0	Degree
km	Kilometres
m	Metres
mm	Millimetres
A3	Paper size 297mm x 420mm
A1	Paper size 594mm x 841mm
%	Percentage

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1 Visual baseline technical report

1.1 Introduction

1.1.1.1 This Visual Baseline Technical Report describes the visual baseline that informs the Seascape, Landscape and Visual Impact Assessment (SLVIA) provided in Volume 2, Chapter 10: Seascape, Landscape and Visual Resources of the Environmental Statement.

1.2 Study area

- 1.2.1.1 The seascape, landscape and visual resources study area for Morgan Generation Assets (hereafter referred to as the '50 km SLVIA study area', is shown in Figure A. 1 in Appendix Abelow. The 50 km SLVIA study area has been based on the findings of an analysis of the Zone of Theoretical Visibility (ZTV). The SLVIA study area comprises the area of land and sea to be temporarily and permanently occupied during construction, operations and maintenance and decommissioning of the Morgan Generation Assets together with a 50 km buffer from the Morgan Array Area.
- 1.2.1.2 The buffer used to define the 50 km SVLIA study area is based on the Maximum Design Scenario (MDS) set out in Volume 2, Chapter 10: Seascape, landscape and visual resources of the Environmental Statement.
- 1.2.1.3 A 60 km buffer from the Morgan Array Area is also identified solely for the purpose of assessing effects on nationally and internationally designated landscapes. This 60 km buffer and assessment is documented in Volume 4, Annex 10.5: International and nationally designated landscape study of the Environmental Statement.

1.3 Consultation

1.3.1.1 The statutory consultation feedback sought additional viewpoints, including viewpoints in the nationally and internationally designated landscapes. Further detail on this and other comments raised along with the formal responses are presented in Volume 2, Chapter 10: Seascape, landscape and visual resources of the Environmental Statement. This annex describes the initial and additional viewpoints established from the statutory stakeholder consultation process.

1.4 Methodology

- 1.4.1.1 The fieldwork photography follows the Landscape Institute (LI) guidance set out in LI *Technical Guidance Note (TGN) 06/19: Visual Representation of Development Proposals*, September 2019.
- 1.4.1.2 Following consultation, 23 representative viewpoint locations were identified for the Morgan Array Area. The representative viewpoints formed the basis for the site surveys and photography and these are presented in Table 1.1. Locations have been identified which coincide with access land, national trails, public rights of way and public open spaces to ensure the most sensitive visual receptors form the basis for the Environmental Statement.
- 1.4.1.3 It should be noted that locations within nationally and internationally designated landscapes were also included, some of which fall within an extended study area of 60 km from the Morgan Array Area to inform the assessment of the effects of the Morgan Generation Assets on the special qualities of these landscapes. This is



documented in Volume 4, Annex 10.5: International and nationally designated landscape study of the Environmental Statement.

1.4.2 Site-specific surveys

1.4.2.1 Surveys for the purpose of capturing baseline photography were undertaken during the period from March 2022 to March 2024 to inform the visual resources baseline and the preparation of photomontages.

Procedure for taking photographs at representative viewpoints

- 1.4.2.2 The baseline photographs for the representative viewpoints were taken in favourable dry weather conditions and clear visibility, where possible. These are presented in Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement. This photography has been used as the baseline for the annotated photographs. Meteorological Office criteria regarding favourable weather conditions and clear visibility are reproduced in Volume 2, Chapter 10: Seascape, landscape and visual resources of the Environmental Statement. Volume 4, Annex 10.4: Seascape, landscape and visual resources impact assessment methodology of the Environmental Statement sets out Meteorological Office data relevant to Morgan Generation Assets.
- 1.4.2.3 A fixed 50 mm lens on a digital Single Lens Reflex (SLR) camera was used for the photography in a format equivalent to 35 mm at eye level, approximately 1.75 m above ground level from public viewpoints. A full frame sensor was used (as recommended in the Landscape Institute *Technical Guidance Note 06/19: Visual Representation of Development Proposals*, September 2019). The same exposure setting was used for all the frames. viewpoint locations were recorded using a hand-held Global Positioning System (GPS).
- 1.4.2.4 Photography was undertaken for a full 360° horizontal field of view for most representative viewpoint locations to ensure the maximum landscape context was captured. The panoramas were photographed with the horizon in the centre using a level tripod that was rotated on the same grid co-ordinate to ensure individual frames were aligned.
- 1.4.2.5 The horizontal field of view (HFoV), for photomontage and photowireline purposes, is 39.6°. However, wide panoramas were photographed to provide broad coverage of the seascape and landscape to be assessed. The panoramas were produced by splicing the photos together with specialist software. A 50% overlap was taken between frames to allow the sides of each photo to be removed when splicing, to minimise distortion.
- 1.4.2.6 The panoramas were generated using Adobe Photoshop imaging software. The digital photographs were put directly into the software and each frame combined cylindrically to form a panoramic view. The panoramic images show 180° for context and up to 90° HFoV, as recommended in TGN 06/09 and follow standard industry practice. Photographs are corrected for colour, brightness and/or contrast to ensure that the image quality was optimised. Where possible the representation of the proposed development is at the centre of the image and should be viewed at a comfortable reading distance printed on A1 paper, or at arms' length if printed at A1 width x A3 height.



Photography

- 1.4.2.7 The photography undertaken during site surveys is presented as a series of panoramas in Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement. Two panoramas are presented for each representative viewpoint. The first 180° panorama shows the wider context of the landscape and/or seascape, whilst the second 90° panorama focuses on the Morgan Array Area and immediate context. The approximate locations of the Morgan Array Area are identified on the photos.
- 1.4.2.8 Night time photography was captured for four representative viewpoint locations on the edges of settlements where receptors are most likely to be during the hours of darkness.

1.5 Results

1.5.1.1 Following the statutory consultation process, 23 representative viewpoint locations were identified, 17 of which lie within the 50 km SLVIA study area. Six viewpoints lie within the 50 to 60 km distance range including a viewpoint from the top of Blackpool Tower which was requested through the consultation process and four viewpoints within nationally and internationally designated landscapes. This extended SLVIA study area of 50 to 60 km was identified largely for the purpose of capturing potential effects on the special qualities of national and internationally designated landscapes. The representative viewpoints (excluding those scoped out following feedback received during consultation) provide a balance of locations both at centres of population on the coast and in elevated locations on hills and mountains, where very low levels of receptors are present.

1.5.2 Representative viewpoint descriptions

1.5.2.1 Table 1.1 provides details of the representative viewpoint locations and details of the visual receptor type and the nature and character of the existing view. The viewpoint locations (including elevation data and distance from Morgan Array Area) are illustrated in Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement. Baseline photographs from the representative viewpoint locations are also presented in Appendix B of this annex.

Table 1.1: Morgan Generation Assets representative viewpoints.

Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 14 Cistercian Way, Walney Island (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 1.1 and 1.2)	Walkers on Cistercian Way/England Coast Path in Access Land	A shoreline panorama looking southwest from the settled coastal landscape of Walney Island within NCA 7 West Cumbria Coastal Plain. The informal recreation space fronting the shore is visible in the foreground. MCA 32 Walney Coastal Waters and Duddon Estuary forms the seascape in the middle/background with the characteristic gently shelving sandy shore in the foreground. The operational Barrow, Ormonde, West of Duddon Sands and Walney Offshore wind farms are visible on the near and far horizons.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 15 Blackpool North Pier (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 2.1, 2.2 and 2.3)	Visitors to public pier	This is an open view from an elevated location approximately 17 m above the sea, on the end of the North Pier at Blackpool. Metal railings and buildings on the pier frame the view and form a developed, leisure context for the sea view. The viewpoint is located approximately 350 m out to sea, away from the intensely developed promenade and provides a popular vantage point for visitors to Blackpool. The clusters of wind turbines at Barrow and West of Duddon Sands Offshore wind farms are visible on a section of the horizon, forming a distant element of the seascape of England.
Representative viewpoint 16 England Coast Path, Lake District National Park (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 3.1 and 3,2)	Walkers on Cumbria Coastal Way/England Coast Path in Access Land within Lake District National Park	A slightly elevated, shoreline panorama looking southwest from the coastal dunes within NCA 7 West Cumbria Coastal Plain. The characteristic, gently shelving, rocky/sandy shore makes up the foreground with MCA 31 St Bees to Haverigg Coastal Waters forming the seascape beyond. Ormonde and Walney/Walney Extension operational Offshore wind farms are visible on the near and far horizons with Barrow and West of Duddon Sands also in view to the south.
Representative viewpoint 17 Buck Barrow, Lake District National Park (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 4.1 and 4.2)	Walkers in Access Land within Lake District National Park	A wide ranging, elevated panorama from Kinmount Buck Barrow, one of the peaks at the west edge of NCA 8 Cumbria High Fells. The southwest view takes in the characteristic rugged upland moor of the fells in the foreground descending to the settled lowland of NCA 7 West Cumbria Coastal Plain below. MCA 31 St Bees to Haverigg Coastal Waters and MCA 32 Walney Coastal Waters and Duddon Estuary form the seascape in the middle ground with MCA 38 Irish Sea South making up the background seascape. The operational Ormonde, Walney/Walney Extension, West of Duddon Sands and Barrow Offshore wind farms are visible spreading across both MCA 32 and MCA 38. The Isle of Man is in view on the far horizon right of frame.
Representative viewpoint 18 Herring Tower Trig Point, Langness Peninsula, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 5.1 and 5.2)	Walkers on Public Right of Way (PRoW) at local landmark and Trig	This view was relocated slightly north from the previously agreed location at the panoramic viewpoint at the Dreswick Point to allow a more open view of the sea. This is a panoramic, slightly elevated view from the Trig Point at the registered Herring Tower (1823) on the Langness Peninsula, in the south of the Isle of Man. The view looks out over the rugged and heathy coastline of this part of the island, with rocky outcrops, patches of heather and grassland forming the foreground to the view. There are likely to be views available in extremely clear weather to wind turbines at Walney Offshore Wind Farm and West of Duddon Sands Offshore Wind Farm, but these would be very long distance. Much of the middle distance and far distance view is open seascape, although punctuated by passing sea traffic and infrastructure. The lighthouse at Dreswick Point forms a feature within the view, as does the coastline of the island to the north.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 19	Visitors to the binocular viewpoint, walkers and	View was relocated slightly south from the Obscura at Douglas Head to allow a more open view.
Panoramic viewpoint at Arch Southwest of Douglas Head, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 6.1 and 6.2)	vehicle users	This is an open sea view from the viewing platform with information boards and binoculars at the 'Arch' over the B80 southwest of Douglas Head. Aside from the feature stone wall within the foreground to part of the view, from this location there is an uninterrupted view to the sea. On days of excellent visibility, wind turbines at Walney Offshore Wind Farm and West of Duddon Sands Offshore Wind Farm, would be visible at naked eye in the distant horizon, from a small part of the left side of the view. Other than the road, roadside fencing/walls and some development at Douglas Head, and the impressive stone-built arch behind the viewpoint, the view is mostly of vast seascape. There would be intermittent interruption to the view by passing vessels such as the passenger ferries servicing Douglas Port.
Representative viewpoint 20 Snaefell, summit station trig point, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 7.1 and 7.2)	Walkers on PRoW at local landmark and Trig point	Open, elevated panoramic 360-degree view from Trig Point at Snaefell 621 m, within the more mountainous central north half of the Isle of Man. The view looks southeast out over the foothills with the café/station of Snaefell Mountain Railway within the foreground towards the coastal landscape and sea. There is a similar view available from the café/station.
		In the direction of the Morgan Array Area, short grassland with rocky outcrops forms the foreground to the view on the top of Snaefell, before the land falls steeply, with steeply undulating landform featuring towards the sea. Nearer the sea in the view the land use changes from open grassland hill tops to more enclosed farmland and wooded blocks, as well as grouped settlement on the areas closest to the sea. The sea and horizon line to draw the viewers' eye, and being such an elevated view, the sea forms the distant view across the full width of the view. Wind turbines at Walney Offshore Wind Farm and West of Duddon Sands Offshore Wind Farm would feature on the distant horizon in a small part of the view on days of excellent visibility. Due to the distance, the wind turbines off the North Wales and Liverpool coastlines are unlikely to be visible.
		Path from the train station and both path or scramble routes towards the high point on the summit were highly frequented during the visit.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 21 Liverpool to Dublin (Ireland) Ferry (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figure 8.1)	Passengers on ferry	No photography undertaken because of the transient nature of the representative viewpoint. This viewpoint is represented by an illustrative wireline for the purposes of assessment within Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement. Representative view within/looking across MCA 04 North Wales Open Waters/SCA 28 northeast of Anglesey. Located approximately 50 km south of the Morgan Array Area, 15 km north of Great Orme and 30 km east of Point Lynas, Anglesey. The North Wales coast with Eryri mountain range beyond is visible to the south; on good days the north coast of Anglesey is in view further to the west. The Isle of Man is a distant presence on the horizon to the northwest in the most favourable conditions. Gwynt y Môr Offshore Wind Farm lies 10 km to the east with oil and gas infrastructure and Burbo Bank Offshore Wind Farm visible beyond. The ferry route passes through/close to the north of these offshore wind farm groups, the influence of which diminishes further west travelling towards Dublin and vice versa on the return journey. Commercial shipping <i>en route</i> to/from Merseyside ports (some vessels moored waiting for Liverpool pilot) is a constant feature of the seascape at this point, and of the ferry route as a whole.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 22 Liverpool to Douglas (Isle of Man) Ferry	Passengers on ferry	No photography undertaken because of the transient nature of the representative viewpoint. This viewpoint is represented by an illustrative wireline for the purposes of assessment within Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement.
(Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figure		The most open view from the ferry to the sea is from the upper level decks to the rear of the ferry accessed through the reserved lounges. There are also views from the ferry through windows surrounding the vessel, and a more visually restricted deck accessed from the standard lounges at the rear of the ferry.
9.1)		When departing from Liverpool Port on the car ferry, wind turbines and other port side infrastructure feature on the coastline. The existing offshore wind turbines at Burbo Bank and, at a further distance, Gwynt y Mor are present within views once the ferry is out of the estuary and into the open sea. The formal rows of wind turbines with the coastline behind, provide a distinctive feature to the views from the moving vessel, with many passengers watching the views here. The fumes from the ferry adds a brown haze to views. Multiple other fixed sea infrastructure elements, and transient vessels, feature within views almost continuously within a journey on both sides of the ferry. Approximately halfway within a journey, the offshore wind turbines at West of Duddon Sands and Walney Offshore Wind Farms begin to feature on the left-hand side of the rear view in clear weather conditions and continue to feature in the middle distance. The ferry route also affords views to wind turbines off the North Wales coast, and static sea infrastructure, such as oil and gas platforms, although less influential than earlier within the journey.
		When departing from Douglas, the jagged/varied coastline of the island and the promenade architecture of Douglas, along with other landmarks, create an attractive existing scene in views from the ferry. Occasional small vessels and passing ferries approaching Douglas form isolated features in views from the rear of the ferry decks where the sea is mostly open and undeveloped. Offshore wind turbines and the oil and gas platforms, off the Cumbrian coast become visible approximately 45 to 60 minutes into a journey. At this point structures are discernible within views on clear days and the Isle of Man is barely discernible on the horizon.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative Viewpoint 23 Heysham to Douglas (Isle of Man) Ferry	Passengers on ferry	No photography undertaken because of the transient nature of the representative viewpoint. This viewpoint is represented by an illustrative wireline for the purposes of assessment within Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement.
(Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figure 10.1)		The Heysham Ferry has an open top deck with seating however, the sides are relatively high which restrict views across the seascape. More open views can be gained from the rear deck at the next level down. These decks are accessible to all passengers as opposed to reserved lounge users on the Liverpool Ferry. There are windows all around the vessel with sea views available.
		When departing from Heysham Port on the car ferry, there is one small onshore turbine that features alongside the large-scale buildings at Heysham Nuclear Power Plant on the other side of the port exit. The nuclear power plant due to its large scale forms a noticeable feature on the English coastline within the ferry views for some time. As the ferry travels further the coastline at Blackpool also features, with Blackpool Tower being a noticeable landmark within views. Views from within the ferry looking forwards, or on the top deck through the screens, would include offshore wind turbines with first a small cluster at Barrow, with the more substantial West of Duddon Sands and Walney Wind Farms behind. From the deck with a rear view, wind turbines feature as a sequence within the seascape, forming a constant feature for much of the middle section of the ferry journey, particularly on clear days. Static marine infrastructure form distant features within views to the south however, wind turbines to the north draw the eye due to their proximity. There are views to the existing static infrastructure as the ferry passes existing wind turbines to the north. Wind turbines off the North Wales and Liverpool coastlines would only be discernible in very clear conditions and at a very long distance. On arrival at the Isle of Man, passengers experience minimal static infrastructure and occasional vessels. The rugged coastline of the Isle of Man, and upland interior, form a significant focus within the view at this point, drawing attention away from the wider open seascape. The return journey was undertaken at night, during the hours of darkness. All stationary and moving sea infrastructure had lit elements. Lighting on existing wind turbines nearest the ferry route consisted of red flashing lighting on the nacelles and green/white lighting on the associated infrastructure structures. During the section of the journey where the ferry passes close to the proposed Morgan Array Area there is visible lighting at offshore wind t



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 42 Maughold Head	Walkers at highpoint on Maughold Head Fort Monument	This viewpoint was relocated further northwest on the coastal trail from the car park at Maughold Lighthouse to this high point due to the more open view available.
Lighthouse, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 11.1 and 11.2)		Open, elevated view from a high point on a Maughold Head Fort monument looking south/southeast within the Maughold Brooghs, accessible by a footpath. Rocky outcrops and gorse, with some heather, makes up the foreground to the view with the land falling steeply to the sea. The jagged coastline of the island draws the viewers' attention through the view, following the coast into multiple coves, with steep rising cliffs up to a plateau of farmlands and sparse settlement.
		The open sea is prominent within this view with intermittent views of sea vessels being regular features and views towards the existing wind turbines being available in clear conditions also forming more permanent features in the view. Although wind turbines are visible here, they are not overly dominant due to the expanse of open sea within the view.
Representative viewpoint 43 Old Laxey, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 12.1, 12.2 and 12.3)	Walkers using pavement at entrance to the beach	This is a mostly open view eastwards from the pavement at the stepped entrance down to the beach at the village of Laxey, next to the main car park for visitors. Laxey Head and associated lighthouses form prominent built elements within the far left of the view, as does the sea wall within the foreground to the view. The seafront of Laxey is quiet, feels local and less developed for tourism compared to the larger town of Douglas. The coastline of the Isle of Man to the south of Laxey at Clay Head frames the right-hand side of the view with buildings at the elevated villages of Baldrine also featuring. A large section of the view incorporates the open sea with some local boats and passing large vessels visible. The existing wind turbines at Walney Offshore Wind Farm are discernible within the left-hand side of the long-distance view only during extremely clear conditions. At night-time, lighting columns with downward angled light fittings are visible along the pavement and along Laxey Head pier. The small light houses provide flashing lit elements within the view. During clear nights the flashing red lights from the existing Walney Offshore Wind Farm feature within the night-time view. There is also residential and street lighting at Laxey and Baldrine within the view.
Representative viewpoint 44 Slieau Ruy Cairn, Isle of Man	Walkers at Cairn/Trig Point	This is an elevated view southeast from within a fairly remote area from a Cairn and Trig Point at Slieau Ruy, within the foothill range in the centre of the island, to the northwest of Douglas and southeast of the more mountainous areas.
(Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 13.1 and 13.2)		The foreground and much of the middle distance to the view includes the area of heathland on the plateaued top of Slieau Ruy, before the land drops out of the view down to the coastal part of the island. The town of Douglas features within the central left of the view, integrated into an area of woodland and farmland. There are also a few areas of woodland blocks in the middle to long distance. The coastline where land meets the sea is only visible in a few locations due to the landform here. The sea and horizon line form the backdrop to the view, with sea vehicles intermittently providing movement. The existing wind turbines at Walney Offshore Wind Farm are visible in very clear conditions from this viewpoint.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 45 South Barrule Cairn, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 14.1 and 14.2)	Walkers at Cairn/Trig Point	This is an elevated view southeast, from a Cairn and Trig Point at South Barrule, within the central south part of the island. The sea on the north side of the island is closer within this 360° view that the sea in the direction of the Morgan Array Area, as such the eye at this high point is actually drawn to the view looking southwest and west from this viewpoint.
		The foreground to the view consists of a section of rough grassland with some heather also, before the landform drops away to a large section of the view being small to medium hedge enclosed farmland with some tree belts, woodland blocks and areas of settlement. The flat spur of land at Langness also attracts the eye as it extends into the sea, and Herring Tower (viewpoint 18) is visible in good visibility. Sea vessels intermittently feature within the view as would smaller boats and recreational water sporting activities in the bays at Langness and Castletown. In good, clear weather conditions, there are views to existing wind turbines at Walney Offshore Wind Farm.
Representative viewpoint 46 Port St. Mary, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 15.1, 15.2 and 15.3)	Walkers on the heritage trail and at the memorial	Both day and night-time photos were collected from the car park at Port St. Mary Point. Further day time photos were taken from the nearby fixed binocular location on the Coast Path and from the TSS Mona's Queen III Anchor Memorial on a local heritage trail. The most open view towards the Morgan Array Area is from the Memorial.
		The view looks southeast from the Memorial over the foreshore of rocks to the open sea. The rocky beach area is under the sea at high tide. The Memorial is well-visited and is located on the towns Heritage Trail. Within the open sea during the site visits, there was plenty of movement on the sea itself with boats and ships in the long distance of the view, and some local yachts closer to the viewer. Existing wind turbines at Walney Offshore Wind Farm are screened by the coastline at Castle Town and Langness. It is anticipated that, in extremely good conditions, views may be available to wind turbines of the coast of North Wales and at West of Duddon Sands, although this was not experienced during site work.
		Night-time view was collected from the car park at Port St. Mary Point, as opposed to having it collected from the Memorial point due to safety reasons. Lighting columns with downward angled light fittings are visible along the pavement of Clifton Road behind the viewpoint. Residential and street lighting within the settlements of Port St. Mary and Castletown also provide lit elements within the view. During the conditions of the site survey, there was not any visibility to lighting associated with existing wind turbines within the night-time view.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 49 Douglas Promenade, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 16.1, 16.2 and 16.3)	Visitors using Promenade	This is a panoramic view looking southeast from Douglas Bay beach promenade in Douglas, the largest town on the Isle of Man. It is a wide promenade used by walkers, cyclists, roller skaters and skateboarders. The promenade also adjoins the main road which has a tramway in the centre between the lanes. The wide sand and shale beach, with some very limited rock outcrops, forms the foreground to the view. The view is framed either side by the coastline of the island, with the manmade structures at the port, and Tower of Refuge on St Marys Rock, featuring within the right of the view and the rocky edge of Onchan Head on the left of the view. The view includes the urban elements of the town on the edges but the focus of the view is out to the open sea. The existing wind turbines at Walney Offshore Wind Farm are discernible within the left-hand side of the long-distance view during extremely clear weather conditions. The ferries servicing Douglas, along with other vessels in the distance, provide intermittent movement in the view. Further regular beachside activity including swimmers, dog walkers, and the occasional small sailboat/dinghy, provide movement within the foreground and middle distance of the view. At night-time the promenade is well lit with downward light fittings on lighting columns. Lighting at the ferry port and at Douglas Head provide prominent lit elements within the night-time view. The lighting at the existing wind turbine clusters within the view provide a twinkling or shimmering effect during clear nights, as the lights turn on and off in sequence across the width of the arrays. With the exception of the wind turbines and passing ferries, much of the open sea is in darkness.
Representative viewpoint 50 Coast Path at Chasm/Sugarloaf, Isle of Man (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 17.1 and 17.2)	Walkers using the Coastal Path (Raad Ny Foillan)	This view was added during site work as it provides an open view to the south and southeast from the Coast Path at a footpath stile near to the Chasm and Sugarloaf towards the Morgan Array Area. Views to the sea from parts of the Chasm are restricted by the cliffs within the view. The footpath here is very well used and the Chasm and Sugarloaf are tourism features on the island, but locals also use this stretch of the coastal path. The view provides an open seascape, with the elevation of the land allowing uninterrupted views to the sea and along the southeast coast of the island within the left-hand side of the view. The coastline at Port St. Mary Point, the bay at Castletown and the arc of Langness feature in the long distance left side of the view. In the foreground the view includes rough grassland to stone wall enclosed unimproved pasture with the open sea behind. Intermittent sea vessels pass through the view. During the survey, views to any of the existing wind turbines or fixed sea infrastructure were not available and given the distance to them, it is anticipated that views to these would be unlikely.
Representative viewpoint 51 Blackpool Tower (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 18.1 and 18.2)	Visitors to Blackpool Tower	Expansive views are available from the top of Blackpool Tower of the coastline, including large beach and extensive coastal settlement of Blackpool, overlooking the Irish Sea. Blackpool North Pier is clearly visible in the foreground extending out to sea. Existing offshore wind farms at Walney and West of Duddon Sands are barely visible beyond the intervening coastline on the distant horizon. Shipping and ferries are visible on an intermittent basis.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 55 Trwyn Eilian (Point Lynas), Isle of Anglesey, National Landscape (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 19.1 and 19.2)	Visitors to Isle of Anglesey AONB	Expansive panoramic views of the Irish Sea are available with the lighthouse and headland to the left of the viewer at Point Lynas.
Representative viewpoint 58 Muncaster Fell, Lake District National Park	Recreational visitors to Lake District National Park	Panoramic views are available in a south westerly direction of the Irish Sea from this elevated location at Muncaster Fell. The views are attained with the lower lying pastoral farmland in the foreground and plantation coniferous forestry. The sinuous course of the River Esk and estuary is visible. In the distance,
(Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 20.1 and 20.2)		Black Combe is visible to the left of the viewer.
Representative viewpoint 59 Black Combe, Lake District National Park	Recreational visitors to Lake District National Park	Panoramic views are available of the Irish Sea from the summit of Black Combe. This rounded grassy summit affords uninterrupted views of the sea in a south westerly direction along with part of the patchwork farmed landscape along the coastal plain.
(Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 21.1 and 21.2)		Existing offshore windfarms including Walney and West of Duddon Sands are visible only on occasions where weather conditions favour visibility.
Representative viewpoint 60 Whit Fell, Lake District National Park (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures	Recreational visitors to Lake District National Park	Panoramic views are available from the summit of Whit Fell of the mountain landscape in the foreground including that in the vicinity of Burn Moor against the backdrop of the Irish Sea. Further afield to the right of the viewer, the patchwork farmed landscape, associated with the coastal plain, interspersed with areas of woodland is visible at the coast. The sinuous estuarine landscape of the River Esk is clearly visible at the coast along with areas of beach. The Sellafield Nuclear Power Plant is visible as a very small element in the distance to the right of the viewer.
22.1 and 22.2)		This landscape is visible against the backdrop of the Irish Sea. Existing offshore windfarms including Walney and West of Duddon Sands are visible only on occasions where weather conditions favour visibility.



Viewpoint reference no.	Location/receptor	Viewpoint description
Representative viewpoint 61 Whin Rigg, Lake District National Park (Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement, Figures 23.1 and 23.2)	Recreational visitors to Lake District National Park	Panoramic views are available in a south westerly direction of the Irish Sea from this elevated location at Whin Rigg. The views are attained with the mountain moorland landscape in the foreground and the lower lying pastoral farmland at the coast. The sinuous course of the River Esk and estuary is visible in the distance close to the coast.

1.5.2.2 All photography was scheduled to be undertaken on days when the Meteorological Office forecast was for very good or excellent visibility. Base photography of optimal quality could not be obtained from Viewpoint 51 at the top of Blackpool Tower due to perspex screens. Further detail on baseline photography is presented in Table 1.2 below.

Table 1.2: Morgan baseline photographic data at representative viewpoint locations.

Representative viewpoint Ref	Date and time	Atmospheric conditions
Baseline representative viewp Assets	oint photographic informati	on for Morgan Generation
14 Cistercian Way, Walney Island	15 September 2022 16:14	Very good 20.1 km to 40 km visibility
15 Blackpool North Pier	20 June 2023 10:09	Very good 20.1 km to 40 km visibility
16 England Coast Path, Lake District National Park	8 August 2023 09:38	Very good 20.1 km to 40 km visibility
17 Buck Barrow, Lake District National Park	8 August 2023 08:20	Very good 20.1 km to 40 km visibility
18 Herring Tower Trig Point, Langness Peninsula, Isle of Man	21 July 2022 12:54	Very good 20.1 km to 40 km visibility
19 Panoramic viewpoint at Arch Southwest of Douglas Head, Isle of Man	20 July 2022 19:13	Very good 20.1 km to 40 km visibility
20 Snaefell Summit station trig point, Isle of Man	20 July 2022 14:37	Very good 20.1 km to 40 km visibility
21 Liverpool to Dublin (Ireland) Ferry	No photography undertaken	
22 Liverpool to Douglas (Isle of Man) Ferry	No photography undertaken	
23 Heysham to Douglas (Isle of Man) Ferry	No photography undertaken	
42 Maughold Head Lighthouse, Isle of Man	20 July 2022 13:18	Very good 20.1 km to 40 km visibility
43 Old Laxey, Isle of Man	20 July 2022 15:51	Very good 20.1 km to 40 km visibility

Document Reference: F4.10.3



Representative viewpoint Ref	Date and time	Atmospheric conditions
44 Slieau Ruy Cairn, Isle of Man	20 July 2022 17:34	Very good 20.1 km to 40 km visibility
45 South Barrule Cairn, Isle of Man	21 July 2022 14:08	Good 10.1 km to 20 km visibility
46 Port St. Mary, Isle of Man	21 July 2022 11:56	Very good 20.1 km to 40 km visibility
49 Douglas Promenade, Isle of Man	20 July 2022 19:51	Very good 20.1 km to 40 km visibility
50 Coast Path at Chasm/Sugarloaf, Isle of Man	21 July 2022 11:03	Good 10.1 km to 20 km visibility
51 Blackpool Tower	8 September 2023 09:55	Visibility curtailed by perspex screen
55 Trwyn Eilian (Point Lynas), Isle of Anglesey National Landscape	07 September 2023 13:57	Good 10.1 km to 20 km visibility
58 Muncaster Fell, Lake District National Park	06 December 2023 11:21	Very good 20.1 km to 40 km visibility
59 Black Combe, Lake District National Park	04 March 2024 10:00	Very good 20.1 km to 40 km visibility
60 Whit Fell, Lake District National Park	04 March 2024 10:10	Very good 20.1 km to 40 km visibility
61 Whin Rigg, Lake District National Park	30 January 2024 10:10	Very good 20.1 km to 40 km visibility

1.6 Summary

1.6.1.1 Following a desktop exercise and consultation process, representative viewpoint locations were identified. This has enabled a broad range of typical sensitive visual receptors within the SLVIA study area to be identified for consideration within the assessment process in Volume 2, Chapter 10: Seascape, landscape and visual resources of the Environmental Statement. Site surveys have been undertaken and photography captured at these representative viewpoint locations and is provided in Volume 4, Annex 10.6: Seascape visualisations of the Environmental Statement.

1.7 References

Landscape Institute (2019) Technical Guidance Note (TGN) 06/19: Visual Representation of Development Proposals.

NRW (2020) Seascape and Visual Buffer Study for Offshore Wind Farms, The White Consultants.



Appendix A: Figures

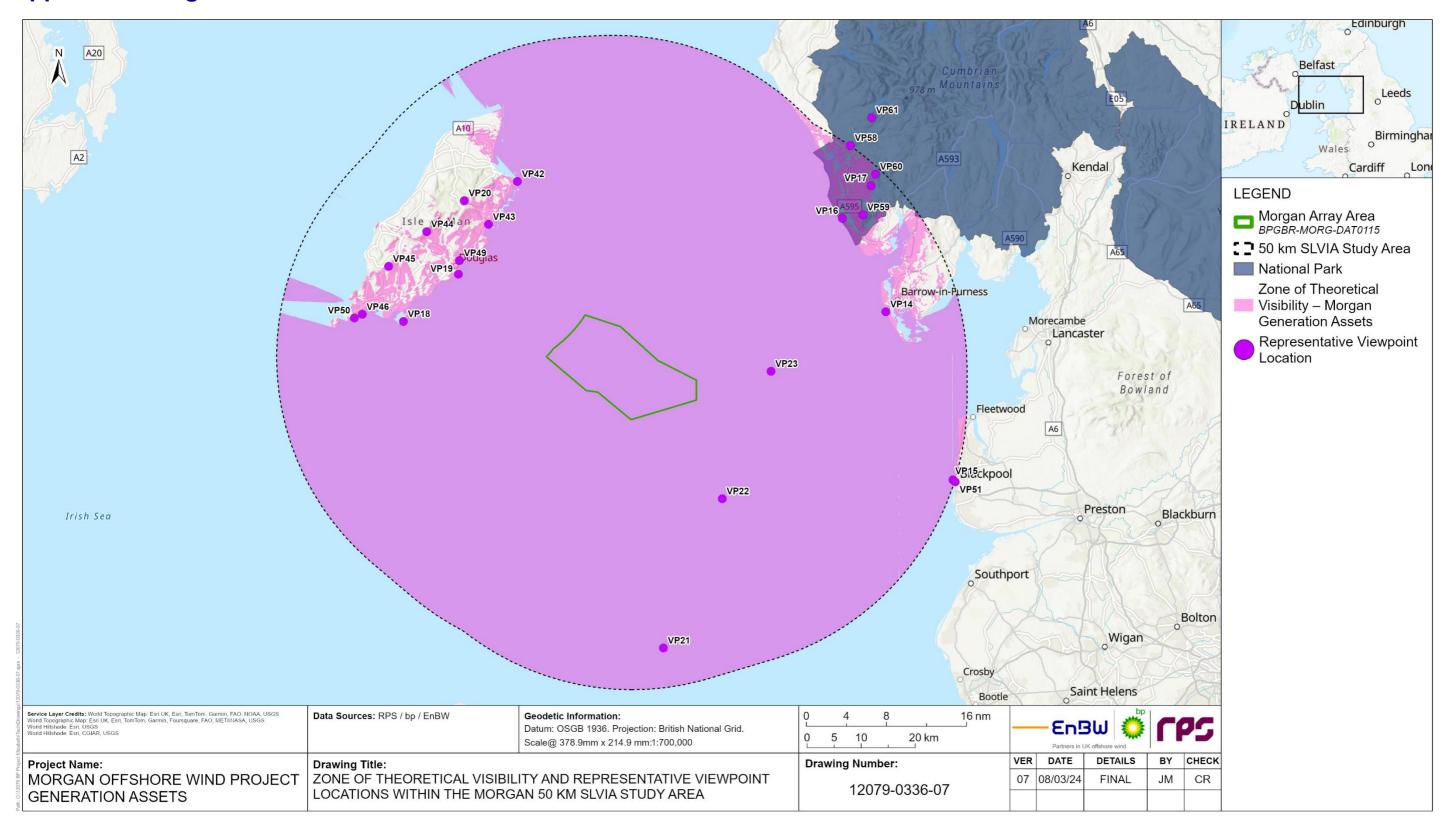


Figure A. 1: Zone of Theoretical Visibility and representative viewpoint locations within the Morgan Generation Assets 50 km SLVIA study area.

Document Reference: F4.10.3

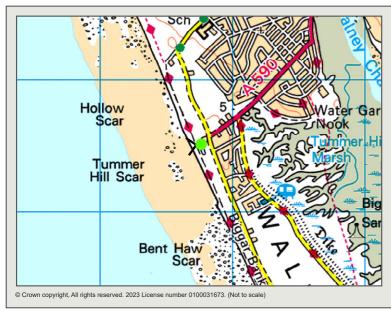




Appendix B: Viewpoint locations



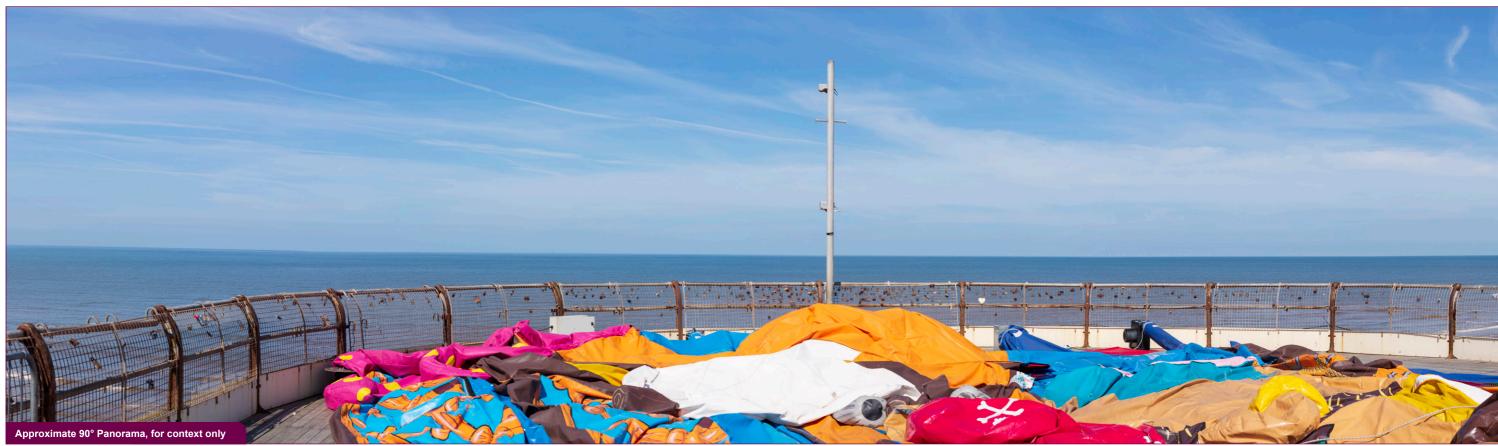


















For context only





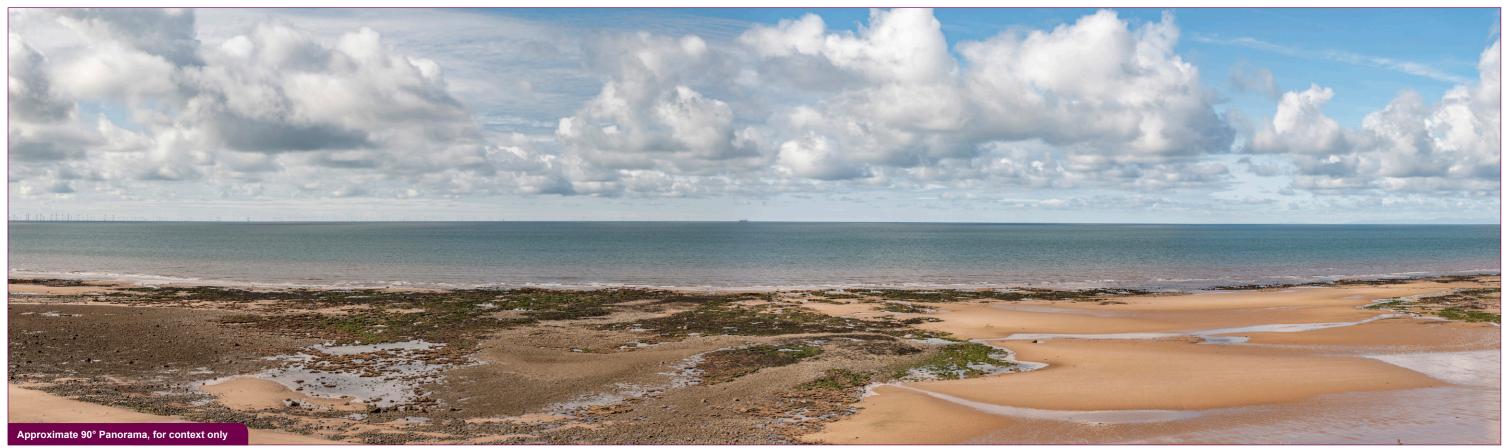


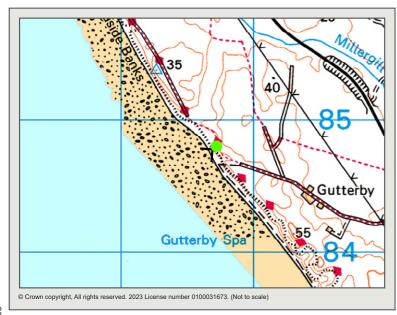




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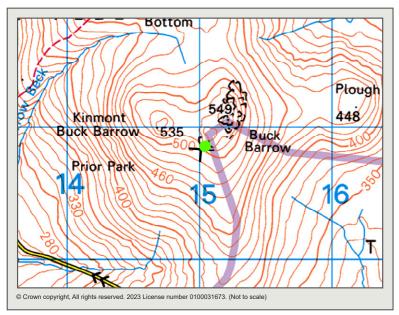










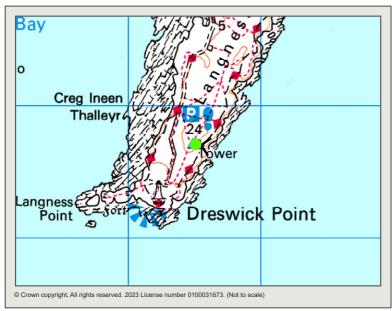










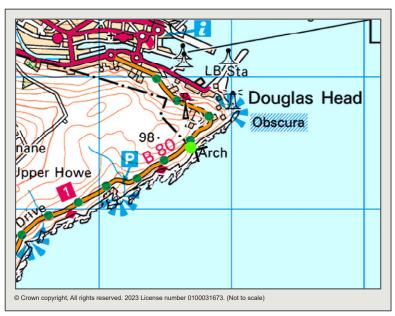










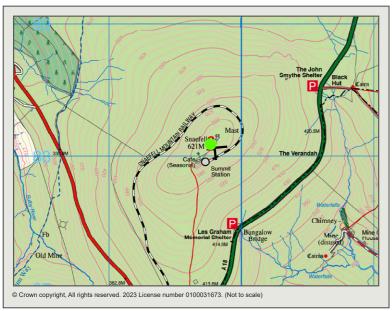










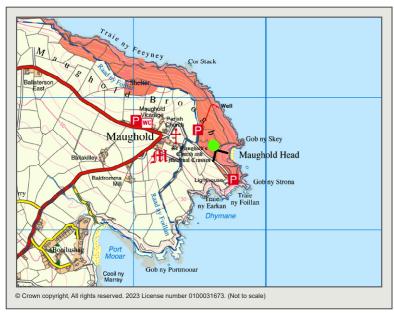










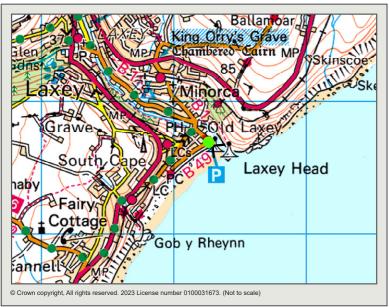










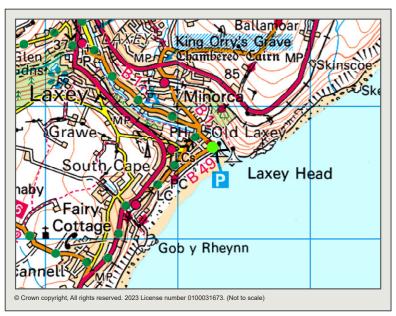










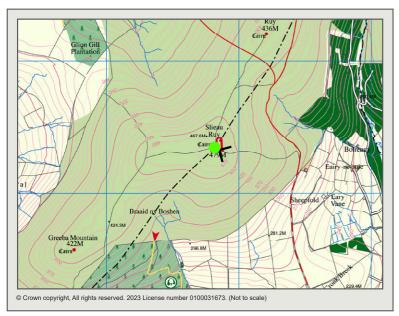










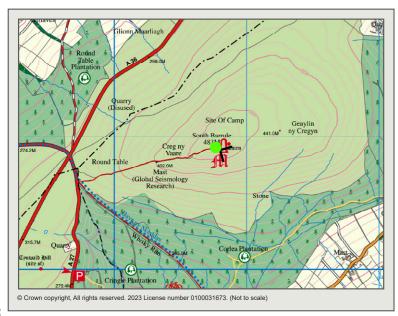
















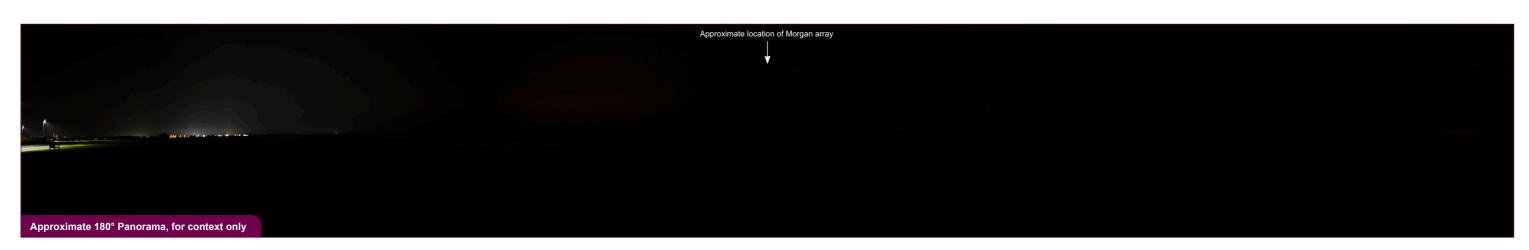














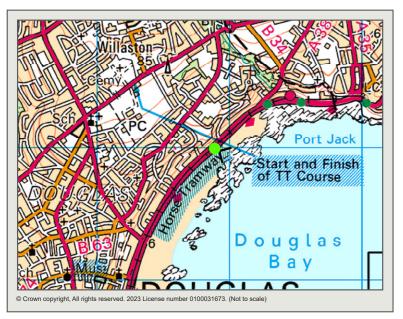










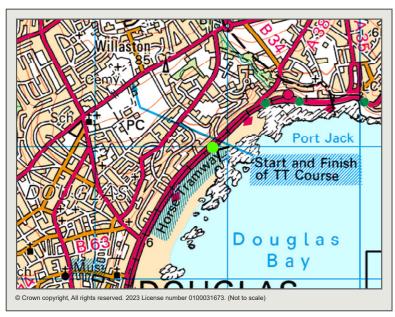












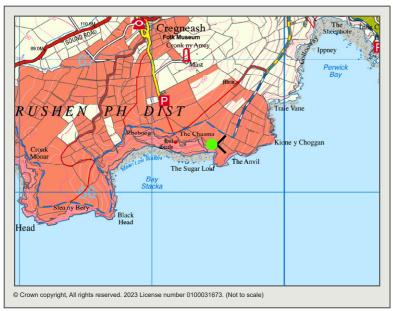




For context only

















Better image is not possible due to the perspex safety screen in place.



















