



Chapter 17.0

Seascape and Landscape

17.0 Seascape and Landscape

17.1 Overview of existing situation

- 17.1.0.1 The Project falls within Seascape Unit 49 (Lavernock Point to Gold Cliff) of the Seascape Assessment of Wales, which has a relatively linear, reclaimed coastline, with sea defences. The land interface is principally with a landscape defined by the Wentlooge Levels (identified as LANDMAP Visual and Sensory Aspect Areas), which fall within the wider Gwent Levels - an area of agricultural land reclaimed from the sea, together with low-lying estuarine alluvial wetland and intertidal mudflats. The area is also influenced by the urban areas/respective hinterlands of Cardiff and Newport.
- 17.1.0.2 The proposed Study Area for assessment extends to 15km from the Project. Beyond this distance it is anticipated that the Project would not be readily perceptible such that any effects would be negligible. The Mendip Hills Areas of Outstanding Natural Beauty (AONB) lies at the southern edge of the Study Area, and is therefore distant from the Project. More locally, the Wentlooge Levels Special Landscape Area (SLA), which is identified as part of the non-adopted Cardiff Unitary Development Plan (to 2016) and Deposit Local Plan (2006-2026), is the only SLA that interfaces with the Project – it is currently proposed rather than adopted as a designation. The Project falls within the Gwent Levels Registered Landscape of Outstanding Historic Interest, which is included in the non-statutory Register of Landscapes of Special Historic Interest in Wales. The Wales Tranquil Areas Map (2009) indicates that the site and immediate surroundings predominantly fall within disturbed rather than tranquil areas.
- 17.1.0.3 Preliminary Zone of Theoretical Visibility (ZTV) mapping (refer to Figure 17.1) indicates potential visual receptors (such as properties and Public Rights of Way/areas of public access) at and/or around Cardiff, Newport, Portishead, Clevedon and Weston-super-Mare. Key coastal recreational routes that will need to be taken into account as part of the assessment include the Wales Coast Path and Mariners' Path/Gordano Round.

17.2 Scope of potential impact to be assessed

- 17.2.0.1 The principal seascape, landscape and visual effects are anticipated to occur at and close to the Project site, where there is the greatest potential for seascape/landscape character to be altered by the Project and for visual receptors (those who would have a view of the Project) to experience a change in views. More detailed evaluation of the Project and resultant changes in coastal processes, in the context of further seascape and landscape analysis, is required to determine the nature of seascape and landscape effects. Information pertaining to these considerations and the methodology for assessing effects in respect of the same are set out below (Sections 17.3 and 17.4). It is not anticipated that current levels of tranquillity would be significantly affected by the Project during operation, however due consideration will be given to the Project in respect of tranquillity,

particularly the noise implications of the Project, as part of future environmental impact assessment work (Refer to Chapter 21 Terrestrial Noise and Vibration). The Zone of Theoretical Visibility (ZTV) (refer to Figure 17.1) does not take into account land cover (i.e. the reduction in visibility as a result of vegetation and built form within the landscape) and provides only a starting point for the analysis of visual effects by informing the selection of representative viewpoints. Viewpoints will be selected, informed by the consultation process, to represent the range of receptors identified above. Proposed representative viewpoints, for consideration, are set out in Section 17.3, below. Cumulative effects resulting from the Project in combination with any other relevant projects, will also be assessed, as set out below.

17.3 Existing baseline data, consultation and need for survey

17.3.0.1 In order to establish likely seascape and landscape effects, more detailed analysis of seascape and landscape character will be required, drawing on:

- i. the Seascape Assessment of Wales (and, if available, more detailed seascape character information – due to be published by Natural Resources Wales in 2015);
- ii. LANDMAP (the national landscape appraisal system in Wales) information (all 5 LANDMAP Aspects, as they relate to the site);
- iii. local authority landscape character assessments (currently available published assessments, in respect of the site, comprise the Cardiff Council document entitled ‘Review of Landscape Character Areas’, 2008;
- iv. the Newport County Borough Council document entitled ‘Landscapes Working for Newport’, 1999); and
- v. site survey.

17.3.0.2 Representative viewpoint analysis, informed by site survey and photography, and supported by photomontages (computer rendered images of the Project superimposed onto existing photographs and representing the likely appearance of the Project) for selected viewpoints, will be required to examine potential visual effects.

17.3.0.3 The viewpoints listed below and shown on Figure 17.1 are considered to be representative of the range of visual receptors within the Project Study Area. Viewpoints predominantly fall within coastal areas; woodland/forestry cover and urban settlement are anticipated to restrict the visibility of the Project from locations inland. It is considered that views from Lavernock Point (Viewpoint 1, below) and Brean Down (Viewpoint 9, below) will be broadly comparable with those from Flat Holm and Steep Holm, respectively, and could be considered as representative viewpoints for these islands.

Table 17.1: Proposed Viewpoints for Visual Assessment

No.	Description	National Grid Ref.	
1	Wales Coast Path, Lavernock Point, Looking North East	318739	168187
2	Paget Road, Penarth, Cardiff, Looking East	318490	172278
3	Wales Coast Path, Rumney Great Wharf, Wentlooge Levels, Looking South	323218	177681
4	Wales Coast Path, New Gout, Wentlooge Levels, Looking South	331293	183706
5	Wales Coast Path, Gold Cliff, nr Goldcliff, Caldicot Levels, Looking South West	337211	181916
6	Battery Point, Portishead, near Bristol, Looking West	346414	177571
7	Clevedon Pier, Clevedon, Looking West	339957	172004
8	Sand Point, near Weston-super-Mare, Looking North	331928	165935
9	Brean Down, near Weston-super-Mare, Looking North	328016	159326
10	Bleadon Hill, Mendip Hills AONB, Looking North	335823	157838

17.3.0.4 A selection of viewpoint photographs are provided below to illustrate views to the site:

Viewpoint 2: Paget Road, Penarth, Cardiff, Looking East



Viewpoint 4: New Gout, Wentlooge Levels, Looking South



Viewpoint 5: Gold Cliff, nr Goldcliff, Caldicot Levels, Looking South West



Viewpoint 6: Battery Point, Portishead, Looking West



Viewpoint 7: Clevedon Pier, Clevedon, Looking North



- 17.3.0.5 The landscape and visual considerations in respect of the Project have so far been discussed with Natural Resources Wales (NRW) (on 5th December 2015) and are taken into account in this chapter of the Scoping Report. It is proposed that viewpoint locations will be agreed with NRW, Natural England and the local planning authorities.

17.4 Proposed assessment methodology

- 17.4.0.1 Landscape is defined in the European Landscape Convention as ‘...an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors’. In coastal areas (including the coast and adjacent

areas of open water), landscape takes the form of seascape. Visual considerations relate specifically to the views of a landscape/seascape afforded to people. These separate but related issues form the basis for seascape, landscape and visual impact assessment (SLVIA).

- 17.4.0.2 The SLVIA will be prepared by a Chartered Landscape Architect based on best practice guidance produced by the Landscape Institute and Institute of Environmental Management and Assessment (Guidelines for Landscape and Visual Impact Assessment: Third Edition, 2013). The work will involve site survey and desk-top research, and will culminate in production of a report chapter setting out an introduction to the topic, a detailed assessment methodology, findings of baseline studies/research, design/mitigation measures, an assessment of impacts, and an overall summary.
- 17.4.0.3 The proposed Study Area for the SLVIA extends to 15km from the Project (refer to Figure 17.1). Beyond this distance it is anticipated that the Project would not be readily perceptible, such that any effects would be negligible. Further research will be undertaken to identify any other projects that may require consideration in respect of cumulative effects, which will then be taken into account in the cumulative assessment. Historic landscape and other heritage issues are primarily a matter of cultural heritage and will be considered within Chapter 18 Cultural Heritage: Marine and Terrestrial. However, the landscape and visual impact assessment will consider heritage principally in relation to seascape and LANDMAP/landscape character, with due regard for key cultural heritage assets in respect of viewpoint selection (to inform the Cultural Heritage assessment). Photography and photomontages will be undertaken in accordance with Landscape Institute best practice guidance (Photography and Photomontage in Landscape and Visual Impact Assessment, 2011).

17.5 References

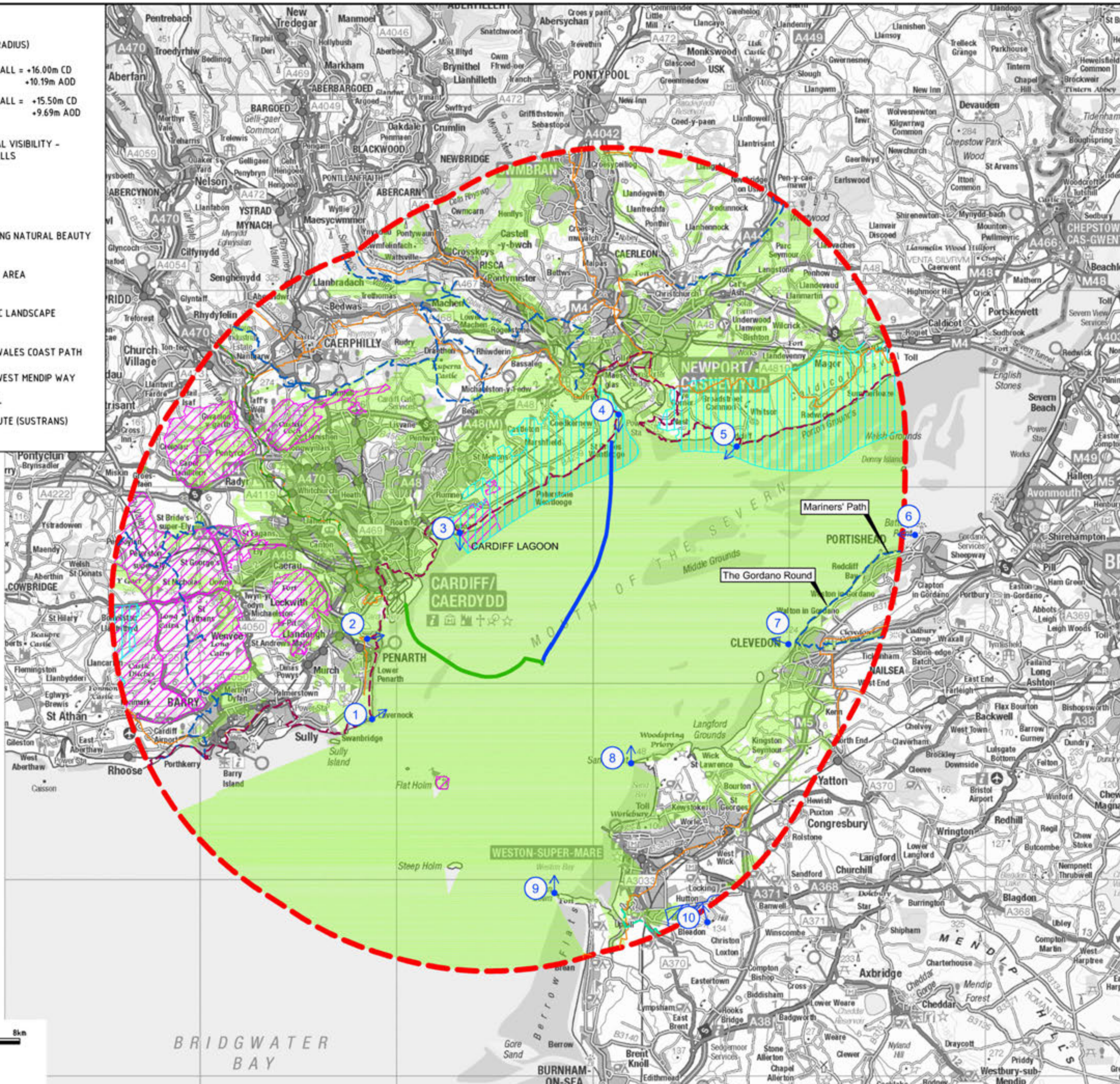
- City of Cardiff Council (2003) Cardiff Unitary Development Plan (to 2016)
- City of Cardiff Council (2013) Deposit Local Plan (2006-2026)
- Council of Europe (2000) European Landscape Convention
- Countryside Council for Wales (2009) Wales Tranquil Areas Map
- Landscape Institute (2011) Photography and Photomontage in Landscape and Visual Impact Assessment
- Landscape Institute (2013) Guidelines for Landscape and Visual Impact Assessment: Third Edition



Figures

KEY:

- - - STUDY AREA (15km RADIUS)
- CREST OF LAGOON WALL = +16.00m CD
+10.19m AOD
- CREST OF LAGOON WALL = +15.50m CD
+9.69m AOD
- ZONE OF THEORETICAL VISIBILITY -
CARDIFF LAGOON WALLS
- 1 VIEWPOINTS
- AREA OF OUTSTANDING NATURAL BEAUTY
- SPECIAL LANDSCAPE AREA
- REGISTERED HISTORIC LANDSCAPE
- - - NATIONAL ROUTE - WALES COAST PATH
- - - NATIONAL ROUTE - WEST MENDIP WAY
- - - RECREATIONAL TRAIL
- - - NATIONAL CYCLE ROUTE (Sustrans)



- NOTES:**
1. THE ZTV WAS CALCULATED USING WINDFARM COMPUTER SOFTWARE BASED ON ORDNANCE SURVEY (O.S) OPENDATA 1:250 000 SCALE RASTER TILES AND "OS TERRAIN 50" DTM GRID DATA BASED ON A 50m GRID.
 2. THE ZTV ILLUSTRATES AN AREA OF THEORETICAL VISIBILITY BASED ON PROPOSED DEVELOPMENT AS SET OUT IN THE KEY.
 3. THE ZTV IS BASED ON LANDFORM DATA ONLY, WITH ANY RIDGE LINES, PLATEAUS AND VALLEYS REFLECTED IN THE EXTENT OF PREDICTED VISIBILITY, BUT DOES NOT TAKE ACCOUNT OF LAND COVER.
 4. THE ZTV REPRESENTS A "WORSE CASE" SCENARIO WITH REGARD TO THE VISIBILITY OF THE PROPOSED DEVELOPMENT.

01	FIRST ISSUE	20 JAN 15
Issue	Description	Date

PRELIMINARY	
NOT TO BE USED FOR CONSTRUCTION	
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**CARDIFF
TIDAL LAGOON**

**SEASCAPE, LANDSCAPE
AND VISUAL
CONSIDERATIONS**

Drawing No.	Project No.	Issue
FIG 17.1	UA007480	01