Construction of a wellsite and operation of a drilling rig for the appraisal of subsurface hydrocarbons, well testing and retention of equipment – Land east of The Mill Yard, Burniston Mill, Coastal Road, Burniston, Scarborough

Environmental Impact Assessment – Environmental Statement Volume III Figures

Europa Oil and Gas Limited

February 2025

Quality information

Prepared by	Checked by	Approved by
Paul Foster, Planning Director, Egdon Resources UK Limited	Alastair Stuart, Chief Operating Officer, Europa Jamie McGill, Petroleum Engineer, Europa	Will Holland, Chief Executive, Europa

ES MainText Figures (Volume III)

Figure 6.1 – Landscape Context

Figure 6.2 – Landscape Character

Figure 6.3 – Designations

Figure 6.4 – Zone of Theoretical Visibility – Bare Earth

Figure 6.5 – Zone of Theoretical Visibility – With Screening Effect of Woodland and Buildings

Figure 6.6 – Night-time Receptors

Annotated Viewpoints

Landscape Restoration Plan

Figure 6.1 – Landscape Context

2024-10-21 Burniston Well Landscape Figures MD.qgz

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BURNISTON WELL

FIGURE 6.1

Landscape Context

KEY

Site

- Site Boundary
- Distance Radii Buffer (1km and 2km)
- CROW Open Access Land
- National Parks
- National Cycle Network (NCN)
- National Trails / Coastal Paths
- Minor Road
- Major Road

Public Rights of Way

- Byway Open to All Traffic
- Bridleway
- Footpath
- Unsurfaced Unclassified Roads

0 0.5 1 km

NORTH

Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
JAN 2025	MD	A3	1:40,000	MB	-

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Figure 6.2 – Landscape Character

2024-10-21 Burniston Well Landscape Figures MD.qgz

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BURNISTON WELL

FIGURE 6.2

Landscape Character

KEY

Site

- Site Boundary
- Distance Radius from Site (1km and 2km)
- National Parks

North Yorkshire and York Landscape Characterisation Project (May 2011)
Local Landscape Character Types

- (1) Urban Landscapes
- (15) Rugged Cliffs, Coastal Valleys and Bays
- (2) Sandstone Moors
- (4) Limestone Foothills and Valleys

Scarborough Landscape Study: Volume 1 - Borough Wide Landscape Character Assessment (2013)

- A1: Cloughton & Burniston
- D3: Scalby
- E2: East Ayton
- G3: Long Nab to North Bay
- J1: South Bay and Cayton Bay
- M1: Oliver's Mount
- Urban Areas

The map extent is located wholly within the North York Moors and Cleveland Hills National Character Area

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Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
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Figure 6.3 - Designations

2024-10-21 Burniston Well Landscape Figures MD.qgz

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an RSK company

BURNISTON WELL

FIGURE 6.3

Designations

KEY

Site

- Site Boundary
- Distance Radius from Site (1km and 2km)

Landscape Designations

- North York Moors National Park
- Ancient Woodland

Heritage and Conservation Designations

- Listed Building Grade I
- Listed Building Grade II
- Listed Building Grade II*
- Scheduled Monuments
- Conservation Areas
- Registered Parks and Gardens
- Coast Path
- Heritage Coast

0 0.5 1 km

NORTH

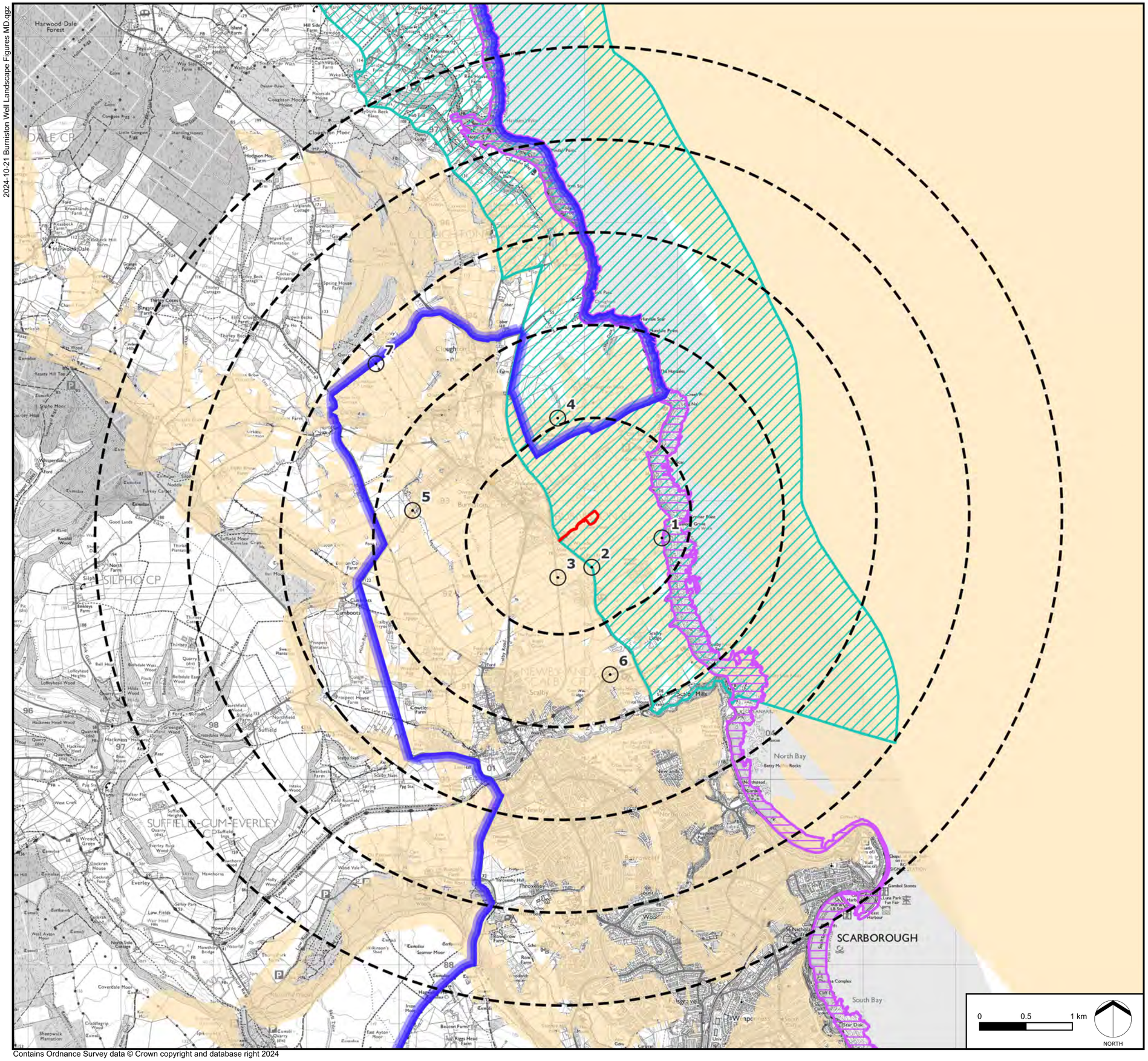
Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
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Figure 6.4 – Zone of Theoretical Visibility – Bare Earth

2024-10-21 Burniston Well Landscape Figures MD.qgz



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BURNISTON WELL

FIGURE 6.4

Zone of Theoretical Visibility

KEY

Site

- Site Boundary
- Distance Radii Buffer (1km, 2km, 3km, 4km and 5km)
- Viewpoint Locations

Zone of Theoretical Visibility

- Infrastructure may be visible

Landscape Designations

- Heritage Coast
- England Coast Path
- National Parks

FIGURE DATA:
This figure has been based on the following data:

Layout file: Rig-38m_T5DTM_9km
Terrain data: T5-DTM
Viewer's eye height: 2m above ground level
Calculation grid size: 5m

NOTES:
This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.

The areas shown are the maximum theoretical visibility, taking topography into account.

This visibility map is based on a 'bare earth' model of the landform and does not show any effects of screening from obstacles such as buildings and vegetation.

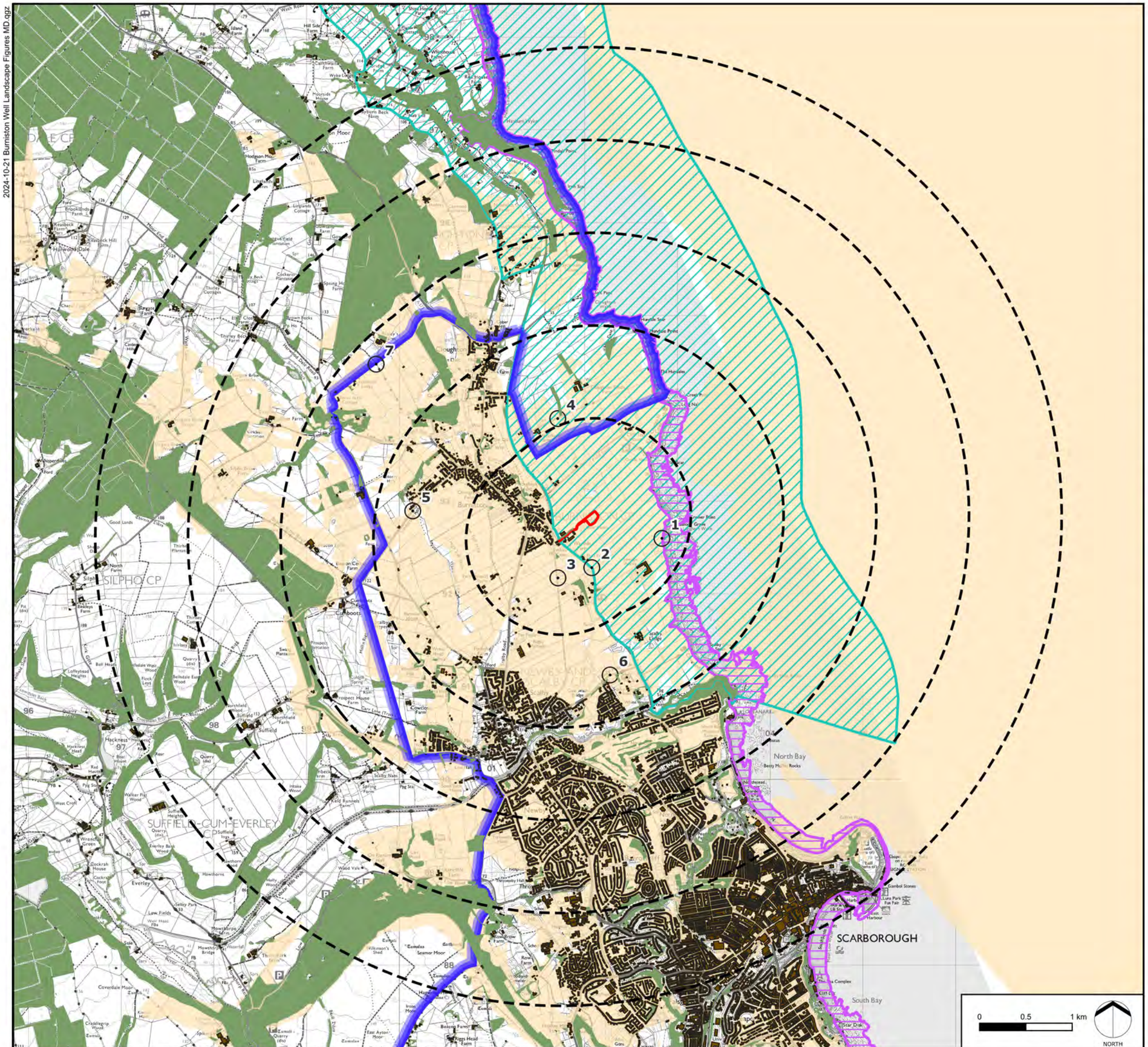
The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DTM and has a 5m² resolution.

Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
JAN 2025	MD	A3	1:40,000	MB	-

Figure 6.5 – Zone of Theoretical Visibility – With Screening Effect of Woodland and Buildings

2024-10-21 Burniston Well Landscape Figures MD.qgz



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BURNISTON WELL

FIGURE 6.5

Zone of Theoretical Visibility With Screening Effect of Woodland and Buildings

KEY

Site

- Site Boundary
- Distance Radii Buffer (1km, 2km, 3km, 4km and 5km)
- Viewpoint Locations

Screening

- Woodland
- Building

Zone of Theoretical Visibility

- Infrastructure may be visible

Landscape Designations

- England Coast Path
- Heritage Coast
- National Parks

FIGURE DATA:
This figure has been based on the following data:

Layout file: Rig-38m_T5DSM_9km
Terrain data: Terrain5-DSM-woodland-buildings
Viewer's eye height: 2m above ground level
Calculation grid size: 5m

NOTES:
This drawing is based upon computer generated Zone of Theoretical Visibility (ZTV) studies produced using the Viewshed routine in the Visibility Analysis plugin for QGIS.

The areas shown are the maximum theoretical visibility, taking into account topography, principal woodlands and buildings.

A digital surface model (DSM) has been derived from OS Terrain 5 height data with the locations of woodland and buildings taken from the OS Open Map Local dataset. Buildings have been modelled with an assumed height of 7.5m and woodland an assumed height of 10m, representing a conservative estimate of average heights within the study area.

The model does not take into account some localised features such as small copses, hedgerows or individual trees and therefore still gives an exaggerated impression of the extent of visibility. The actual extent of visibility on the ground will be less than that suggested by this plan.

The ZTV includes an adjustment that allows for Earth's curvature and light refraction. It is based on a derived DSM and has a 5m^2 resolution.

Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
JAN 2025	MD	A3	1:40,000	MB	-

Figure 6.6 – Night-time Receptors

2024-10-21 Burniston Well Landscape Figures MD.qgz

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an RSK company

BURNISTON WELL

FIGURE 6.6

Night-Time Receptors

KEY

Site

- Site Boundary
- Distance Radii Buffer (1km, 2km, 3km, 4km and 5km)
- Viewpoints (Night-Time)
- North York Moors National Park

Existing Light Environment

Visible Infrared Imaging Radiometer Suite (VIIRS) - W / cm2 * sr

- 0 - 1.8
- 1.9 - 6
- 6.1 - 12.5
- 12.6 - 15.7
- 15.7 - 26.4
- 26.5 - 33.6

0 0.5 1 km

NORTH

Projected Coordinate System: British National Grid

DATE	BY	PAPER	SCALE	QA	REV
JAN 2025	MD	A3	1:40,000	MB	-

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Annotated Viewpoints



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model; it ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

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Viewpoint Information:

Grid Reference:	502840E 492607N
Ground Height:	50m AOD
Direction of Centre of View: ³	289°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	12:08
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 1: Cleveland Way
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:
1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model; it ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

Contains Ordnance Survey data © Crown copyright and database right 2024

Viewpoint Information:

Grid Reference:	502078E 492282N
Ground Height:	40m AOD
Direction of Centre of View: °	11.6°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	13:15
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 2: A165 Coastal Road EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening structures.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

Contains Ordnance Survey data © Crown copyright and database right 2024

Viewpoint Information:

Grid Reference:	502078E 492282N
Ground Height:	40m AOD
Direction of Centre of View: ³	11.6°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	17:56
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 2: A165 Coastal Road (night)
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

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Viewpoint Information:

Grid Reference:	501704E 492271N
Ground Height:	41m AOD
Direction of Centre of View: ³	38.6°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	13:43
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 3: National Cycle Route 1, Cinder Track
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

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Viewpoint Information:

Grid Reference:	501704E 493889N
Ground Height:	85.3m AOD
Direction of Centre of View: °	145.6°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	15:06
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 4: Station Road
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

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Viewpoint Information:

Grid Reference:	500148E 492892N
Ground Height:	92m AOD
Direction of Centre of View: ³	89.9°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	14:14
Enlargement Factor:	approx. 96%

STEPHENSON HALLIDAY
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Burniston Well Site

Viewpoint 5: Limestone Road
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

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Viewpoint Information:

Grid Reference:	500148E 492892N
Ground Height:	92m AOD
Direction of Centre of View: °	89.9°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	17:24
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 5: Limestone Road (night)
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

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Viewpoint Information:

Grid Reference:	502274E 491130N
Ground Height:	42.5m AOD
Direction of Centre of View: ³	357.2°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	12:45
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 6: Field Lane, Scalby
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

Contains Ordnance Survey data © Crown copyright and database right 2024

Viewpoint Information:

Grid Reference:	502274E 491130N
Ground Height:	42.5m AOD
Direction of Centre of View: °	357.2°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	17:40
Enlargement Factor:	approx. 96%

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Burniston Well Site

Viewpoint 6: Field Lane, Scalby (night)
EXISTING VIEW



Date	By
January 2025	ML
Image Size	QA
820 x 222mm	DT
Paper Size	Rev
840 x 297mm	-
0900-Annotated-Photosheets	



Notes:

1) This visualisation is a cylindrical projection panorama. It provides landscape and visual context only.
2) This data has been output directly from the wireline model. It ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000.

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Viewpoint Information:

Grid Reference:	499868E 494285N
Ground Height:	111.8m AOD
Direction of Centre of View: [3]	126.1°
Horizontal Field of View:	90°
Vertical Field of View:	24°
Viewing Distance:	522mm

Photography Information:

Camera:	Canon EOS 5D Mark II
Lens:	50mm Fixed Focal Length
Camera Height:	1.8m
Photography Date:	12/11/2024
Photography Time:	14:38
Enlargement Factor:	approx. 96%

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Burniston Well Site

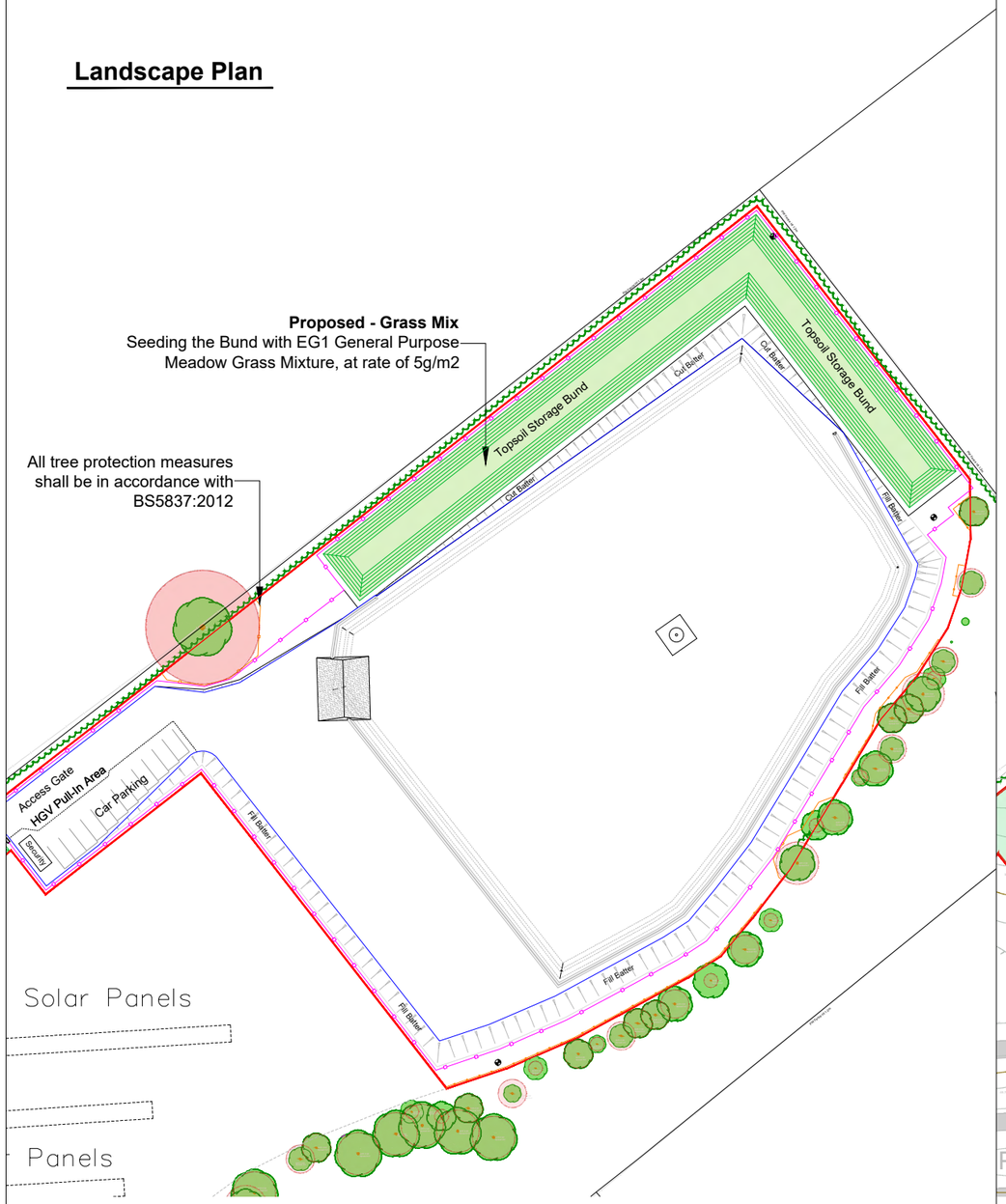
Viewpoint 7: Ripley's Road
EXISTING VIEW

Landscape Restoration Plan

Landscape Plan

Proposed - Grass Mix
Seeding the Bund with EG1 General Purpose Meadow Grass Mixture, at rate of 5g/m2

All tree protection measures shall be in accordance with BS5837:2012



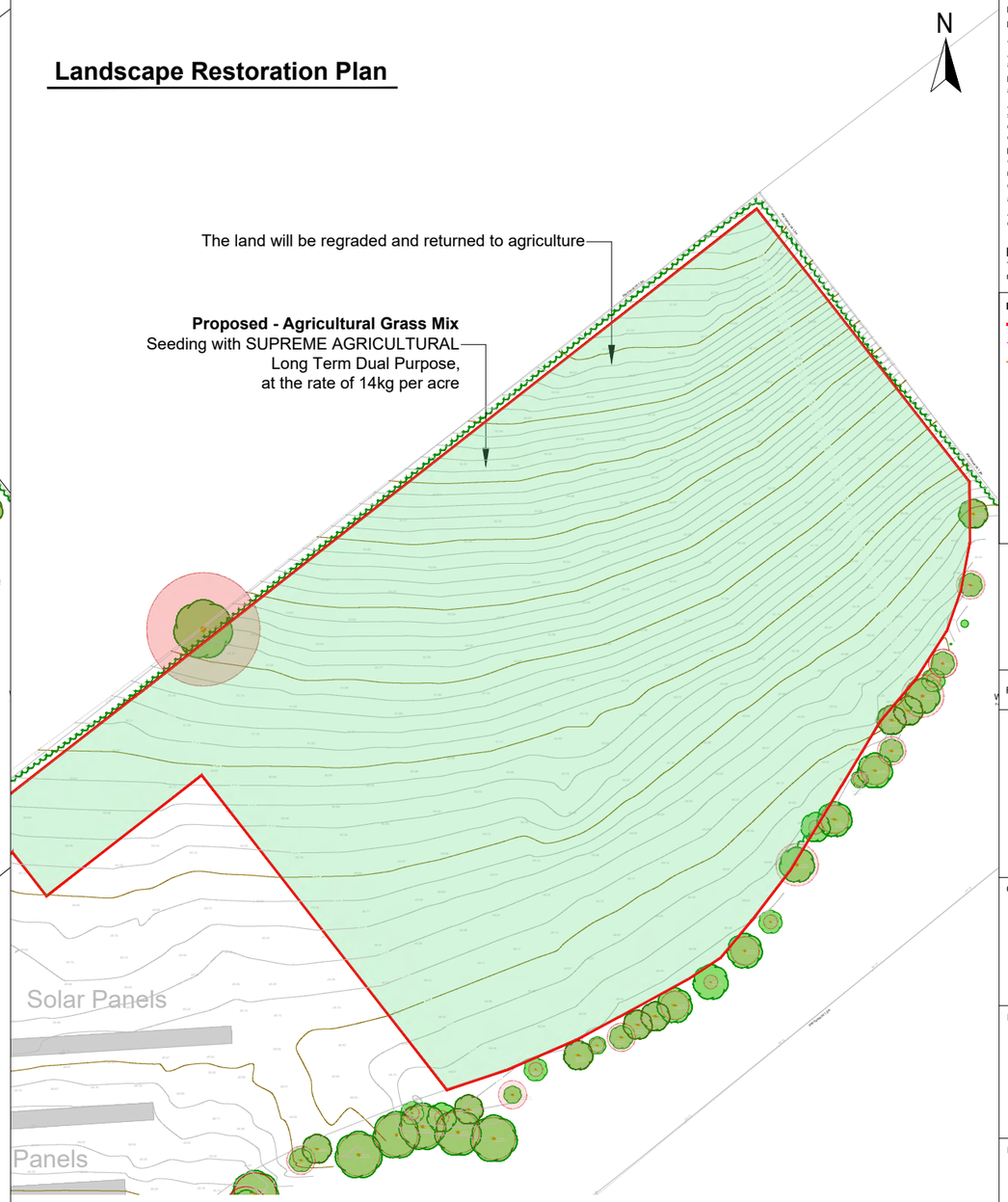
Grass Mixes Schedule

EG1 General Purpose Meadow Grass Mixture		
Supplier: Emorsgate, Sowing Rate: 5g/m2		
Mix %	Common Name	Species
10	Common Bent	Agrostis capillaris
35	Crested Dogstail	Cynosurus cristatus
30	Red Fescue	Festuca rubra
5	Smaller Cat's-tail	Phleum bertolonii
20	Smooth-stalked Meadow-grass	Poa pratensis

Landscape Restoration Plan

The land will be regraded and returned to agriculture

Proposed - Agricultural Grass Mix
Seeding with SUPREME AGRICULTURAL Long Term Dual Purpose, at the rate of 14kg per acre



Agricultural Grass Mixes Schedule

SUPREME AGRICULTURAL Long Term Dual Purpose	
Supplier: Greenland Seeds, Sowing Rate: 14kg per acre	
Mix per pack/kg	Species
2.5	Agaska/Boyne Intermediate Diploid Perennial Ryegrass
4.0	Aston Energy/Nolwen Intermediate Tetraploid Ryegrass
3.5	Bijou/Nashota Late Tetraploid Perennial Ryegrass
3.0	Oakpark Late Diploid Perennial Ryegrass
0.25	Climax/Tenho Timothy
0.75	Dual White Clover Blend

GENERAL NOTES

Do not scale from this drawing. Only work to written dimensions.

Drawing is for planning purposes only not for construction.

All site dimensions shall be verified by the Contractor on site prior to commencing any works.

All contractors should ascertain the location of all underground services/utilities before undertaking any work and conflicts resolved.

It is assumed all work will be carried out by an experienced competent contractor working to an approved method statement.

All seeded areas to be cultivated except within RPA's of trees and leveled as required removing any stones, rubble, subsoil and general construction waste. Seeding to take place between April and June or August and October. Seeding activity done outside of the recommended season is done so at contractor risk.

Excavation work should be done outside of the tree protection fencing and RPA, any excavation within RPA is to be undertaken by hand with fence posts positioned to avoid any larger structural tree roots or alternatively use a weighted fence within RPA to avoid the need for excavation.

Where works are to be undertaken adjacent to hedgerows a suitable offset (2m) must be provided and where necessary the use of ground protection.

All tree protection measures shall be in accordance with *BS 5837:2012* -'Trees in relation to Design, demolition and construction - Recommendations'.

RESIDUAL DESIGN HAZARDS

This information has been collated as part of the CDM Regulations, and identifies hazards and risks associated with the design proposals

Legend

- Planning Application Boundary
- Security Fencing
- Proposed BS Tree Protection Fencing
- Existing Tree to be Retained
- Existing Shrub to be Retained
- Existing Hedgerow to be Retained
- Root Protection Area (RPA)
- Proposed Grass Mix Area
- Proposed Agricultural Grass Mix Area

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
00	18/12/2024	First Issue	ML	MB	MB

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Email: info@stephenson-halliday.com
Web: www.stephenson-halliday.com

Client
Europa Oil & Gas

Project Title
Burniston Well Site

Drawing Title
Landscape Plan &Landscape Restoration Plan

Drawn	Date	Checked	Date	Approved	Date
ML	06/02/2025	MB	06/02/2025	MB	06/02/2025

Scale	Orig Size	Status
1:1000	A3	

Drawing No. 0900-LVIA01 Rev. 00

File Path 0900-05-04

Scale
0 10 20 30 40 50m