

Vale of Glamorgan Council

Biglis to Dinas Powys Active Travel Route – Landscape & Visual Appraisal

Document Ref: 10058585-ARC-EGN-ZZ-LVA-RP-00001

Revision: V1.1

OCTOBER 2024



Contacts



DAN WATTS
Principal Landscape Architect

Mobile: +44 7342 710037

Email: dan.watts@arcadis.com

Arcadis (UK) Limited
2 Glass Wharf
Temple Quay
Bristol
BS2 0EL
T: +44 (0)117 372 1200



HANNAH GILROY
Consultant Landscape Architect

Mobile: +44 7584 330054

Email: hannah.gilroy@arcadis.com

Arcadis (UK) Limited
2 Glass Wharf
Temple Quay
Bristol
BS2 0EL
T: +44 (0)117 372 1200

Biglis to Dinas Powys Active Travel Route

Landscape and Visual Appraisal

Author Hannah Gilroy
Checker Dan Watts
Reviewer Ben Hilder
Approver Ben Hilder
Document Ref. 10058585-ARC-EGN-ZZ-LVA-RP-00001
Date OCTOBER 2024

Version Control

Version	Date	Author	Checker	Reviewer	Approver	Changes
V1.1	15/10/24	H Gilroy	D Watts	B Hilder	B Hilder	

This report dated **Click here to enter a date.** has been prepared for **Click here to enter text.**(the “Client”) in accordance with the terms and conditions of appointment dated **Click here to enter a date.**(the “Appointment”) between the Client and (“Arcadis”) for the purposes specified in the Appointment. For avoidance of doubt, no other person(s) may use or rely upon this report or its contents, and Arcadis accepts no responsibility for any such use or reliance thereon by any other third party.

Contents

1	Introduction.....	6
2	Methodology	7
3	Baseline Analysis	Error! Bookmark not defined.
4	Design and Mitigation	31
5	Appraisal	33
6	Summary and Conclusion	43
7	References	44

Tables

Table 2-1	Summary of Consultation Responses.....	9
Table 3-1	Sources of baseline data.....	10
Table 3-2	Summary of National Landscape Character Areas (NCA).....	19
Table 3-3	Summary of County Landscape Character Areas (LCA's).....	20
Table 3-4	Summary of visual receptors to be carried forward for appraisal.....	25
Table 3-5	Representative Viewpoint Locations	30

Figures

Figure 1: ZTV and Viewpoint Locations

Figure 2: Landscape Character

Figure 3: Designations

Figure 4: Access

Figure 5: Topography

Figures 6.1- 6.11 – Photographic Survey

Appendices

Appendix A

Methodology

Appendix B

LANDMAP Visual Sensory Landscape Character at Local Level

Acronyms and Abbreviations

Abbreviation	Definition
AOD	Above Ordnance Datum
ATR	Active Travel Route
CA	Conservation Area
DTM	Digital Terrain Model
EIA	Environmental Impact Assessment
GIS	Geographical Information System
GLVIA3	Guidelines for Landscape and Visual Impact Assessment 3rd Edition
LCA	Landscape Character Area
LI	Landscape Institute
LiDAR	Light Detection and Ranging
LVA	Landscape and Visual Appraisal
NCA	National Character Area
NL	National Landscape
NPPF	National Planning Policy Framework
OS	Ordnance Survey
PIR	Passive Infra-Red
PRoW	Public Rights of Way
PDS	Proposed Development Site
RV	Representative Viewpoint
TGN	Technical Guidance Note
VoGC	Vale of Glamorgan Council
VSLCA	Visual Sensory Landscape Character Area
ZTV	Zone of Theoretical Visibility

1 Introduction

1.1 Background to the Scheme and Proposed Development

- 1.1.1 Arcadis has been appointed by Vale of Glamorgan Council (VoGC) to prepare a Landscape and Visual Appraisal (LVA) in support of a detailed application for an Active Travel Route (ATR) between Biglis and Dinas Powys (hereafter referred to as the 'Proposed Development').

1.2 Site Location and Description

- 1.2.1 The Proposed Development is located between Biglis and Dinas-Powys, approximately 2.5km to the south-west of Cardiff city centre.
- 1.2.2 From the south, the proposed route connects with Sully Moors Road, passing through a small copse, then proceeding northwards adjacent to the east of the A4055 for approximately 1500m. The route then crosses the A4055, passing through Parc Byn-Y-Don, before continuing northwards through residential areas and terminating at an existing access path for Dinas Powys Railway Station (see Figure 1).

2 Methodology

2.1 Approach

- 2.1.1 This LVA has been carried out in accordance with best practice guidance in relation to Landscape and Visual Impact Assessment (LVIA), specifically with reference to the *Guidelines for Landscape and Visual Impact Assessment (GLVIA3)* (Landscape Institute and IEMA, 2013). A full methodology is provided in **Appendix A**
- 2.1.2 This Appraisal has been informed by a desktop study, supplemented by a field survey of the Proposed Development Site (PDS) and its surroundings.

2.2 Nature of Landscape and Visual Effects

- 2.2.1 The Appraisal considers two distinct but closely related matters: Landscape and Visual Amenity, as outlined below.

Landscape

- 2.2.2 Landscape effects are a combination of the physical changes to the fabric of the landscape arising from the Proposed Development and perceptual changes – the way these physical changes alter how the landscape is perceived.
- 2.2.3 The character of the landscape derives from a combination of physical factors, natural processes and human intervention.
- 2.2.4 The landscape appraisal considers the effect of the Proposed Development on the landscape as a whole, as well as effects on significant individual elements of the landscape, and effects on characteristic combinations or patterns of elements and how these are perceived to affect its character and quality.
- 2.2.5 Landscape character is generally considered to be a resource in its own right, which exists whether or not there are people present to experience it.

Visual

- 2.2.6 Visual appraisal is concerned with the views that are available to people who may be affected by the Proposed Development, and their perception and responses to changes in these views.
- 2.2.7 Visual effects arise from changes in the composition and character of views available in the area affected. The Appraisal considers the likely change that would be experienced, including the effects both on specific views and on general visual amenity.
- 2.2.8 In line with Para 6.13 of GLVIA3 and for the purposes of the Appraisal, it is the people living, working, passing through or enjoying recreational activities in the area who actually see the views and enjoy the visual amenity, that are mapped and described as the ‘receptors’ of the views.

2.3 Extent of Study Area

- 2.3.1 The Study Area for the LVA has been established through an identification of the visual envelope of the key areas of built form that make up the operational phase of the Proposed Development and our site work to determine the distance, in this landscape, from which the development of the type and scale proposed fails to become generally perceptible. A visual envelope for the construction phase of the Project has not been established given the temporary nature of these works.

- 2.3.2 The first step in the appraisal process is therefore to establish this area of visibility, or the 'Zone of Theoretical Visibility' (ZTV) of the Proposed Development.
- 2.3.3 The ZTV has been modelled using ArcGIS Pro 3.2.2 (see **Figure 1 – ZTV and Viewpoint Locations**). The points of maximum height above existing ground levels of the Proposed Development are overlain on to a digital terrain model (DTM) and computer generated 'lines of sight' are created to show what can be seen from these points and thus the places from which the Proposed Development may be theoretically visible.
- 2.3.4 A standard ZTV methodology for modelling has been applied. The process followed is as below:
- Digital Terrain Model (DTM) is used to represent the elevation and terrain data of site and surrounding area (DEFRA 2m resolution DTM LIDAR has been used);
 - The target for the ZTV is the Proposed Development Site (PDS) boundary, with a 5m height above datum applied, which represents the notional height of lighting columns within the scheme.
 - A viewer height of 1.6m above ground level, representing a typical human eye height.
 - 'Bare-earth' Zone of Theoretical Visibility (ZTV) which represents a worst-case scenario, treating landform as if it were 'bare earth' and not considering existing vegetation that might screen views.
- 2.3.5 Based on the author's understanding of the landform and vegetation of the PDS and its surrounding area, and professional experience gained from other appraisals for this type of development, where built form above existing ground level is limited to slim lighting columns and a linear embankment adjacent to an existing highway, such that the two features appear as one, it is considered that the Proposed Development is not likely to be generally perceptible beyond 1km from the PDS. The Study Area for this LVA has therefore been defined as a 1km radius from the PDS.

Representative Viewpoints

- 2.3.6 The results of the ZTV and desk-based analysis of the Study Area have been used to identify the key potential visual receptors. From this information, a number of Representative Viewpoints (RV's), from a range of distances and directions have been selected. These RV's offer a representative sample of visibility of the Proposed Development from key visual receptors.
- 2.3.7 The actual level of visibility has then been verified during the Site Visit and potential RV's retained or discarded accordingly, leaving 11.No RV's to be taken forward for the Appraisal. These are shown on **Figure 1 – ZTV and Viewpoint Locations**.

2.4 Limitations and Assumptions

Limitations

Extents of the Study Area

- 2.4.1 As set out in paragraph 2.3.5, it is considered that the Proposed Development would not bring about any notable effects on receptors outside the visual envelope of the development and beyond 1km from the location of the PDS. Accordingly areas of landscape and visual receptors beyond this have been scoped out, and have not been included in this appraisal.

Programme Constraints

- 2.4.2 Due to programme limitations, the visual appraisal has been carried out during the summer when trees are in full leaf.
- 2.4.3 The supporting RV images shown in **Figures 6.1 - 6.11** do not illustrate the 'worst case' scenario i.e. when there are no leaves on the trees during the winter months. However, the Appraisal for all visual receptors in section 5 of this report has been carried out as if this were the case.

Assumptions

Professional Judgement

- 2.4.4 To avoid making assumptions regarding other people's expected responses to changes in landscape character and visual amenity matters, subjective judgements are avoided where possible in this Appraisal. The focus instead is predominantly upon what objectively would be experienced as a result of the proposed Development. Given the nature of landscape character and people's differing connections with it, plus the differences between people's expectations with regards to visual amenity, reasoned professional experience is required where subjective judgements are necessary.

Distances

- 2.4.5 Where distances are given in the appraisal, these are approximate distances (rounded to the nearest 10m) between the nearest part of the Site and the nearest part of the receptor in question, unless explicitly stated otherwise.

2.5 Temporal Scope

- 2.5.1 For the purposes of this Appraisal, effects will be considered during the following phases of the project lifespan:
- Construction phase effects;
 - Effects at year 1 of operation; and
 - Residual effects at year 15 – when it is reasonably expected that any landscape planting, that has been carried out as part of the Proposed Development, will have established.

2.6 Consultation

- 2.6.1 Table 2-1 below provides a summary of the stakeholder consultation undertaken to date, along with responses received.

Table 2-1 Summary of Consultation Responses

Consultee	Date of Consultation	Consultee Comments	Project Response
Vale of Glamorgan Landscape Officer J H Green	Email sent: 19/06/2024	Presented Study Area / Proposed RV Locations / Methodology No response to date	N/A

3 Desktop Study

3.1 Introduction

- 3.1.1 The desktop study initially comprises the collation and review of published background information relating to the PDS and its surrounding context. This includes a review of key legislation, landscape planning policy and the landscape character of the LVA study area set out in published documentation, as well as information on statutory and non-statutory landscape designations and any consented neighbouring development that might affect the appraisal.
- 3.1.2 The desktop study is then supplemented with field-work to ground truth findings.

SOURCES OF BASELINE INFORMATION

- 3.1.3 Sources of baseline data are summarised in **Table 3-1** below:

Table 3-1 Sources of baseline data

Baseline topic	Data Source
Legislation	
<i>Active travel (Wales) Act, 2011</i> (Welsh Government, 2011)	https://www.gov.wales/sites/default/files/publications/2022-01/active-travel-act-guidance.pdf Accessed 30/05/2024
<i>The Environment (Wales) Act, 2016</i> (Welsh Government, 2016)	https://www.legislation.gov.uk/anaw/2016/3/contents/wales Accessed: 30/05/2024
Planning Policy	
<u>National Policy</u> <i>Planning Policy Wales - Edition 12, February 2024</i> (Welsh Government, 2024)	https://www.gov.wales/sites/default/files/publications/2024-02/planning-policy-wales-edition-12_1.pdf Accessed 30/05/2024
<u>Local Policy</u> <i>Vale of Glamorgan Local Development Plan 2011-2026</i> (Vale of Glamorgan Council, 2017)	https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/LDP/LDP-Adoption/Adopted-LDP-Written-Statement-June-2017-final-interactive-web-version.pdf Accessed 30/05/2024

Baseline topic	Data Source
<p><u>Supplementary Planning Guidance (SPG)</u></p> <p><i>Vale of Glamorgan Local Development Plan 2011-2026</i> <i>SPG -Travel Plan, July 2018</i> (Vale of Glamorgan Council, 2018)</p>	<p>https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/SPG/Travel-Plan-SPG-2018.pdf</p> <p>Accessed 30/05/2024</p>
<p><i>Vale of Glamorgan Local Development Plan 2011-2026</i> <i>SPG - Trees, Woodlands, Hedgerows and Development</i> (Vale of Glamorgan Council, 2018)</p>	<p>https://www.valeofglamorgan.gov.uk/Documents/Living/Planning/Policy/SPG/Final-Trees-Woodlands-Hedgerows-and-Development-SPG-2018-v2.pdf</p> <p>Accessed 30/05/2024</p>
Landscape Character	
<u>National</u>	
<p><i>National Landscape Character</i> (Natural Resources Wales, 2014)</p>	<p>https://cdn.cyfoethnaturiol.cymru/media/682621/nlca35-cardiff-and-newport-description.pdf?mode=pad&</p> <p>Accessed 30/05/2024</p> <p>GIS dataset downloaded from Datamap Wales: Available at: https://datamap.gov.wales/layers/inspire-nrw:NRW_LANDSCAPE_CHARACTER_AREAS</p> <p>Accessed 30/05/2024</p>
<u>County</u>	
<p><i>Designation of Landscape Character Areas – Final Report</i> (Natural Resources Wales, 2016)</p>	<p>https://cdn.cyfoethnaturiol.cymru/media/682621/nlca35-cardiff-and-newport-description.pdf?mode=pad&</p> <p>Accessed 30/05/2024</p>
<u>LANDMAP</u>	
<p><i>Area summary for South Wales Central</i> (Natural Resources Wales, 2014)</p>	<p>https://naturalresources.wales/media/685445/as-south-wales-central-landscape-final.pdf</p> <p>GIS dataset downloaded from DataMap Wales Available at:</p>

Baseline topic	Data Source
	https://datamap.gov.wales/search/?title__icontains=landmap&abstract__icontains=landmap&keywords__name__icontains=landmap&purpose__icontains=landmap&f_method=or&limit=20&offset=0 Accessed 30/05/2024
Statutory and Non-statutory Designations	
Special Landscape Area	GIS dataset downloaded from DataMap Wales https://datamap.gov.wales/layers/geonode:nrw_special_landscape_area Accessed 30/05/2024
SSSI	GIS dataset downloaded from DataMap Wales https://datamap.gov.wales/layers/inspire-nrw:NRW_SSSI Accessed 03/06/2024
Conservation Area	GIS dataset downloaded from DataMap Wales https://datamap.gov.wales/layers/inspire-wg:conservation_areas Accessed 03/06/2024
Listed Building	GIS dataset downloaded from DataMap Wales https://datamap.gov.wales/layers/inspire-wg:Cadw_ListedBuildings Accessed 03/06/2024
Scheduled Monument	GIS dataset downloaded from DataMap Wales https://datamap.gov.wales/layers/inspire-wg:Cadw_SAM Accessed 03/06/2024
Ancient Woodland	GIS dataset downloaded from DataMap Wales https://datamap.gov.wales/layers/inspire-nrw:NRW_ANCIENT_WOODLAND_INVENTORY_2021 Accessed 03/06/2024
National Trails, Long Distance Routes	GIS dataset for Wales Coastal Path downloaded from DataMap Wales https://datamap.gov.wales/layers/inspire-nrw:NRW_WALES_COASTAL_PATH Accessed 31/05/2024 GIS dataset for Capital Walk, Cardiff downloaded from LDWA

Baseline topic	Data Source
	https://ldwa.org.uk/ldp/members/show_path.php?path_name=Capital+Walk+--+Cardiff Accessed 31/05/2024
Public Rights of Way	PRoW dataset sourced from RowMaps https://www.rowmaps.com/kmls/VG/ Accessed 31/05/2024
Tree Preservation Order (TPO)	TPO data sourced from Vale of Glamorgan Interactive Map https://myvale.valeofglamorgan.gov.uk/myCouncil.aspx Accessed 03/06/2024

3.2 Guidance

3.2.1 This Appraisal has been carried out in accordance with the following guidance:

- *Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3)* (Landscape Institute and IEMA, 2013) and subsequently: *Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3)*, published in *Technical Guidance Note LITGN-2024-01* (The Landscape Institute, 2024). Available at: https://www.landscapeinstitute.org/wp-content/uploads/2024/08/LITGN-2024-01-GLVIA3-NC_Aug-2024.pdf
- *Landscape Institute Technical Guidance Note 06/19 - Visual Representation of Development Proposals* (The Landscape Institute, 2019). Available at: https://www.landscapeinstitute.org/wp-content/uploads/2019/09/LI_TGN-06-19_Visual_Representation-1.pdf
- *TGN 02-21: Assessing landscape value outside national designations* (The Landscape Institute, 2021). Available at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2021/05/tgn-02-21-assessing-landscape-value-outside-national-designations.pdf>

3.3 Legislative Context

International

- 3.3.1 The UK is a signatory to the European Landscape Convention (ELC) (Council of Europe, 2000) which was ratified in 2006 and became binding in the UK from 1 March 2007.
- 3.3.2 The Convention is not an EU Directive, rather countries that ratify the Convention make a commitment to upholding the principles it contains within the context of their own domestic legal and policy frameworks.
- 3.3.3 There is no UK legislation specifically covering Landscape or Visual Amenity, but the spirit of the ELC is carried through in planning policy.
- 3.3.4 Landscape is defined in the ELC as:

'an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors.'

3.3.5 Furthermore, it recognises that all landscapes are potentially important, irrespective of location or condition – signatories acknowledge:

‘... that the landscape is an important part of the quality of life for people everywhere: in urban areas and in the countryside, in degraded areas as well as in areas of high quality, in areas recognised as being of outstanding beauty as well as everyday area’.

National

3.3.6 The following Welsh Government legislation is deemed to be of relevance to this Appraisal:

Active travel (Wales) Act, 2011

Part 2: Planning and Design for Active Travel in Wales

- *Chapter 7: Introduction to Planning and Design*
- *Chapter 9: User needs*
- *Chapter 11: Designing for active travel routes and links*
- *Chapter 15: Construction, maintenance and management of active travel routes including streetworks*

The Environment (Wales) Act, 2016

Part 1: Sustainable Management of Natural Resources

- *Chapter 6: Biodiversity and resilience of ecosystems duty*

3.4 Planning Policy Context

3.4.1 The following Planning Policy is deemed to be of relevance to this Appraisal:

National

Planning Policy Wales – Edition 12

Chapter 4 – Active and Social Places

- *Section 4.1 – Transport*

Chapter 5 – Productive and Enterprising Places

- *Section 5.3 - Transportation Infrastructure*

Chapter 6 – Distinctive and Natural Places

- *Section 6.2 – Green Infrastructure*
- *Section 6.3 – Landscape*
- *Section 6.4 - Biodiversity and Ecological Networks*

County

Vale of Glamorgan Local Development Plan 2011 - 2026

Strategic Policy

- *Policy SP7 –Transportation*

Managing Growth Policy

- *Policy MG16 – Transport Proposals*

- *Policy MG17 – Special Landscape Areas*

Managing Growth Policy

- *SPG -Travel Plan*
- *SPG - Trees, Woodlands, Hedgerows and Development*

3.5 Landscape Baseline

Landform and Watercourses

- 3.5.1 The landform of the PDS and the Study Area is shown on **Figure 4: Topography**.
- 3.5.2 The southern extents of the PDS follow the route of the existing A4055 across an area of floodplain, where the topography ranges between 5-7m AOD. The landform rises slightly as the route proceeds northwards towards Dinas-Powys, to a maximum of 14m AOD at Dinas-Powys Station.
- 3.5.3 There are a number of watercourses within the Study Area, these are listed below:
- Cadoxton River – Runs broadly north-south through the Study Area, with much of the route running adjacent to the west of the A4055, within the PDS boundary;
 - Cold Brook – Runs broadly north-south through the Study Area, connecting with Cadoxton River to the west of the A4055; and
 - A network of un-named drainage ditches that criss-cross the lowlands of Cog Moors to the east of the PDS.

Existing Site Features and Vegetation

- 3.5.4 The southern extent of the PDS comprises a mixture of agricultural grassland, with established hedgerows delineating field boundaries and lining the existing A4055.
- 3.5.5 Further north, the route deviates from the A4055, crossing open grassland at Parc Bryn-y-Don, before continuing north through an avenue of mature trees and into the residential suburbs of Dinas-Powys, where vegetation is generally limited to sporadic street trees and amenity planting within private gardens.
- 3.5.6 Vegetation within the wider Study Area comprises a mixture of grazing pasture and arable fields bounded by mature hedgerows as well as sporadic blocks of woodland.

Tree Preservation Orders (TPO)

- 3.5.7 There are a number of TPO trees or groups within or immediately adjacent the PDS. These shown on **Figure 3 – Designations** and listed below:
- Cardiff Road, Dinas Powys - Individual: 035A - 1973 - 14 - A36
 - Cardiff Road, Dinas Powys - Individual: 035A - 1973 - 14 - A37
 - Cardiff Road, Dinas Powys - Individual: 035A - 1973 - 14 - T033
 - Cardiff Road, Dinas Powys - Individual: 035A - 1973 - 14 - T047
 - Cardiff Road, Dinas Powys - Group: 035A - 1973 - 14 - G21
 - Cardiff Road, Dinas Powys - Group: 035A - 1973 - 14 - G20
 - White Bungalow, Barry Road, Dinas Powys - Group: 348 - 2008 - 16 - G01
- 3.5.8 In addition to the above, there are also a large number of TPO's across the wider Study Area, however they will not be affected by the Proposed Development.

Statutory and Non - Statutory Designations

- 3.5.9** Statutory and non-statutory designations are shown in **Figure 3: Designations**. All are listed below, along with their approximate distance and direction from the PDS.

Designated Landscapes

National Parks

- 3.5.10 No part of the 1km Study Area is located within a National Park.

National Landscapes

- 3.5.11 No part of the 1km Study Area is located within a National Landscape.

Sites of Special Scientific Interest

- 3.5.12 Cog Moors SSSI occupies an area of 13ha, approximately 350m to the east of the PDS. The site was designated on the basis of its wildlife, including birds, butterflies, lizards, reptiles and insects.

Ramsar

- 3.5.13 There are no Ramsar sites within the Study Area.

Other Relevant Designations

Country Park

- 3.5.14 There are no Country Parks within the Study Area.

Historic landscapes / Historic Parks and Gardens

- 3.5.15 There are no Historic Landscapes or Historic Parks & Gardens within the Study Area.

Scheduled Monuments

- 3.5.16 There are no Scheduled Monuments within the PDS, however there are a number within the wider Study Area including:

- Romano-British Farmstead, Dinas Powys Common, 100m to the north-west.
- Dinas-Powys Castle, Dinas Powys, 450m to the north; and
- Middleton Moated Site, Sully, 650m to the south.

- 3.5.17 The historic setting of these of these Scheduled Monuments will not be affected by the Proposed Development, hence they are scoped out of the Appraisal.

Listed Buildings

- 3.5.18 There are no Listed Buildings within the PDS, however there a number of within the wider Study Area including:

- No's 1-6 Little Orchard – Grade II, Dinas Powys, 675m to the east.
- Barn at Biglis Farm – Grade II, Biglis, 700m to the north-west.
- Biglis Farmhouse – Grade II, Biglis, 700m to the north-west.
- Church of St John the Baptist, Sully, 950m to the south.
- Church of St Peter – Grade II, Dinas Powys, 400m to the north.
- Dinas Powys Parish Hall – Grade II, Dinas Powys, 325m to the north-west.
- Limekiln – Grade II, Sully, 775m to the south-east.
- Lon Twyn – Grade II, Dinas Powys, 650m to the north-west.
- Old Court – Grade II, Dinas Powys, 225m to the north-west.
- Remains of Dinas Powys Castle – Grade II, Dinas Powys, 525m to the north.
- The Mount – Grade II, Dinas Powys, 250m to the west; and
- War Memorial – Grade II, Dinas Powys, 275m to the north-west.

3.5.19 The historic setting of these of these Listed Buildings will not be affected by the Proposed Development, hence they are scoped out of the Appraisal.

County Treasures

3.5.20 In addition to the above listed heritage assets, VoG Council maintains a list of *County Treasures*. This is a non-statutory list of buildings that are '*considered to be key examples of vernacular architecture, or buildings which have an important local history.*'

3.5.21 Whilst there are no *County Treasures* within the PDS, there are a large number within the wider Study Area, many of which are also designated as either Scheduled Monuments or Listed Buildings.

3.5.22 The historic setting of these of these *County Treasures* will not be affected by the Proposed Development, hence they are scoped out of the Appraisal.

Conservation Areas

3.5.23 The northernmost extent of the PDS meets the southwestern edge of Dinas Powys Conservation Area, albeit only in two locations, which are not likely to be affected by the Proposed Development, hence it will not be taken forward for Appraisal

Special Landscape Areas

3.5.24 On the northern outskirts of Dinas Powys lies Cwrt-yr-Ala Basin which is designated by VoGC as a Special Landscape Area. The south-eastern extent of this SLA falls within the Study Area and incorporates Dinas Powys Golf Course.

3.5.25 The Proposed Development will not affect the physical landscape of the SLA and the ZTV indicates that there is not likely to be any intervisibility, hence effects upon the SLA will be scoped out of the Appraisal.

Ancient Woodland

3.5.26 There are no areas of Ancient Woodland within the PDS, however there are a number of areas of Ancient Semi Natural Woodland and Restored Ancient Woodland within the wider Study Area.

3.5.27 None of these areas of Ancient Woodland will be affected by the Proposed Development, hence they are scoped out of the Appraisal.

Published Landscape Character Assessments

3.5.28 Published Landscape Character Assessments (LCAs), supplemented by fieldwork have informed the identification of landscape character receptors for use in the LVIA. The existing published character assessments that were used in the preparation of the LVIA comprise the following:

- The National Landscape Character Areas (NLCAs) (Natural Resources Wales, 2014)
- Vale of Glamorgan Council Landscape Character Assessment (Vale of Glamorgan Council, 2008)
- LANDMAP

3.5.29 The extents of the Character Areas (or in the case of LANDMAP – Aspect Areas) associated with each of the above listed studies, that occur within the Study Area are shown in **Figure 2: Landscape Character**.

Landscape Character at the National Scale

3.5.30 Natural Resource Wales (NRW) has divided Wales into 48 regional areas referred to as National Landscape Character Areas (NLCAs). Their boundaries follow natural lines in the landscape, rather than administrative boundaries, and each is defined by a unique combination of landscape, biodiversity, geodiversity and cultural and economic activity.

3.5.31 The majority of the Study Area lies within **NLCA35: 'Cardiff, Barry & Newport'** character area however the very northwest edge of the Study Area lies within **NLCA36 'Vale of Glamorgan'**. These LCA's are illustrated on **Figure 2: Landscape Character**.

3.5.32 Natural Resource Wales, defines the key characteristics of **NLCA35** as follows:

- *Edge to the coalfield - lowland margins to the south-east of the South Wales coalfield. A varied geology of mudstones, sandstones and a few outcrops of limestone. Many glacial moraine features.*
- *Busy, heavily urbanised areas - containing Cardiff, and other large settlements including Penarth and Barry to the south to the west and the city of Newport and new town of Cwmbran to the east.*
- *Cardiff – capital city, largest urban area and principle administrative centre for Wales. The Romans established a settlement at Cardiff, remains visible in Cardiff Castle. Mid C19th growth as the most important port in the world for coal export. Cardiff Bay has since regenerated as a secondary focus in the city. The urban form of Cardiff expands across much of the surrounding landscape.*
- *Ports – Cardiff, together with Barry and Newport with its industrialised river frontage.*
- *Urban fringe / peri-urban areas – for example land between Penarth and Barry, which contains linear settlement linked by rural roads but has an urban fringe character in parts.*
- *Green belt with lush fieldscapes and woodlands - rural pastures and woodlands provide a contrasting peaceful, providing a green setting. Cardiff has the only green belt in Wales. Medium sized fields are mainly enclosed by hedgerows with frequent hedgerow trees.*
- *Prominent landmark structures - include Millennium Stadium in Cardiff; the series of bridges in Newport including the Transporter bridge; the chemical works at Barry, standing out prominently on the skyline.*
- *The M4 motorway - forms a noisy, busy corridor between and bypassing the two cities, together with the main railway.*
- *Green wedges / corridors penetrating urban areas – including wooded river corridors in Cardiff and Newport and the coast at Barry.*
- *Lowland river corridors - Rivers Taff and Ely drain into Cardiff Bay and the tidal River Rhymney runs through east Cardiff; the tidal River Usk forms the focus of Newport with the River Ebbw meandering to the southeast.*
- *St Fagans - National History Museum displays around 40 vernacular buildings in a picturesque setting adjacent to St Fagans Castle.*

3.5.33 Natural Resource Wales, defines the key characteristics of **NLCA36** as follows:

- *Lowland, rolling limestone plateau with glacial till.*
- *Coastal cliffs – mark a sudden edge to the landscape. Species-rich calcareous, neutral and maritime grasslands are found on their tops. Layers of geology characterise their sides and inter-tidal platforms. Wide views over the Bristol Channel. Much is Heritage Coast.*
- *Mixed agricultural land uses - with predominantly rural character*
- *Small woodlands – mainly to the east. Few large woods.*
- *Mixed field patterns and sizes - with hedgerows and hedgebanks, frequent hedgerow trees. Limestone walls define land above the cliffs in the west.*
- *Norman castles and medieval villages centred on churches.*
- *Predominantly still rural - with strong senses of enclosure by historic field boundaries.*
- *A number of large built developments – including Cardiff International Airport and Aberthaw Power Station. Some areas with traffic noise, e.g. in the M4 corridor.*
- *Commuter settlement - modern suburban housing extending but contrasting with historic settlement character.*

Table 3-2 Summary of National Landscape Character Areas (NCA)

National Character Areas	Scoped In / Out
NLCA35 - Cardiff, Barry & Newport	<p>Out.</p> <p>The scale of Character Area in relation to the Proposed Development is such that character is unlikely to be affected.</p> <p>Finer grained Assessments at regional or local scale are more suitable for use.</p>
NCLA36 – Vale of Glamorgan	<p>Out.</p> <p>No direct effects or intervisibility.</p>

Landscape Character at Regional and Local Scale

- 3.5.34 In 2008 Vale of Glamorgan County Borough Council commissioned the report: *A Review of Landscape Character Areas* (RLCA) (Vale of Glamorgan Council, 2008). This identified 27 Landscape Character Areas (LCA's) within the area of Vale of Glamorgan.
- 3.5.35 The report was produced using the LANDMAP methodology, considering the relevant aspect areas to define and characterise each of the LCA's. The constituent LANDMAP Visual Sensory Character Areas (VSLCA's) are shown on **Figure 2** and a summary of their key characteristics is provided in **Appendix B**.
- 3.5.36 The relevant LCA's set out in the RLCA will be used as the basis for the appraisal of landscape character effects at the regional and local scale.
- 3.5.37 The following 4 distinct LCA's have been identified within the 1km Study Area, which are illustrated on **Figure 2**.
- 3.5.38 The Proposed Development Is located within **LCA 17 – Cog Moors**. The key characteristics and sensitivity associated with the area are set out below:
- *A flat area of reclaimed marshland given over to agriculture;*
 - *A mixture of lowland agricultural vegetation, hedgerows and hedgerow trees;*
 - *Few areas of woodland;*
 - *Drainage ditch system provides an important habitat resource;*
 - *Enclosed by higher ground (Pop Hill at 40m AOD, Sully Ridge 50m plus AOD) it presents a mosaic of rough pasture within a matrix of drainage ditches and associated hedgerows and hedgerow trees.*
 - *Many hedgerows are gappy and overgrown, and despite its proximity to Barry and Dinas Powys it retains a remote and tranquil feel;*
 - *Poorly managed, compounded on the settlement edges.*
 - *It has a number of detractors, including overhead power lines and the noise disruption of the railway and A4055 road.*
- 3.5.39 Whilst LCA 17 is largely rural in nature, defined by low lying marshland and agricultural fields, the part of the LCA through which the PDS passes, is located immediately adjacent to the A4055, which deviates from the character of the wider LCA and defines the character at the local level, thus reducing the susceptibility to the Proposed Development.
- 3.5.40 The Study Area is located within Tranquility Zone B, so it is accepted that there are notable detractors present.

3.5.41 There are no nationally designated landscapes within the part of the LCA within the Study Area and features within the landscape are generally unremarkable and easily substitutable. The scale and character of the Proposed Development is not incongruent with the part of the LCA within which it is located, hence sensitivity to this type of development is considered to be **Low**.

3.5.42 The following LCA's within the wider Study Area are set out below, with their key characteristics:

LCA 23 – Cwrt yr Ala Lowlands

- *An area of dry terrestrial habitats of lowland meadows and grasslands, with a large extent of deciduous / mixed woodlands, which are widely visible in the surrounding landscape.*
- *An intimate landscape of pastoral fields, hedgerows and woodlands, the latter forming an important landscape element and generally found on the steeper valley sides or ridgelines.*
- *Main settlements are Wenvoe and Michaelson-le-Pit, otherwise an area of dispersed farms and houses, notwithstanding its proximity to Cardiff, Llandough and Dinas Powys.*
- *The area has few roads and is generally tranquil.*
- *Strong sense of place, with vernacular buildings and a sense of being a well-managed area.*

LCA 24 – Sully Ridge / Cosmeston

- *A mosaic of lowland terrestrial habitats, mainly given over to agriculture.*
- *There are important water bodies and woodlands at Cosmeston Lakes, a former quarry site, and small areas of woodland on the side slopes of the ridge.*
- *An elevated area offering extensive views out across the Vale and Bristol Channel.*
- *It has a sense of exposure and a coastal edge landscape with sparse, windblown vegetation mainly pastoral in use, the field boundaries are formed by well-maintained hedges.*
- *Important recreational landscapes at Cosmeston Lakes and the adjacent Downs Golf Course. Close to the settlements more disturbance and disruption to the landscape with the visual settlement edge issues of litter, fly tipping, discordant boundaries.*

3.5.43 No direct effects or intervisibility are anticipated for either LCA 23 or LCA 24, so determinations of sensitivity have not been carried out.

Table 3-3 Summary of County Landscape Character Areas (LCA's)

LCA	Sensitivity	Scoped In/Out
LCA 17 – Cog Moors	Medium	In. Potential for direct landscape effects
LCA 23 – Cwrt yr Ala Lowlands	N/A	Out. No direct effects or intervisibility
LCA 24 – Sully Ridge/Cosmeston	Medium	In Potential for direct landscape effects

3.6 Visual Baseline

Introduction

- 3.6.1 The visual baseline assesses the theoretical visibility of the Proposed Development and identifies those people whose visual amenity is likely to be affected by changes to their views.
- 3.6.2 A baseline appraisal of the local visual context and visual amenity was undertaken in June 2024, to understand the existing extent of visibility of the PDS, key views in the vicinity of the PDS and key visual receptors likely to be affected by the Proposed Development.
- 3.6.3 Key representative views (RVs) have been identified, which reflect the character and quality of typical views from key visual receptors, as defined in Para 2.3.3. These RV's provide the baseline against which the visual effect of the Proposed Development can be appraised.

Visual Receptors

- 3.6.4 Analysis of the PDS and Study Area through desk-top study and field-work has identified the following Visual Receptors.

Users of National Trails

- 3.6.5 The Welsh Coastal Path enters the Study Area in the southwest, travelling along the B4267/Sully Moor Road and then continuing along the A4055 heading towards Palmerstown.

User of Long-Distance Footpaths

- 3.6.6 The Capital Walk runs for 38 miles through the wider Cardiff area, between Swanbridge Bay and St Brides. The route passes east-west through the Study Area approximately 400m to the north-east of the PDS boundary at its closest point.

Other Public Rights of Way

- 3.6.7 There is a network of Local Authority Public Rights of Way (PRoW) within the Study Area. These are listed below, with their closest proximity to the PDS:
- Footpath VG/S13/1/1 starts at Cog Road in Sully, leading to VG/S1/41/1 which joins to the A4055. At this point the existing footpath will be integrated into the proposed active travel route. Distance from PDS: Intersects.
 - Footpath VG/S1/14/2 then VG/S1/14/1 continues from the northern side of the A4055 not far from where Footpath VG/S13/1/1 ends. The route crosses the Cadoxton River and follows this watercourse and mature hedgerow along its length until it crosses back over the river to join the A4055 again on the outskirts of Dinas Powys. Distance from PDS: Adjacent and intersecting at Parc Bryn-y-Don.
 - Footpath VG/S1/12/2 also adjoins the A4055 on a track and immediately crosses Cadoxton River where the route intersects with Footpath VG/S1/14/2. The route continues northwest until it reaches Biglis Pumping Station which is largely screened by established vegetation. Distance from PDS: Intersects.
 - Footpath VG/S1/11/2 proceeds from the northern side of Biglis Pumping Station towards Biglis House, continuing through fields before passing under the Vale of Glamorgan Railway that links Barry to Dinas Powys. The route then heads through Biglis Farm where it connects with Footpaths VG/S1/11/1 and VG/S1/10/3. Distance from PDS: 450m
 - Footpath VG/S1/11/1 follows on from VG/S1/11/2 and VG/S1/10/3 heading further westwards, terminating at Argae Lane adjacent to St Richards Gwyn Catholic High School. Distance from PDS: 800m

- Footpath VG/S1/10/3 heads northwest from VG/S1/11/1 and VG/S1/11/2, terminating at Argae Lane. Distance from PDS: 800m
- Footpath VG/S1/10/1 joins VG/S1/10/3 where it loops back onto Argae Lane over a small bridge adjacent to a Driving Range and Restaurant, heading southeast along Cold Brook. Distance from PDS: 850m
- Footpath VG/S1/13/2 joins VG/S1/10/1 when the path later splits into two either side of a farm track. Distance from PDS: 850m
- Footpath VG/S1/9/1 proceeds northwards from VG/S1/13/2 across fields, before emerging onto Westra Road. Distance from PDS: 875m
- Footpath VG/S13/1/1 proceeds north-eastwards from VG/S1/9/1, until it reaches the outskirts of Dinas Powys where it connects with Southra. Distance from PDS: 325m
- Footpath VG/S1/33/1 is a short path on the edge of Dinas Powys Common which connects Southra to Station Road. Distance from PDS: 75m
- Footpath VG/S1/32/1 is a short urban route between Wesley Court and A4055/Cardiff Road. Distance from PDS: Intersects.
- Footpath VG/S1/38/1 is a short urban route connecting Twyncyn to Highwalls Avenue. Distance from PDS: 525m
- Footpath VGS1/3/1 runs broadly north to south through Dinas Powys Golf Club to the Golf Club building, where it joins S1/2/1. Distance from PDS: 600m
- Footpath VG/S1/2/1 adjoins VG/S1/3/1, running along the boundary of Dinas Powys Golf Course where it connects with VG/S1/2/2. Distance from PDS: 600m
- Footpath VG/S1/2/2 adjoins VG/S1/2/1 to the south then intersects with VG/M2/5/1 and VG/M2/5/2 to the north. Distance from PDS: 725m
- Footpath VG/M2/5/1 leads a short distance between two dwellings until path splits into two (VG/S1/1/1 and VG/M2/1/2). Distance from PDS: 480m
- Footpath VG/M2/5/2 adjoins VG/M2/1/2 and VG/M2/5/1 towards Dinas Powys Hillfort (which lies outside of the Study Area). Distance from PDS: 825m
- Footpath VG/S1/1/1 connects with VG/M2/1/2 and VG/M2/5/1. The route proceeds south along the Cadoxton River, terminating at Pen-Y-Turnpike Road. Distance from PDS: 475m
- Footpath VG/M2/1/2 connects with VG/M2/5/2 and VG/S1/1/1. Only the very southern section of this route is within the Study Area. Distance from PDS: 900m
- Footpath VG/S1/46/1 runs along Ardwyn Walk, connecting with Pen-Y-Turnpike Road. Distance from PDS: 575m
- Footpath VG/S1/28a/1 is a short route connecting Brookside to Castle Close in the south. This footpath has a passive level crossing across the Vale of Glamorgan Railway. Distance from PDS: 625m
- Footpath VG/S1/26/1 is a short stretch of footway linking the front of a number of properties along St Donats Close to Castle Drive. Distance from PDS: 500m
- Footpath VG/S1/25/1 proceeds eastwards from Murch Car Park behind a number of residential properties. Access can also be gained from the adjoining Madoc Close, Lllandilo Close and Aberdovey Close. Also adjoins VG/S1/25/2 and VG/S1/28c/2. Distance from PDS: 500m
- Footpath VG/S1/25/2 connects with VG/S1/25/1, proceeding eastwards out of the Study Area towards Penarth. Distance from PDS: 825m
- Footpath VG/S1/28c/2 connects with VG/S1/25/1 and VG/S1/25/2, linking Aberdovey Close Cul-de-sac with Murch Crescent. Distance from PDS: 825m
- Footpath VG/S1/28b/1 is a short urban route, linking Cardigan Close with Raglan Close. Distance from PDS: 800m

- Footpath VG/S1/23/1 proceeds westwards from a small car park, running along the front of some of the residential properties on Sunnycroft Lane to a turning head adjacent to the East Brook. Distance from PDS: 150m
- Footpath VG/S1/22/1 adjoins the same turning head as VG/S1/23/1, adjacent to a small bridge linking to Murchfield Community Centre. Follows the East Brook where it then joins St Cadoc's Avenue which is part of the PDS. Distance from PDS: Intersects
- Footpaths VG/S1/21/1, VG/S1/21/2 and VG/S1/21/3 cross and follow the Cadoxton River. Linking Cross Common Road, Wellwood Drive and St Lythan Close. Distance from PDS: 25m
- Footpath VG/S1/16/1 proceeds from Cross Common Road through a number of fields, terminating on Sully Road, which is outside the Study Area. Distance from PDS: 550m
- Footpath VG/S1/15/1 proceeds from Cross Common Road, crossing fields before terminating at the existing junction with the A4055/Cardiff Road. This junction is being amended in the Proposed Development, at which point this footpath will be integrated with the proposed ATR. Distance from PDS: Integrated
- Bridleway VG/S1/45/1 proceeds from Cross Common Road, passing through woodland before reaching Sunnycroft Lane, where it meets with a number of adjacent properties on the outskirts of Dinas Powys, terminating at Longmeadow Drive. Distance from PDS: 325m

CRoW Open Access Land

3.6.8 There are a number of areas of CRoW Open Access Land (UK Government, 2000)

- Six parcels of land surrounding or including Dinas Powys Common;
- Seven parcels of land surrounding or including Cross Common at Pop Hill; and
- One parcel of land near Dinas Powys Castle along the northern edge of the Cadoxton River

Cycle Routes

3.6.9 There are no National Cycle Routes within the Study Area.

Areas of Recreation

3.6.10 **There are a number of** areas of recreation within the PDS and wider Study Area such as Country Parks, Recreation Grounds etc. These include:

- Camp Coconuts, adjacent to PDS, to the south
- Dinas Powys Bowling Club, 550m to the northwest
- Dinas Powys Common, 75m to the west
- Dinas Powys Cricket Club, 500m to the west
- Dinas Powys FC, 200m to the northeast
- Dinas Powys Golf Club, 550m to the north
- Dinas Powys Lawn Tennis Club, 600m to the northwest
- Dinas Powys Library & Activity Centre, 325 to the northeast
- Dinas Powys Primary School, 200m to the northeast
- Dinas Powys RFC, 450m to the west
- Footgolf, Driving Range and The Clubhouse Restaurant, 1,000m to the west
- Hebron Hall Swimming Pool, 175m to the west
- Mc Donald's on A4055/A4231, adjacent to PDS to the west
- Murchfield Community Centre, 100m to the east
- Murch Bowling Club, 50m to the east
- Murch Playground, 25m to the east
- Parc Bryn-y-Don including skate park, within PDS
- Parc Bryn-y-Don Cricket Club, adjacent to PDS, to the west

- St Andrews Major CIW Primary School, 700m to the northwest
- St Richard Gwyn Catholic High School, 1,000m to the west

Residential Receptors

3.6.11 There are a number of existing settlements which are likely to experience views of the Proposed Development, including:

- Properties in Dinas Powys, including those on Heol-Y-Frenhines, Drylla, Croffa, Cardiff Road and St Cadoc's Avenue;
- Properties at the northern urban fringe of Sully, 800m to the southeast, including those on Cog Road and Ashby Road;
- Properties at the northern urban fringe of Palmerstown (Suburb of Barry), 450m to the west, including those on Greenacres and Pen-Y-Brun; and
- Properties in Westra (Suburb of Dinas Powys), 700m to the northwest, including those on Westra and St Andrews Road

Individual Residential Properties

3.6.12 There are a number of individual residential properties, which are likely to experience views of the Proposed Development, including:

- Biglis House, 450m to the west
- Biglis Farm, 750m to the west
- Group of dwellings to the east of the A4055 on the southern outskirts of Dinas Powys, these being White Acres, Lindau, Arnold House, Shangri La, Fairwood, Shortlands, and The Beeches. Some of these adjacent to the PDS.
- Group of dwellings further east on Cross Common Road on the southern outskirts of Dinas Powys, these being Meuhlan, Trem Dyffryn, Holmesdale, Raycroft, Raycroft Annexe, Ashlea, Walnut Tree House, West Down, Cherry Trees, Letchworth, Norbury, The Breeches, Sunny Bank, Ty Wern, Wylde Green, Conigree, Ty-R-Waun, and Penybryn. Closest being 600m to the PDS.

Highways

3.6.13 Much of the Study Area is rural in character, with the settlements of Barry/Sully and Dinas Powys to the south and north respectively. For this reason there are a limited number of highways which are likely to experience views of the Proposed Development, these include:

- A4055/Cardiff Road
- A4231/Barry Docks Link Road
- B4267/Sully Moors Road
- Elm Grove Place
- Heol Y Frenhines
- Green Lane (private road)
- St Cadoc's Avenue
- Cog Road
- Ashby Road
- A network of smaller roads within the settlements of Dinas Powys, Sully and Barry
- A small amount of private access tracks to some of the rural properties

Railways

3.6.14 The Vale of Glamorgan Railway passes through the centre of the Study Area, with stations at Cadoxton and Dinas Powys which is within the Study Area.

Places of Employment

3.6.15 There are a number of places of employment within the Study Area, which include the following:

- Bakelite Synthetics, 750m to the south
- Camp Coconuts, adjacent to PDS, to the south
- Dow Silicones, 525m to the southwest
- Mc Donalds's, adjacent to PDS to the west
- Palmers Vale Business Centre, 825m to the west
- Palmerston Workshops, 775m to the west
- Polaris Industrial Estate, 825 to the southwest
- Ty-Verlon Industrial Estate, 50m to the west

Summary of Visual Receptors to be carried forward for Appraisal

Table 3-4 Summary of visual receptors to be carried forward for appraisal

Visual Receptor	Scoped In / Out
Long Distance Routes	
Capital Walk LDR	Out Views obscured by intervening buildings
National Trails	
Welsh Coastal Path	In Likely to experience views
Local Authority PRoW	
Footpath VG/S13/1/1	In Likely to experience views
Footpath VG/S1/41/1	In Likely to experience views
Footpath VG/S1/14/2	In Likely to experience views
Footpath VG/S1/12/1	In Likely to experience views
Footpath VG/S1/12/2	In Likely to experience views
Footpath VG/S1/11/2	Out Views obscured by intervening vegetation
Footpath VG/S1/11/1	Out Views obscured by intervening vegetation
Footpath VG/S1/10/3	Out Views obscured by intervening vegetation
Footpath VG/S1/10/1	Out Views obscured by intervening vegetation
Footpath VG/S1/13/2	Out Views obscured by intervening vegetation
Footpath VG/S1/9/1	Out Views obscured by intervening vegetation

Footpath VG/S13/1/1	Out Views obscured by intervening vegetation
Footpath VG/S1/33/1	Out Views obscured by intervening buildings & landform
Footpath VG/S1/32/1	Out No highway works in this area
Footpath VG/S1/38/1	Out Views obscured by intervening buildings & landform
Footpath VGS1/3/1	Out Views obscured by intervening buildings & landform
Footpath VG/S1/2/1	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/S1/2/2	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/M2/5/1	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/M2/5/2	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/S1/1/1	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/M2/1/2	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/S1/46/1	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/28a/1	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/26/1	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/25/1	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/25/2	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/28c/2	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/28b/1	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/23/1	Out Views obscured by intervening, vegetation & buildings
Footpath VG/S1/22/1	In Potential for direct effects anticipated

Footpaths VG/S1/21/1, VG/S1/21/2 and VG/S1/21/3	In Potential for limited views
Footpath VG/S1/18/1	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/S1/16/1	Out Views obscured by intervening, vegetation, buildings & landform
Footpath VG/S1/15/1	In Potential for direct effects anticipated
Bridleway VG/S1/45/1	Out Views obscured by intervening, vegetation, buildings & landform
Areas of Recreation	
Camp Coconuts	In Close proximity means views will be unavoidable
Dinas Powys Bowling Club	Out Views obscured by intervening, vegetation, buildings & landform
CRoW Access Areas: <ul style="list-style-type: none"> • Dinas Powys Common • Cross Common 	Out Views obscured by intervening, vegetation, buildings & landform
Dinas Powys Cricket Club	In Potential for filtered glimpses
Dinas Powys FC	Out Views obscured by intervening, vegetation & buildings
Dinas Powys Golf Club	Out Views obscured by intervening, vegetation, buildings & landform
Dinas Powys Lawn Tennis Club	Out Views obscured by intervening, vegetation, buildings & landform
Dinas Powys Library & Activity Centre	Out Views obscured by intervening, vegetation & buildings
Dinas Powys Primary School	Out Views obscured by intervening, vegetation & buildings
Dinas Powys RFC	Out Views obscured by intervening, vegetation, buildings & landform
Footgolf, Driving Range and The Clubhouse Restaurant	Out Views obscured by intervening, vegetation, buildings & landform
Hebron Hall Swimming Pool	Out Views obscured by intervening, vegetation & buildings

Mc Donald's	In Potential for filtered views
Murchfield Community Centre	Out Views obscured by intervening, vegetation & buildings
Murch Bowling Club	Out Views obscured by intervening, vegetation & buildings
Murchfield Playground	In Potential for limited views
Parc Bryn-y-Don including Skate Park	In Close proximity means views are unavoidable
St Andrews Major CIW Primary School	Out Views obscured by intervening, vegetation, buildings & landform
St Richard Gwyn Catholic High School	Out Views obscured by intervening, vegetation, buildings & landform
Residential	
Properties in Dinas Powys including those on Heol Y Frenhines, St Cadoc's Avenue and Elm Grove Place as well as a number of connecting roads	In Close proximity means views are unavoidable
Properties in Sully Including those on Ashby Road and Cog Road	In Potential for distant views
Palmerstown (Suburb of Barry)	Out Views obscured by intervening, vegetation & buildings
Westra (Suburb of Dinas Powys)	Out Views obscured by intervening, vegetation, buildings & landform
Biglis House	Out Views obscured by intervening, vegetation & buildings
Biglis Farm	Out Views obscured by intervening, vegetation, buildings & landform
Group of dwellings to the east of the A4055 on the southern outskirts of Dinas Powys	In Potential for direct effects anticipated
Group of dwellings further east on Cross Common Road on the southern outskirts of Dinas Powys	Out Views obscured by intervening, vegetation, buildings & landform

Highways	
A4055/Cardiff Road	In Likely to experience views
A4231/Barry Docks Link Road	In Likely to experience views
B4267/Sully Moors Road	In Likely to experience views
Elm Grove Place	Out Views obscured by intervening buildings and vegetation
Roads within Dinas Powys including Heol Y Frenhines, Green Lane. St Cadoc's Avenue	In Close proximity means views are unavoidable
Private track to Biglis House	In Potential for direct effects anticipated
Railways	
Vale of Glamorgan Railway	Out Views obscured by intervening, vegetation, buildings & landform
Commercial	
Bakelite Synthetics	Out Views obscured by intervening, vegetation & buildings
Camp Coconuts & neighbouring units	In Potential for direct effects anticipated
Cog Moors, Welsh Water	Out Views obscured by intervening, vegetation, buildings & landform
Dow Silicones	Out Views obscured by intervening, vegetation & buildings
Mc Donalds's	In Potential for direct effects anticipated
Palmers Vale Business Centre	Out Views obscured by intervening, vegetation & buildings
Palmerston Workshops	Out Views obscured by intervening, vegetation & buildings
Polaris Industrial Estate	Out Views obscured by intervening, vegetation & buildings
Ty-Verlon Industrial Estate	Out Views obscured by intervening, vegetation & buildings

Representative Viewpoints

- 3.6.16 After analysis of the overall visual amenity context of the site and its surroundings, and identification of those visual receptors upon which there is the potential for significant effects, a set of Representative Viewpoint (RV) locations have been determined.
- 3.6.17 Some of the RV's correspond with receptors that have been scoped out of the Appraisal, however they are included here to illustrate no visibility.
- 3.6.18 **Table 3-5** presents the locations of the RV's as well as their reference. Summer Viewpoint Photographs have been used to illustrate the Appraisal and are presented in **Figures 6.1 - 6.11**.

Table 3-5 Representative Viewpoint Locations

Viewpoint Reference	Description and Receptors	Distance from Site Boundary
VP1	View north from Ashby Road leading to footpath S13/1/1. Walkers & residents at home	800m
VP2	View north-west from Ashby Road. Residents at home	700m
VP3	View north from farm gateway on B4267. Walkers & road users	850m
VP4	View north along the B4267 towards roundabout. Walkers & road users	25m
VP5	View north-east along footpath S13/11/1. Walkers	625m
VP6	View south-east along footpath S1/14/2. Walkers	Adjacent to Site Boundary
VP7	View south-east along footpath S1/12/1. Walkers	Adjacent to Site Boundary
VP8	Views of approximately 270 degrees from the north-west to the east. Closest being south-west to the Site Boundary. Walkers & road users	Adjacent to Site Boundary
VP9	View west along St Cadoc's Avenue. Walkers & road users	25m
VP10	View south-west from Heol Y Frenhines into the footpath. Walkers & road users	Within Site Boundary
VP11	View west View south-east along footpath S1/15/1. Walkers	450m

4 Design and Mitigation

4.1 The Proposed Development

- 4.1.1 The Proposed Development is shown on the accompanying suite of plans (10058585-ARC-XX-300-DR-A-00001 - 00008). It comprises a non-motorised ATR linking Biglis to Dinas Powys Station.
- 4.1.2 The design comprises:
- 4m and 3m bi-directional ATR, with connections to existing highways and PRow;
 - Upgrades to existing highways, including the provision of on-road cycleways, crossing points and quiet streets; and
 - Connection to existing access to Dinas Powys Station.
- 4.1.3 The ATR runs adjacent to the east of the A4055 until it reaches Parc Bryn-Y-Don. The route will be constructed on an embankment in this location, with a small bridge over Cadoxton River. Existing roadside vegetation will be preserved, except for a small amount of woodland which will be removed to facilitate connections to Sully Moors Road in the south-west and Green Lane to the north-east. Additional woodland and hedgerow planting is proposed along both sides of the embankment to provide visual mitigation.
- 4.1.4 The route then joins the A4055 via a proposed pedestrian crossing, proceeding northwards, before crossing the A4055 and passing through Parc Bryn-Y-Don, where the route runs adjacent to the existing vehicular access. No existing vegetation will be removed along this part of the route and a row of native specimen trees are proposed.

Construction phase

- 4.1.5 A construction compound and welfare facilities will be located in the car park area within Parc Bryn-Y-Don.
- 4.1.6 The anticipated timeframe for the construction phase of the project will be 9-12 months.
- 4.1.7 Common effects can be reduced through the implementation of practices in accordance with the Considerate Constructors Scheme (such as appropriately sited construction compounds, suitable control of construction lighting away from surrounding countryside, limiting material stockpile heights and the implementation of tree protection measures in accordance with *BS5837: Trees in Relation to Design, Demolition and Construction to Construction - Recommendations* (British Standards Institute, 2012).

Lighting during construction

- 4.1.8 The Contractor will develop a Lighting Scheme for the Construction and Operational Stages of the Proposed Development. This will be submitted for approval to the Local Planning Authority.
- 4.1.9 The general principles will include:
- Construction lighting kept to a minimum to facilitate safe working methods whilst preventing light pollution above or near the horizontal;
 - Lamps above 500 lumens should be installed in dark sky friendly fixtures that prevent unnecessary upward light;
 - Point where the light is needed not in a direction that causes a nuisance to neighbours or wildlife;
 - Switch off lighting when not needed. Consider the use of proximity sensors and avoid dusk-till-dawn sensors;
 - Light to the appropriate illuminance;
 - Avoid bright white and cooler temperature LED's; and

- Install at the lowest possible height to achieve required lighting levels.

4.1.10 The contractor will undertake a lighting assessment to manage light impacts. Temporary lighting will be restricted to meet on-site safety and security requirements.

4.2 Landscape design aims and objectives

4.2.1 The aim of the landscape design aspect of the project is to complement the Proposed ATR with native species vegetation, providing visual mitigation and screening of proposed embankments, hard landscape and lighting, whilst connecting with existing Green Infrastructure and habitat networks.

Landscape objectives

- Deliver high-quality hard and soft landscaping, taking into consideration local character and existing Green Infrastructure;
- Achieve a Net Benefit for Biodiversity across the Proposed Development, in accordance with Welsh Government *Diversity, Extent, Condition, Connectivity and Aspects of ecosystem resilience* (DECCA) framework;
- Support ecological aspirations for the wider scheme through the provision of suitable soft landscaping wherever possible; and
- Provide landscape and visual mitigation, where possible to minimise potentially negative impacts identified within this report.

Landscape Design

Soft Landscape

4.2.2 The Soft Landscape Design Proposals are shown on drawing numbers 10058585-ARC-XX-300-DR-A-00001–00008 and comprise:

- Woodland and hedgerow planting adjacent to the Proposed ATR. Species will be a native mix of local provenance, including Oak, Field Maple, Silver Birch, Hawthorn and Hazel.
- Native specimen tree planting within Parc Byn-Y-Don will provide additional structure and screening as the route passes through the park.
- Seeding of species-rich grassland to much of the remaining open space within the PDS will provide additional habitat for pollinators.

Hard Landscape

4.2.3 All areas of hard landscape have been designed so that they are consistent with adjoining areas of existing highway infrastructure. Please refer to Engineers drawings 10058585-ARC-XX-010-DR-C-00004 – 00013 for all aspects of hard surfacing, lighting and fencing.

5 Appraisal

5.1 Overview

- 5.1.1 This section considers the temporary and permanent effects arising from the construction and operation of the Proposed Development and associated landscaping works upon the landscape character and visual amenity of receptors identified in Section 3.
- 5.1.2 Effects of the Proposed Development are considered for each receptor based upon the following:
- Construction Phase
 - Year 1 of the operational phase
 - Residual effects at year 15 of the operational phase
- 5.1.3 An appraisal of night views has not been undertaken as the Proposed Development only includes PIR controlled lighting for the section of the route adjacent to the A4055 which will be intermittent and screened by proposed woodland such that effects will not be readily noticeable.

5.2 Construction Phase Effects

- 5.2.1 As the nature of construction works varies significantly across the PDS route, for the purposes of this Appraisal it has been split into two sections.

The PDS along the A4055/Cardiff Road including Parc Bryn-y-Don

- 5.2.2 This linear section to the south-east of the A4055 involves a considerably more significant construction approach, when compared to the remainder of the scheme.
- 5.2.3 Here there will be raised earthworks to bring the ATR above the flood risk level, which will require taller, heavier plant and machinery. In addition, a small bridge will need to be constructed for over the Cadoxton River which is likely to require a crane or other heavy lifting equipment.
- 5.2.4 An area of existing agricultural land between the A4055 and Cog Moors SSSI will be subject to soil removal to create additional flood capacity, which will involve the use of heavy plant and machinery. Existing field boundary vegetation will be retained, and the area will be returned to agricultural use post-construction, such that visual effects will not be noticeable once operational.
- 5.2.5 The existing footway through Parc Bryn-y-Don would be widened to accommodate more active travel traffic. This will involve an amount of heavy machinery and equipment but will be significantly less than the new section of ATR.
- 5.2.6 A Construction Compound is proposed to be located within the car park at Parc Bryn-Y-Don, which although noticeable, will not differ significantly from existing usage, hence will not appear incongruent.
- 5.2.7 The Proposed Development will deliver a **Medium** magnitude of change, resulting in a **Minor (adverse)** level of effect.

The PDS through Dinas Powys to the Train Station

- 5.2.8 Once the route exits the north of Parc Bryn-Y-Don, the Proposed Development involves considerably smaller-scale construction activity, albeit in close proximity to residential receptors, so highly visible. Works in this section of the route largely comprise upgrades to existing footways, new road markings, tactile paving and dropped kerbs to provide residential access. There are also two proposed pedestrian crossings/raised tables at the north of Heol-Y-Frenhines and south of St Cadoc's Avenue respectively.

- 5.2.9 These are generally relatively small-scale construction interventions, which will take a short time to complete and will therefore result in more localised, less visually intrusive effects, however it is likely there will be a degree of temporary noise, dust and disruption.
- 5.2.10 Construction work is likely to involve the use of pneumatic breakers and disc-cutting equipment, as well as earth moving and resurfacing plant and equipment. Temporary highway and footway closures or diversions may be required and tree protection measures may also be required, which will add noticeable visual clutter.
- 5.2.11 As this section of the route is located adjacent to high sensitivity residential visual receptors, it is important that effects are reduced with thorough implementation of Considerate Construction Practices (such as appropriately sited signage, lighting, screening and working within designated hours). It would be envisioned that the work would take place in phases to minimise disruption.
- 5.2.12 The Proposed Development will deliver a **Low** magnitude of change, resulting in a **Minor (adverse)** level of effect.

Lighting during construction

- 5.2.13 The Contractor will develop a Lighting Scheme for the Construction and Operational Stages of the Proposed Development. This will be submitted for approval to the Local Planning Authority.
- 5.2.14 The general principles will include:
- Construction lighting kept to a minimum to facilitate safe working methods whilst preventing light pollution above or near the horizontal;
 - Lamps above 500 lumens should be installed in dark sky friendly fixtures that prevent unnecessary upward light;
 - Point where the light is needed not in a direction that causes a nuisance to neighbours or wildlife;
 - Switch off lighting when not needed. Consider the use of proximity sensors and avoid dusk-till-dawn sensors;
 - Light to the appropriate illuminance;
 - Avoid bright white and cooler temperature LED's; and
 - Install at the lowest possible height to achieve required lighting levels.
- 5.2.15 The contractor will undertake a lighting assessment to manage light impacts. Temporary lighting will be restricted to meet on-site safety and security requirements.

5.3 Landscape Character Effects

LCA 17 – Cog Moors (Sensitivity Low)

- 5.3.1 The southern section of the PDS passes through the centre of LCA 17 (see **Figure 2 – Landscape Character**).
- 5.3.2 Development within the LCA comprises the section of the ATR to the east of the A4055 and the section of the route that passes through parc Bryn-Y-Don.
- 5.3.3 Where the ATR runs adjacent to, and within the boundary, of the A4055, direct effects will be localised. Although sections of the route will require the construction of an embankment and a bridge over Cadoxton River, this will be adjacent to, and of a similar level topographically to the existing highway, thereby maintaining the existing predominantly flat landscape in this area. The narrow width of the Proposed ATR means that only a small amount of the existing agricultural land in this location will be replaced by hardstanding.

- 5.3.4 Where the route passes through Parc Bryn-y-Don, the Proposed Development is limited to the widening of the existing vehicular access through the park and the provision of a pedestrian crossing. Direct effects will again be localised, limited in scale, and not incongruent with existing development.
- 5.3.5 Except for two locations, where a small amount of existing woodland is removed to facilitate the connection with Sully Moors Road and Green Lane, existing hedgerows and woodland will be preserved and enhanced with additional planting, which is likely to ameliorate the detraction caused by the existing A4055 to a degree. Changes to the overall fabric of the landscape of the LCA will be limited.
- 5.3.6 The Proposed Development will deliver a **Medium** magnitude of change, resulting in a **Minor (adverse)** level of effect, reducing further by year 15 to **Minor to Negligible**
- LCA 24 – Sully Ridge/Cosmeston (Sensitivity Low)**
- 5.3.7 A short section of the PDS passes through the western edge of LCA 24.
- 5.3.8 The extent of this LCA is shown on **Figure 2 – Landscape Character**.
- 5.3.9 Development within the LCA is limited to upgrades to the existing highway, which are contained within the existing highway boundary. There will be no direct effects upon the wider character area.
- 5.3.10 The Proposed Development will deliver a **Low** magnitude of change, resulting in a **Minor to Negligible (adverse)** level of effect, reducing further by year 15 to **Negligible**

5.4 Visual Effects

National Trails

- 5.4.1 National Trails are typically recognised for their leisure and scenic qualities. The section of the Trail which is likely to experience views towards the Proposed Development follows the route of an existing highway, with no notable views, hence it is considered that the Trail in this location is of **Medium** sensitivity.

The Welsh Coastal Path (RV 3)

- 5.4.2 The Welsh Coastal Path enters the Study Area from the south, proceeding northwards along the B4267/Sully Moors Road, where it passes through the western extent of the PDS approximately 30m from the Proposed Development, before turning west on to the A4055 towards Barry, heading away from the PDS.

Year 1

- 5.4.3 Glimpses of the Proposed Development would be possible through gaps in roadside vegetation as the PRoW proceeds northwards along Sully Moors Road, partially obscured by existing field boundary vegetation.
- 5.4.4 The removal of some of the existing woodland adjacent to Sully Moors Road to facilitate the connection to the ATR, means that this junction point would be clearly visible at close proximity, albeit filtered through existing trees to the west of the road and viewed in the context of existing highway infrastructure.
- 5.4.5 It is considered that the Proposed Development would result in a **Medium** magnitude of change, leading to a **Moderate (adverse)** level of effect.

Year 15

- 5.4.6 At year 15, vegetation to the east of the ATR would have reached a level of maturity where views from much of the route would be screened. Vegetation removed to facilitate the connection to the Sully Moors Road will have regrown and additional planting in this location will have matured to provide

additional screening, however the entrance to the ATR will remain visible and filtered views of the wider development would still be possible during winter months.

- 5.4.7 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Minor (adverse)** level of effect.

Local Authority PRow

- 5.4.8 PRow within the Study Area are generally unremarkable routes with no views of recognised importance hence it is considered that they are of **Medium** sensitivity.

Footpath VG/S13/1/1 & VG/S1/41/1 (RV's 1 & 5)

- 5.4.9 Footpath VG/S13/1/1 descends gradually as it proceeds northwards from Ashby Road (RV 1), before plateauing where the route approaches the junction with Footpath VG/S1/41/1 (RV 5) and continuing northwards until it meets the ATR.

Year 1

- 5.4.10 The Proposed Development will be visible from the elevated southern extents of the PRow, set against the backdrop of the existing highway and roadside vegetation of the A4055, so it would not appear incongruent. As the route proceeds northwards, views become increasingly obscured by intervening field boundary vegetation, until it crosses an access track adjacent to the Cadoxton River, approximately, after which there would be unobstructed close-proximity views of the proposed bridge and embankment, in the absence of mature proposed screening vegetation.
- 5.4.11 It is considered that the Proposed Development would result in a **Medium** magnitude of change, leading to a **Moderate (adverse)** level of effect.

Year 15

- 5.4.12 At year 15, proposed vegetation to the east of the PDS will have matured sufficiently to largely obscure views of the ATR beyond, both from elevated sections of the route to the south, as well as close proximity views adjacent to the Cadoxton River.
- 5.4.13 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Minor (adverse)** level of effect.

Footpath VG/S1/14/1 & VG/S1/14/2

- 5.4.14 Footpath VG/S1/14/2 begins to the west of the A4055, proceeding northwards to the west of the hedgerow adjacent to the highway, until it connects with Footpath VG/S1/14/1, which continues northwards until it terminates at the A4055 to the south of Dinas Powys.

Years 1 and 15

- 5.4.15 Easterly views towards the PDS are screened by existing roadside vegetation for the majority of the route. Glimpses may be possible through roadside vegetation where Footpath VG/S1/14/2 joins the A4055. More open views are possible where Footpath VG/S1/14/1 passes through Parc Bryn-y-Don, although the Proposed Development in the location is limited and in context with the existing character, comprising the addition of the ATR route adjacent to the existing vehicular access, a new pedestrian crossing. A proposed row of specimen trees, will help to soften the presence of the development in the setting and provide increasing levels of screening as they mature.
- 5.4.16 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Minor (adverse)** level of effect, reducing to **Negligible** by Year 15.

Footpath VG/S1/12/1 & VG/S1/12/2 (RV 7)

- 5.4.17 Footpath VG/S1/12/2 proceeds westwards from its junction with the A4055, connecting with Footpath VG/S1/12/1 after approximately 15m, which continues west until it reaches Biglis Pumping Station.

Year 1

- 5.4.18 Glimpses of the Proposed Development may be possible through existing roadside vegetation to the east of the A4055 from the easternmost extents of the route, becoming increasingly obscured as the route proceeds westwards, until the combined screening effects of intervening vegetation will obscure visibility completely beyond Biglis Pumping Station.
- 5.4.19 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (adverse)** level of effect.

Year 15

- 5.4.20 Proposed woodland planting to the west of the Proposed ATR would have reached a level of maturity where, combined with existing roadside vegetation, views of the ATR will be completely obscured, resulting in **No Change** to the view.

Footpath VG/S1/22/1 (RV 9)

- 5.4.21 Footpath VG/S1/22/1 comprises a short distance of paved footway between Sunnycroft Lane and St Cadoc's Avenue.

Year 1 & Year 15

- 5.4.22 Views of the Proposed Development will be possible towards the western extent of the route, where it meets St Cadoc's Avenue (see VP9). However, the proposed minor changes to the kerb and pavement design will not noticeably change the composition of the view once complete.
- 5.4.23 It is considered that the Proposed Development would result in **No Change** to the view, leading to a **Neutral** level of effect.

Footpath VG/S1/15/1 (RV 11)

- 5.4.24 Footpath VG/S1/15/1 runs through woodland and open fields, over a small hill between Cross Common Road and the A4055 via Green Lane. As the route reaches the summit of the hill, vegetation clears, permitting westerly and south-westerly views towards the PDS. The route then descends to connect with Green Lane, which it follows until it reaches the PDS at the A4055.

Year 1

- 5.4.25 Views from much of the route will be obscured by existing vegetation, however there will be elevated glimpses of the more southerly section of the ATR, as the footpath reaches the summit of the hill (RV 11). These glimpses will be distant and partially obscured by existing vegetation, with the ATR viewed in the context of the existing linear form of the A4055.
- 5.4.26 There will also be close proximity views as the route approaches the PDS from Green Lane. Changes to the existing junction layout, including the removal of vegetation to facilitate the ATR route and the addition of a pedestrian crossing, whilst highly noticeable, will not significantly affect the existing character of the view.
- 5.4.27 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Minor (adverse)** level of effect.

Year 15

- 5.4.28 At year 15, proposed replacement vegetation to the east will have reached maturity, recreating the woodland edge, softening the presence of development and helping to embed it within its setting.
- 5.4.29 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (adverse)** level of effect.

Leisure Receptors

- 5.4.30 The leisure receptors listed below are likely to experience views of the proposed Development, however these views would be limited, and secondary to the leisure activity they are enjoying hence it is considered that they are of **Low** sensitivity.

Camp Coconuts

- 5.4.31 The Camp Coconuts building and external play space is located immediately to the south of the PDS, where it meets Sully Moors Road. The building appears to have no windows facing towards the PDS, however there is an external play area which borders the PDS at its northern end, which is currently screened by existing woodland and hedgerow.

Years 1 and 15

- 5.4.32 Some of the woodland adjacent to the northern boundary, will be removed to facilitate access for the proposed ATR. To avoid opening up views into the external play space, a close-board fence will be installed along the boundary adjacent to, or replacing the existing palisade security fence (similar to the existing fence along the southern boundary adjacent to the car park). Whilst there will be a noticeable change to the wooded character of northerly views, the hedgerow boundary to the east will be retained and the sense of enclosure provided by the canopy of the taller trees will be largely maintained.
- 5.4.33 It is considered that the Proposed Development would result in a **Medium** magnitude of change, leading to a **Minor (adverse)** level of effect.

Dinas Powys Cricket Club

- 5.4.34 The cricket pitch and clubhouse are located adjacent to the west of the PDS, immediately south of the Dinas Powys urban fringe. The cricket pitch is surrounded on three sides by mixed hedgerows and by residential properties to the north.

Year 1 & Year 15

- 5.4.35 Views towards the Proposed Development are largely obscured by existing boundary vegetation to the west of the PDS. Glimpses may be possible from the car park entrance and through any gaps in vegetation along the tree lined path heading north into Dinas Powys. The widening of the existing path and additional avenue of trees is in-keeping with the character of the area.
- 5.4.36 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (neutral)** level of effect.

McDonald's

- 5.4.37 The McDonalds building is located 15m from the PDS boundary, adjacent to the roundabout linking the A4055, A4231 and B4267. Views across the roundabout for visitors to the restaurant or using the drive through are partially screened by amenity planting on the perimeter of Mc Donalds. However, glimpses are likely through gaps.

Years 1 and 15

- 5.4.38 Glimpses of the entrance to the ATR are likely, due to the removal of trees adjacent to Camp Coconuts to facilitate the ATR route. However, there will be limited impact upon the composition of views, which will continue to be characterised by highway infrastructure.
- 5.4.39 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (adverse)** level of effect.

Murchfield Playground

Murchfield Playground is located adjacent to St Cadoc's Avenue, linked with a pedestrian bridge over East Brook. A path runs along the southern boundary of the playground with open views across East Brook towards the road.

Year 1 & Year 15

- 5.4.40 The playground has open views towards the PDS. However, limited proposed changes to the kerb and pavement design in this location will not noticeably affect views for users once constructed.
- 5.4.41 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (neutral)** level of effect.

Parc Bryn-y-Don including Skate Park

- 5.4.42 The Proposed Development passes through Parc Bryn-y-Don. It enters through the park's entrance off the A4055, following the existing access road past the Skate Park and car park, before proceeding northwards until it leaves the Park where it meets the residential fringe of Dinas Powys. Development comprises the ATR itself, which runs adjacent to the existing highway, but also includes a pedestrian crossing and minor changes to the existing highway layout at the entrance.

Years 1 and 15

- 5.4.43 Views of the Proposed Development are possible across much of the park, apart from the field to the north-east, which is segregated by a substantial belt of mature trees. As the path heads north towards Dinas Powys, views will be partially screened by the row of existing mature trees on either side. Whilst the Proposed Development will undoubtedly be noticeable, views will be partially screened by proposed specimen tree planting adjacent to the route, which will increasingly filter views and help to separate the route from the wider park setting as they reach maturity as well as providing habitat and amenity benefits.
- 5.4.44 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Minor to Negligible (beneficial)** level of effect.

Residential Receptors

- 5.4.45 The Residential Receptors listed below are either situated on roads in close proximity to the Proposed Development, where views will be unavoidable, or they occupy an elevated position with an open aspect that permits clear views, hence they are considered to be of **High** sensitivity.

Residential Properties within Dinas Powys

- 5.4.46 A significant part of the route runs adjacent to existing footways on roads within Dinas Powys including Heol Y Frenhines, St Cadoc's Avenue and Elm Grove Place as well as a number of connecting roads. Many of the dwellings along the route face these roads, with views of modifications to the highways and footways likely to be unavoidable.

Years 1 & Year 15

- 5.4.47 Once operational the Proposed Development will generally have little effect upon the visual amenity of residential receptors, as the proposals are mostly limited to relatively minor changes to the existing highway infrastructure. Dwellings along Heol Y Frenhines, in particular house numbers 41, 43, 45, 47 and 49 (RV 10) are likely to experience slightly more noticeable effects, as they are located adjacent to the proposed connection to Parc Bryn-y-Don. However, given the proposed link is already used by pedestrians accessing Parc Bryn-y-Don, this will not be incongruent with the existing use and highway setting.
- 5.4.48 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Moderate to Minor (adverse)** level of effect.

Residential properties at the northern urban fringe of Sully

5.4.49 The village of Sully is located approximately 775m to the south of the PDS. Topographically It sits at a higher elevation than the PDS, so north-facing properties along the urban fringe, particularly those on Ashby Road (RV 2) and to a lesser degree Cog Road, are likely to have views across the floodplain towards the PDS. The linear nature of the route means that it will be visible across a wide field of view.

Year 1

5.4.50 The Proposed Development is located on an embankment to the south of the existing A4055, so it is likely to be noticeable, particularly in the absence of mature mitigation planting, against the backdrop of existing roadside vegetation. The A4055 has no street lighting, so proposed lighting is likely to be noticeable at night, albeit in the context of the lights of vehicles using the route. Lighting columns are designed to minimise light spill, and a PIR system is proposed, which will help mitigate effects from this light source.

5.4.51 It is considered that the Proposed Development would result in a **Medium** magnitude of change, leading to a **Major to Moderate (adverse)** level of effect.

Year 15

5.4.52 At year 15, proposed mitigation planting to the south of the ATR will have matured to the extent that it will provide effective screening for much of the Proposed Development beyond. Glimpses of taller structures may still be visible. Filtered glimpses of lighting at night may be visible through trees, albeit set against the backdrop of existing light spill from vehicles using the A4055 beyond.

5.4.53 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Moderate to Minor (adverse)** level of effect.

Group of dwellings to the east of the A4055 on the southern outskirts of Dinas Powys

5.4.54 There are a number of large residential properties adjacent to the PDS to the east of the A4055/Cardiff Road, including White Acres, Lindau, Arnold House and Shangri La. These properties are set back from the road to varying degrees with varying amounts of boundary vegetation to screen views towards the PDS. No additional lighting is proposed in this location.

Years 1 and 15

5.4.55 The Proposed Development in this location is generally limited to relatively minor changes to the existing highway and footways, which will be largely obscured by existing boundary vegetation and walling, There is likely to be an increase in the number of people passing the properties, which will be noticeable to varying degrees, dependent on the amount of existing screening. This is not likely to alter the overall composition or character of views from these properties.

5.4.56 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Minor (adverse)** level of effect.

Highway Receptors

5.4.57 Highways within the Study Area are not associated with any views of recognised importance and are typically either bordered by established roadside vegetation, or located within an urban context, hence they are considered to be **Low** sensitivity receptors.

Users of A4055/Cardiff Road

5.4.58 Starting at Sully Moors Road, The Proposed Development proceeds north adjacent to the east of the A4055/Cardiff Road for approximately 1km, before the route joins the highway and continues northwards for a further 350m. The ATR then leaves the highway, passing through Parc Byn-Y-Don, before crossing the A4055 again to the north of Heol Y Frenhines.

Year 1

- 5.4.59 Views towards the section of the ATR to the east of the A4055 will be largely obscured by existing vegetation, except for fleeting glimpses through gaps and field gates, which would not be readily noticeable and would not appear incongruent in the context of the existing highway. Where the ATR joins the highway, changes are generally limited to relatively minor enhancements to existing kerbs and footways, resulting in little change to the existing highway character.
- 5.4.60 It is considered that the Proposed Development would result in a **Low** magnitude of change, leading to a **Minor to negligible (adverse)** level of effect.

Year 15

- 5.4.61 At year 15, proposed vegetation between the A4055 and the ATR will have matured to the extent that it provides additional screening of the route beyond, further reducing the noticeable presence of development.
- 5.4.62 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (adverse)** level of effect.

Users of A4231/Barry Docks Link Road

- 5.4.63 The A4231/Barry Docks Link Road meets the south of the PDS at the A4231/A4055/Sully Moors Road Roundabout. Views of the Proposed Development are obscured for much of the route by existing roadside vegetation, only opening up as the route approaches the roundabout.

Years 1 and 15

- 5.4.64 Creating the entrance to the ATR will involve the removal of some trees, which will be noticeable from the eastern extents of the route, albeit not altering the overall composition of the view. Views of the wider development to the north-east will be largely obscured by existing roadside vegetation to the south-east of the A4055/Cardiff Road and increasingly by proposed woodland planting as it matures.
- 5.4.65 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (adverse)** level of effect.

Users of B4267/Sully Moors Road

- 5.4.66 The B3267/Sully Moors Road connects with the PDS from the south at the roundabout with the A4231 and A4055. Views towards the PDS for much of the route are obscured by existing roadside vegetation, except for occasional glimpses through gaps.

Years 1 and 15

- 5.4.67 The entrance to the ATR will involve the removal of some trees, which will be visible from the northern extents of the Sully Moors Road, permitting views along the western extents of the ATR. This will become less noticeable over time as proposed planting matures. The overall composition and character of the view will not be noticeably altered.
- 5.4.68 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (adverse)** level of effect.

Users of Highways within Dinas Powys

- 5.4.69 A significant part of the route runs adjacent to existing footways on roads within Dinas Powys including Heol Y Frenhines, St Cadoc's Avenue and Elm Grove Place as well as a number of connecting roads.

Years 1 & Year 15

- 5.4.70 Once operational the Proposed Development will generally have little effect upon the visual amenity of users of highways within Dinas Powys, as the proposals are mostly limited to relatively minor changes

to the existing highway infrastructure, such as tactile paving, crossing points and road markings. These changes will not be incongruent with the existing highway setting.

- 5.4.71 It is considered that the Proposed Development would result in a **Negligible** magnitude of change, leading to a **Negligible (neutral)** level of effect.

Users of Private track to Biglis House (RV 7)

- 5.4.72 The private track to Biglis House adjoins the PDS on the western side of the A4055/Cardiff Road. It follows the same route as Footpath VG/S1/12/1 and VG/S1/12/2, which have already been considered in the PRow section of this Appraisal.

Employment Receptors

Camp Coconuts & Neighbouring Units

- 5.4.73 Please refer to Appraisal in Leisure Receptors

McDonalds's

- 5.4.74 Please refer to Appraisal in Leisure Receptors

6 Summary and Conclusion

- 6.1.1 The location and design of the ATR has been carefully considered in terms of managing potential Landscape and Visual effects, with existing vegetation retained wherever possible and extensive planting proposed to deliver both visual mitigation and habitat connectivity.

Landscape Effects Summary

- 6.1.2 The location of the Proposed Development, either within or immediately adjacent to existing highway infrastructure, means that it is in context with its surroundings. Landscape effects are localised and will be most noticeable during the construction phase, reducing considerably once operational and further still once proposed mitigation planting has matured at year 15. Residual effects are reduced to the extent that the Proposed Development will not significantly alter the character of the wider LCA's within which it is located.

Visual Effects Summary

- 6.1.3 Whilst the ZTV appears to show extensive visibility of the Proposed Development across the Study Area, it does not take in to account screening from built form, or vegetation. It is simply a tool to indicate the potential for visibility, which is then confirmed during subsequent field work.
- 6.1.4 The photographic sheets which accompany the Appraisal clearly illustrate the extent to which views to the Proposed Development are likely to be restricted by existing vegetation (particularly in summer months), built form and landform. Where residual views of the Proposed Development (in particular its proposed lighting, hard surfacing, signage and fencing) are likely to be experienced by sensitive receptors, the planting of native-species hedgerow, trees and woodland has been planned to mitigate such adverse effects.
- 6.1.5 Development within the urban section of the route as it passes through Dinas Powys to the north, is limited to relatively minor interventions and enhancements to the existing highways, bringing about minor adverse visual effects, which would largely be restricted to the construction phase only.
- 6.1.6 Development within the section of the route to the south of Dinas Powys is considerably larger in scale, involving earthworks to construct the embankment to raise the route above the floodplain as well as the creation of additional flood capacity.
- 6.1.7 The Proposed Development in this location is likely to be visible from receptors to the east, particularly during the construction phase, which is likely to involve heavy machinery and a crane (for installation of the small bridge over the Cadoxton River). This will reduce considerably at year 1 of operation, although there will still be some visibility in the absence of mature mitigation planting.
- 6.1.8 By year 15, proposed mitigation planting to the east of the ATR will have reached a level of maturity where it is able to deliver effective visual mitigation, reducing visibility and resultant level of effect.

Conclusion

- 6.1.9 It is considered that the Proposed Development would not result in any unacceptable long-term adverse landscape or visual effects.

7 References

- British Standards Institute. (2012). *BS5837: Trees in Relation to Design, Demolition and Construction to Construction - Recommendations* .
- Council of Europe. (2000). *The European Landscape Convention (ELC)*. Council of Europe.
- Landscape Institute and IEMA. (2013). *Guidelines for Landscape and Visual Impact Assessment (GLVIA3)* . Routledge.
- Natural Resources Wales. (2014). *National Landscape Character*.
- Natural Resources Wales. (2016). *Area summary for South Wales Central*.
- Natural Resources Wales. (2016). *LANDMAP*.
- The Landscape Institute. (2019). *Technical Guidance Note 06/19 - Visual Representation of Development Proposals*.
- The Landscape Institute. (2021). *TGN 02/21. Assessing landscape value outside National Designations*.
- The Landscape Institute. (2024). *Technical Guidance Note LITGN-2024-01* .
- UK Government. (2000). *Countryside and Rights of Way Act*.
- Vale of Glamorgan Council. (2008). *Designation of Landscape Character Areas - Final Report*.
- Vale of Glamorgan Council. (2017). *Vale of Glamorgan Local Development Plan 2011-2026*.
- Vale of Glamorgan Council. (2018). *SPG - Travel Plan*.
- Vale of Glamorgan Council. (2018). *SPG - Trees, Woodlands, Hedgerows and Development*.
- Welsh Government. (2011). *Active Travel (Wales) Act*.
- Welsh Government. (2016). *The Environment (Wales) Act*.
- Welsh Government. (2024). *Planning Policy Wales - Edition 12*.

Appendix A

Methodology

This Landscape and Visual Appraisal (LVA) was carried out with reference to the best practice guidelines for Landscape and Visual Impact Assessment as set out in the Guidelines for Landscape and Visual Impact Assessment (3rd edition, 2013) (GLVIA3).

The appraisal approach and process is summarised in the flow diagram below from GLVIA3:

3 Principles and overview of processes

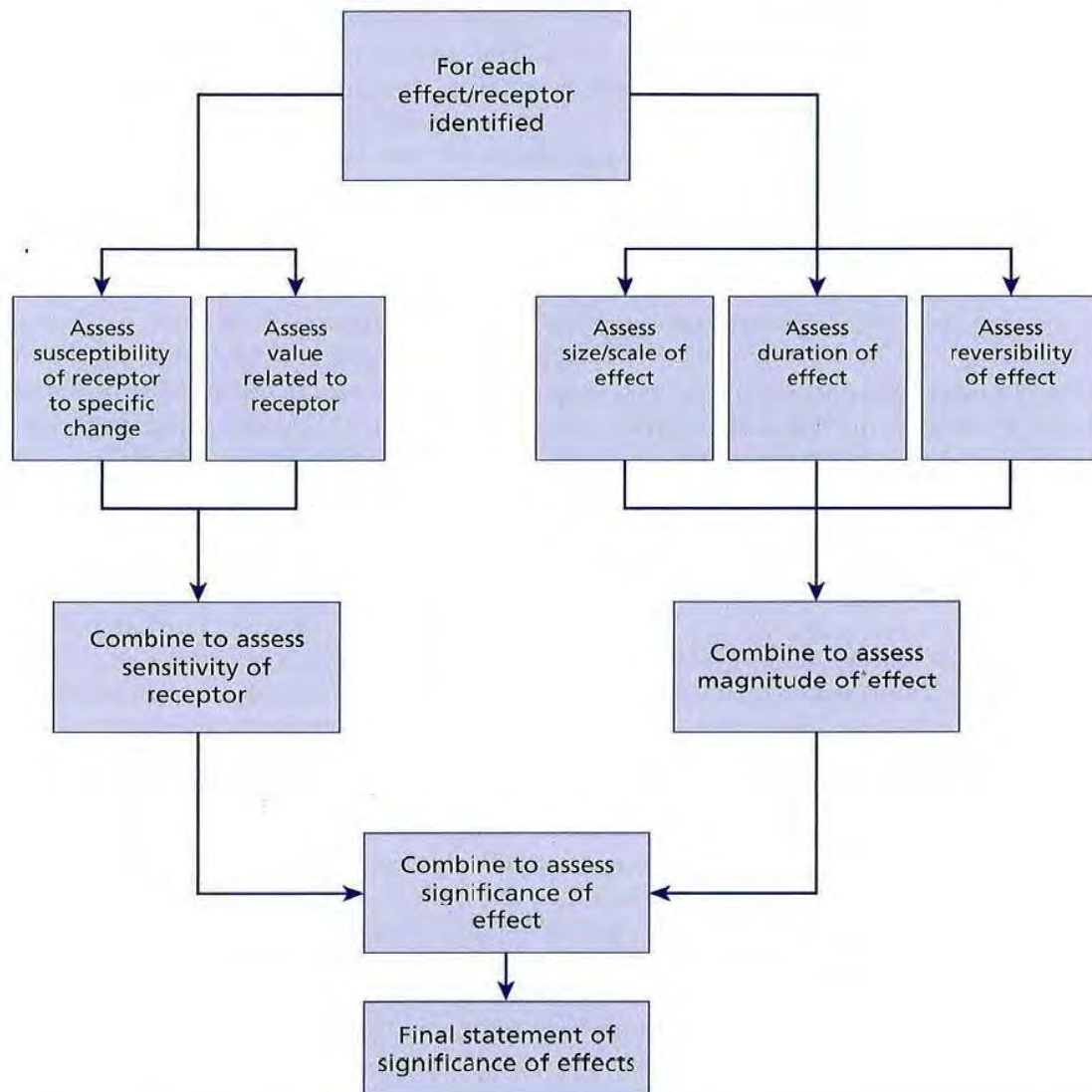


Figure 3.5 Assessing the significance of effects

In the text below there are a number of tables setting out the decision-making framework for assessing sensitivity and magnitude and how these are considered together to reach an appraisal of level of effect.

In all cases these tables are guidelines, not hard and fast rules. Conclusions about the sensitivity of receptors, the magnitude of impacts and the significance of effects are always based on professional judgement.

Assigning Value and Sensitivity

Landscape Receptors

Landscape effects can be defined as the changes in the fabric, character and quality of the landscape as a result of a development, through:

- Direct effects upon the landscape fabric (specific features and elements that make up the landscape);
- Indirect effects upon the overall patterns of elements and on the perceptual and aesthetic aspects that give rise to landscape character and regional and local distinctiveness; and
- Effects upon valued landscapes such as public open space, and statutorily designated heritage assets and designated nature conservation sites with public access.

The sensitivity of the landscape receptors has been arrived at by considering the value and susceptibility of the receptor to the change proposed, generally in accordance with Tables 1 and 2 below.

Table 1: Landscape Receptor Value

Value	Recognition	Features	Quality / Condition
High	Typically a landscape or feature of international or national recognition: World Heritage Sites, National Parks, National Scenic Areas, Gardens and Designed Landscapes.	Typically a strong sense of place with landscape / features worthy of conservation; Absence of detracting features to occasional detracting features.	A very high quality landscape / feature; attractive landscape / feature; exceptional / distinctive.
Medium	Regional recognition or undesignated, but locally valued landscape / features: Council landscape designation; Local Landscape Areas, Country Parks, Regional Parks.	Typically a number of distinguishing features worthy of conservation; evidence of some degradation and some detracting elements.	Ordinary to good quality landscape / feature with some potential for substitution; a reasonably attractive landscape / feature; fairly typical and commonplace.
Low	Typically an undesignated landscape / feature.	Few landscape features worthy of conservation, evidence of degradation with many detracting features.	Ordinary landscape / feature with high potential for substitution; quality that is typically commonplace and unremarkable; limited variety or distinctiveness.

Table 2: Susceptibility of the Landscape Receptor to Change

Value	Recognition
High	Low ability to accommodate the specific proposed change; undue consequences for the maintenance of the baseline situation (receptor value) and / or achievement of relevant planning policies / strategies.
Medium	Moderate ability to accommodate the specific proposed change; some undue consequences for the maintenance of the baseline situation (receptor value) and / or achievement of relevant planning policies / strategies.
Low	High ability to accommodate the specific proposed change; little or no undue consequences for the maintenance of the baseline situation (receptor value) and / or achievement of relevant planning policies / strategies.

Visual Receptors

Visual effects relate to changes in available views and the effect of those changes on people, including:

- the direct effects of the Proposed Development on the content and character of views (e.g. through intrusion or obstruction and / or the change or loss of existing elements in the view); and
- the overall effect on the change on visual amenity.

The sensitivity of a visual receptor reflects their susceptibility to change and any values which may be associated with the specific view. It varies depending on a number of factors such as the activity of the viewer, their reasons for being there and their expectations and the duration of view.

Certain views are highly valued for either their cultural or historical associations, which can increase the sensitivity of the viewer. However, whilst a valued view may serve to increase the overall visual receptor sensitivity, a low value will not necessarily reduce sensitivity.

The sensitivity of these receptors has been arrived at by considering the susceptibility of the visual receptor to the change proposed and any values associated with the particular view, guided by Tables 3 and 4 below.

Table 3: Values Associated with Views

Value	Recognition	Indicators of value
High	Recognised views from nationally or internationally important landscape or heritage resources e.g. National Parks or World Heritage Sites (WHS); important views identified in planning policies or statutory documents.	High value / celebrated view; referred to in national or international guide books, tourist guides etc.; literary and art references; presence of interpretive facilities (e.g. visitor centre).

Medium	Recognised views from local or regionally important landscape or heritage resource, such as Local Landscape Areas or Conservation Areas; may be identified in local planning policies or supplementary planning documents.	Moderately valued view; referred to in local or regional guide books, tourist maps etc.; local literary and art references; presence of some interpretive facilities (e.g. parking places or sign boards)
Low	Views of no recognised importance; not identified in any planning policies or supplementary planning documents.	Ordinary view; not referred to in guide books, tourist maps; no literary or art references; no interpretive facilities.

Table 4: Susceptibility of the Visual Receptor to Change

Value	Recognition
High	Residents at home; visitors to major landscape or heritage resources and other attractions; users of long-distance recreational trails such as national trails and mountain access routes; visitors to landscape and heritage resources and other attractions where views of the surroundings are an important contributor to appreciation / experience / enjoyment.
Medium	Users of roads; users of public open space and local public rights of way; visitors to landscape and heritage resources and other attractions where views of the surroundings are a contributor to appreciation / experience / enjoyment.
Low	People at their place of work; shoppers; people engaged in recreational activities where the view of the surroundings is secondary to the enjoyment of the activity.

Assessing Magnitude of Change

The magnitude of landscape and visual change depends upon a combination of factors including the size, scale and nature of change in relation to the context; the geographical extent of the area influenced; and its duration and reversibility, as summarised in **Table 5** below.

Table 5: Magnitude of Landscape and Visual Change

Value	Size, Scale and Nature	Geographic Extent	Duration and Reversibility
High	Occupies much of the view or obstructs a significant portion. Forms a large or very noticeable or discordant element.	Ranging from notable change over extensive area to intensive change over a more limited area.	Long term; permanent / non-reversible or partially reversible.

	Considerable change to key features or many existing elements of the landscape. Introduces elements considered totally uncharacteristic to the existing landscape. Very noticeable.		
Medium	Occupies a noticeable portion of the view or obstructs a noticeable portion. Forms a noticeable discordant element. Some considerable change to existing landscape elements and /or landscape character; discernibly changes the surroundings of a receptor, such that its baseline is partly altered. Readily noticeable.	Moderate changes in a localised area.	Medium term; semi-permanent or partially reversible.
Low	Occupies a small portion of the view; small change to existing landscape elements and / or landscape character; Slight, but detectable impacts that do not alter the baseline of the receptor materially. Not readily noticeable.	Minor changes in a localised area.	Short term / temporary; partially reversible or reversible.

Level of Effect Criteria

The level of landscape and visual effect is assessed based on the sensitivity of the affected receptor, and the magnitude of change resulting from the Proposed Development, as set out for each above. The combined sensitivity and magnitude used to determine the level of effect is summarised in **Table 6** below. Note that effects can be either 'beneficial' or 'adverse' and in some cases 'neutral' (neither beneficial nor adverse).

Table 6: Level of Landscape and Visual Effect

Magnitude	Sensitivity		
	High	Medium	Low
High	Major	Major to Moderate	Moderate to Minor
Medium	Major to Moderate	Moderate	Minor

Low	Moderate to Minor	Minor	Minor to Negligible
Negligible	Minor	Negligible	Negligible
No Change	Neutral	Neutral	Neutral

It should be noted that this matrix is intended as a framework only and that the level of effect will vary depending on the circumstances, the type and scale of development proposed, the baseline context and other factors.

The gradations of magnitude of change and level of effect used in the Appraisal represent a continuum; the appraiser uses professional judgement when gauging the level of effect.

Appendix B

LANDMAP Visual Sensory Landscape Character at Local Level

The following eight distinct VSLCAs have been identified within the 1km Study Area. These are illustrated on **Figure 2**:

- **2790 – Barry** - The area of Barry is urban Set on an undulating to hilly landform with a large flat coastal plain and Barry Island, it is the largest town in the Vale. The highest point in Barry is approximately 90m AOD near the northwest section of the town. The lowest point is approximately 5m AOD next to the Bristol Channel. Barry has a Victorian core of 4 to 5 storey brick buildings with stone detailing around walls and doors. Whilst the buildings at the core have remained mostly intact these have been modified over the years with signage etc. A new shopping village has been built near to the existing shopping centre. Designed as buildings surrounded by parking, rather than as perimeter blocks, this shopping village has altered the structure and grain of the town. The inner core is also made up of Victorian terrace houses many of which have been inappropriately renovated. The outer suburbs of Barry are made up of a mixture of building styles from 1920's to 1970's housing. Some close to the coast such as round the Knap are attractive. Many outer areas have a discordant appearance. Part of Barry's edge to the east has been developed with hypermarkets, McDonalds outlets and cinemas as well as major industrial complexes. This presents a poor quality entry to the town and lacks any distinctive character of place. The A4231 acts as a boundary to the east and the A4226 does to an extent to the north although this has been bridged by housing and commercial development. The docks area from a natural visual focus for the main part of the town. The docks still functions to an extent while other parts are being redeveloped but the area appears open at present. Barry Island, once a major tourist destination, is now lower key with a promenade and housing on the sensitive peninsula replacing the Butlins Camp. Overall the town is very difficult to find one's way around due to the confusing road pattern and lack of coherent urban structure. Change detection 2014: considerable on-going redevelopment of docks area.
- **2793 - Dinas Powys** - The area of Dinas Powys may be described as urban. It is situated on the river Cadoxton and the associated valley slopes and hills. The highest point is approximately 50m AOD towards Eastbrook the lowest approximately 10m AOD near Cog Moors. Dinas Powys has a small Victorian core (mostly intact) of stone and brick buildings, arranged around a triangular park atop a hill, complete with trees and flower baskets Modern housing estates have significantly extended the village including across the A4055. Built approximately between the 1950's to 1970's these newer housing estates often lack quality open spaces and seem to suffer from a lack of defensible spaces. The extension to the west is linear and of higher quality. The A4055 is busy and noisy and often carries large lorries and other commercial vehicles. Thus the tranquillity of the town is modified. The main through road is edged by linear shop development (often warehouse like with off street carparking at the front). Dinas Powys Common penetrates close into the settlement core. This is an important green edge linking large parts of the village directly with the countryside.
- **2805 - Penarth and Dinas Powys Urban Fringe** - A rolling/undulating lowland landscape rising to approximately 60m AOD in the north from approximately 10m AOD in the south. The area forms a green buffer between Penarth to the east and Dinas Powys in the west. The landcover is

predominantly pastoral fields with many overgrown hedgerows containing trees. There are some wooded areas to the south mostly around Pop Hill. Farms are scattered across the area and discontinuous ribbon development has occurred along the narrow lanes over time. Further development is occurring along Sully Road. Development is suburban in character. The area's tranquillity is compromised by the visibility of development and usage of the roads. Many fields appear overgrown whilst others appear overgrazed. Some are used for equestrian uses. The associated poorly built stables are unsightly and common. Change detection 2014: edge of Penarth has expanded into this area, including prominent new Llandough Hospital.

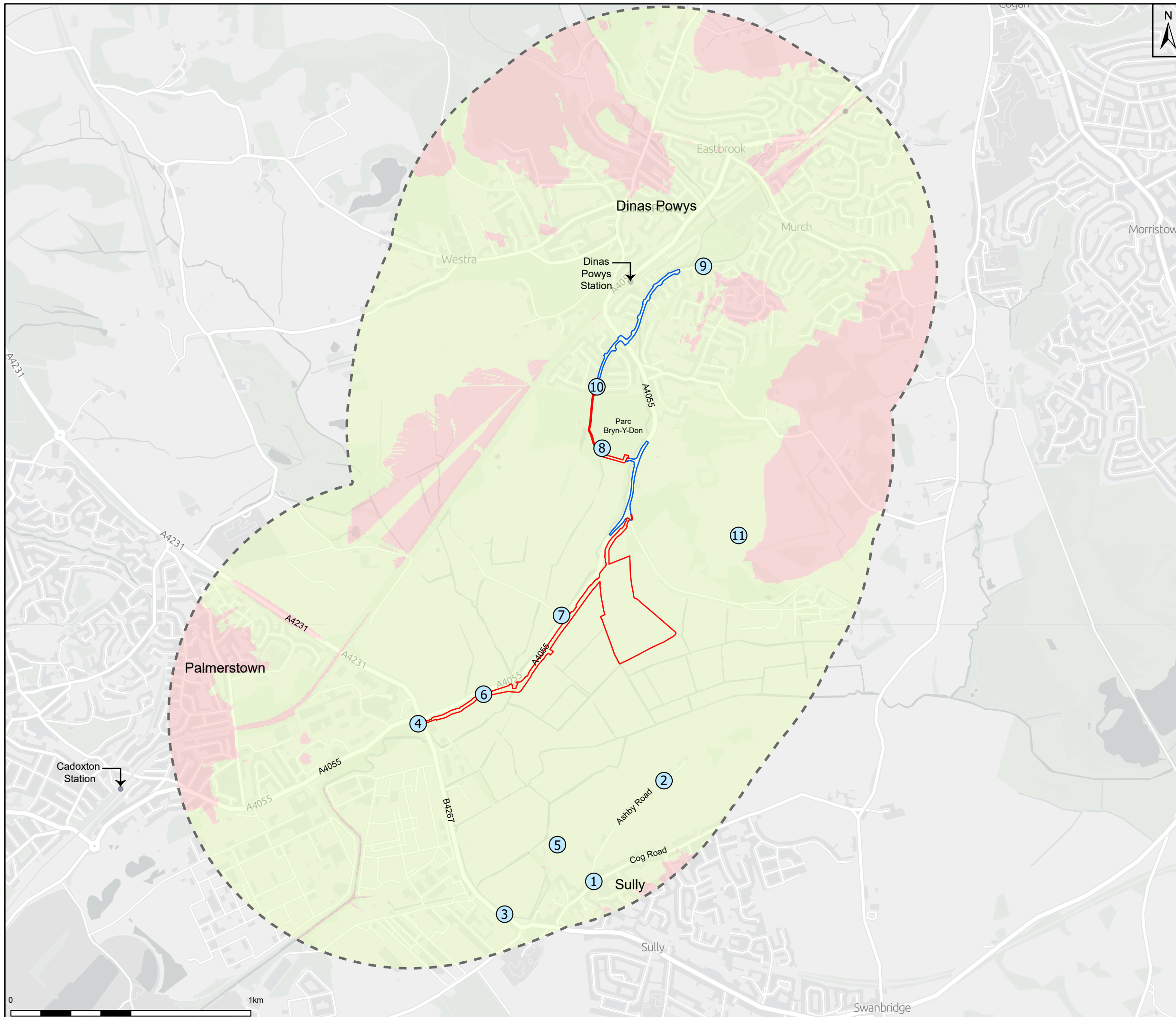
- **2806 - Cog Moors** - Cog Moors is a distinctive flat, low-lying floodplain crossed by drainage channels. The highest point of the moor is in the north at approximately 10m AOD while the lowest point is to the south at approximately 5m AOD. Cog Moors has a mosaic landcover of rough pastoral fields. Boundaries include overgrown hedgerows which are often discontinuous, often containing trees acting as boundaries, wire fences, and sometimes drainage ditches with occasional vegetation. There is no settlement and the area has a feeling of remoteness and tranquillity away from the roads. There is only one farm in the area, with one through road and rail line providing occasional access. The area is enclosed by landform with views possible to ridges either side and to the Barry industrial area. There are several detractors in the area including the raised existing road, sewer manholes, power lines, and disused or abandoned excavation works.
- **2809 - Cwrt yr Ala Valley** - A rolling/undulating area focussed on Cwrt yr Ala valley forming the headwaters of the Cadoxton valley. The highest point is a Cock Hill to the north at 115m AOD, the lowest to the south at approximately 20m AOD. The landcover is a mosaic of pastoral fields, with hedgerows often containing trees, plus woodlands. The latter generally set on the steeper upper slopes of valleys or ridgelines. Settlement is focussed on Michaelston-le-Pit which is a small village but otherwise is dispersed and includes farms and large dwellings. The area is very tranquil as no major roads run through it, indeed all roads into the area are dead ends. The area has a strong sense of place where vernacular buildings, broadleaf woodland and well hedgerows complement well managed farmland. Whilst vegetation presently integrates the settlements into their surroundings recent development is beginning to unbalance the relationship.
- **2812 - Wenvoe Environs** - The aspect area is a rolling/undulating lowland valley. Its highest point is a valley side by Wenvoe quarry to the north at 110m AOD and its lowest point approximately 10m AOD in the south bordering Cog Mors. The area has a mosaic landcover of pastoral and arable fields set within hedgerows often containing trees. These enclose the area effectively. There are several wooded areas concentrated on the steeper valley sides, mostly to the south of the area. Several watercourses dissect the area, running south. There are a number of settlements consisting of farms and a hamlet. Wenvoe quarry and the associated commercial premises, council depot and straight access road provide urban elements to the north. The Cardiff to Barry road (A4050) locally disturbs the tranquillity but other roads connecting Dinas Powis to Barry and Wenvoe are relatively quiet. Access into most of the area is infrequent, with most pressure concentrated on the western and northern sides round the main roads and edges to Cardiff, Barry and Wenvoe. The condition of the rural landscape tends to echo this pressure. To the north and east there is suburban detailing to roads, increasing signage and property refurbishments and new development. To the east of the area the landscape maintains a more rural and tranquil setting of

apparently well managed hedgerows and woodlands. There are various detractors in the area including pylons and electrical overhead wires, and whilst the disused railway provides an interesting landscape element, it is used for rubbish dumping in places. Views to higher ground mean the valley sides are most sensitive to change. Wenvoe Quarry is relatively well screened by landform. Change detection 2014: new retail developments at Culverhouse Cross

- **2813 - Sully Ridge** - The aspect area forms a distinct ridge. The highest point is 54m AOD and the lowest, approximately 10m AOD, bordering Sully Brook and Cog Moors. There are views towards the Bristol Channel from the hill and a feeling of being exposed at this point. The landcover is a mosaic of fields dominated by pasture but with arable with low managed hedges as a dominant boundary type. Generally the landscape appears well managed and productive. There are no woodlands. The settlement pattern focuses on Cog- a picturesque and well maintained village. A small strip of 20 C suburban ribbon development lies close to the foot of the slope bordering Cog Moors. Two minor roads cross the area. The area also has a boundary with suburban Sully. Whilst the area is generally tranquil within, at its edges to the south this is less so with continual traffic and human movement. Near the edge of Sully and the main Penarth to Barry road, suburbanising pressures and detailing affect the character of the essentially rural landscape.
- **2828 - Barry and Sully Coastal Gap** - The area is a rolling/undulating lowland, the highest point is approximately 61m AOD, a hilltop to the east of Swanbridge, the lowest 15m AOD on the top of cliffs facing the Bristol Channel . The area is covered by a mosaic of pastoral fields enclosed by hedgerows. Often these hedgerows are overgrown, many containing trees. The dismantled railway line to the north west of the area is also overgrown with vegetation and creates a strong edge to the area and also gives a surprisingly enclosed feel to parts of it. Pines feature in the area east of Swanbridge. There are several settlements in the area, including farms and hamlets linked by narrow roads which show signs of overuse at parking places. Lavernock Farm to the southeast of the area has been developed as a campsite/holiday village and there is a caravan park at Swanbridge. The area's feeling of tranquillity has been affected by these developments. The area's hedgerows appear neglected in places as do some farm gates and fencing. Lavernock Farm camping ground and holiday village, together with some refurbished houses are suburban in appearance. The area's rural character is being eroded by these changes. here are occasional views to the sea which influences the character of the area.

2 Glass Wharf
Temple Quay
Bristol
BS2 0EL
T: +44 (0)117 372 1200

arcadis.com



Legend

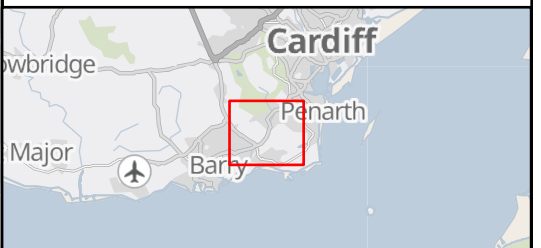
- Highway Works Boundary
- Planning Boundary
- 1km Study Area

Zone of Theoretical Visibility

- Not visible
- Visible


Viewpoint Location

Notes
 GB Light Grey: Contains OS data © Crown Copyright and database right 2023
 Contains data from OS Zoomstack



Rev	Date	Description	Drawn	Check	Approv
01	19/06/24	For information/consultation	DW	xx	xx

Client:



PROJECT:
BIGLIS TO
DINAS POWYS ATR

Site: Biglis to Dinas Powys ATR **Client:** Vale of Glamorgan Council



Registered office:
80Fen
80 Fenchurch Street
London
EC3M 4BY
www.arcadis.com

Coordinating Office:
2 Glass Wharf
Temple Quay
Bristol
BS2 0FR

Title:

**Figure 1:
ZTV and Viewpoint Locations**

Designed	xx	Date	19 June 24	Signed	
Drawn	D.Watts	Date	19 June 24	Signed	
Checked	xx	Date	19 June 24	Signed	
Approved	xx	Date	xx	Signed	
Scale:	1:15,000	Datum:	AOD		
Original Size:	A3	Grid:	OS		
Suitability Code:	S2	Project Number:	10058585		

Suitability Description: **For Information**

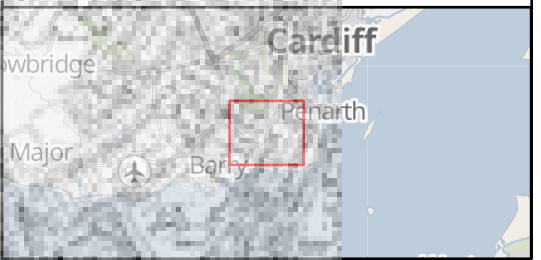
Drawing Number: **10058585-ARC-EGN-ZZ-DR-ZZ-00001** Revision: **P01**

- LandMAP Visual Sensory**
- Barry
 - Barry and Sully Coastal Gap
 - Cog Moors
 - Cwrt yr Ala Valley
 - Dinas Powys
 - Penarth and Dinas Powys Urban Fringe
 - Sully Ridge
 - Wenvoe Environs



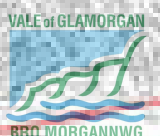
- Legend**
- Planning Boundary
 - Highway Works Boundary
 - 1km Study Area
 - National Landscape Character Area boundary
 - County Landscape Character Area boundary

Notes
 GB Light Grey: Contains OS data © Crown Copyright and database right 2023
 Contains data from OS Zoomstack




Rev	Date	Description	Drawn	Check	Approv
01	27/09/24	Issued for Planning	DW	HG	BH

Client:



PROJECT:
BIGLIS TO DINAS POWYS ATR

Site: Biglis to Dinas Powys ATR
 Client: Vale Of Glamorgan Council



Registered office:
80Fen
80 Fenchurch Street
London
EC3M 4BY

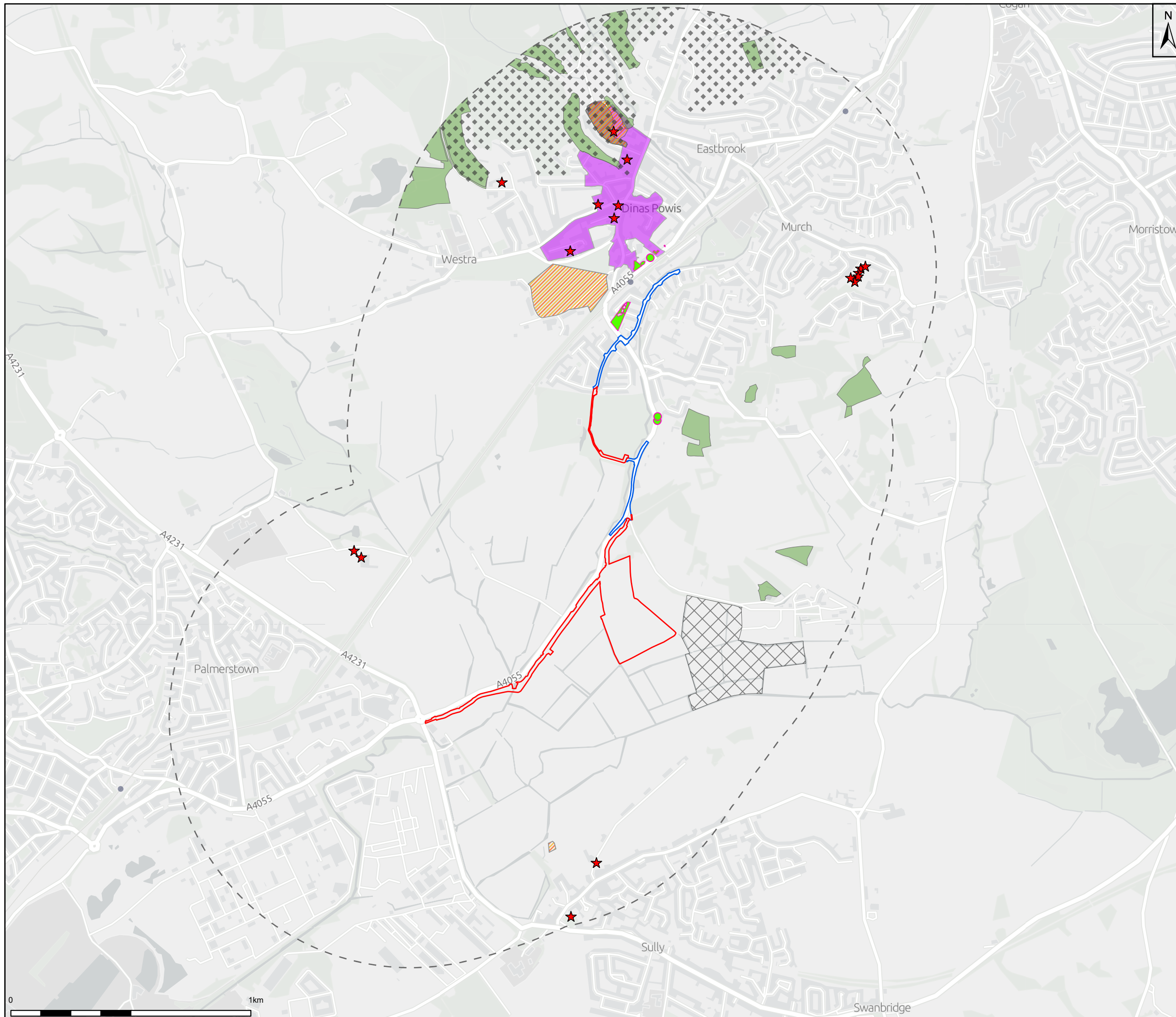
Coordinating Office:
2 Glass Wharf
Temple Quay
Bristol
BS2 0FR

www.arcadis.com

Title:
**Figure 2:
Landscape Character**

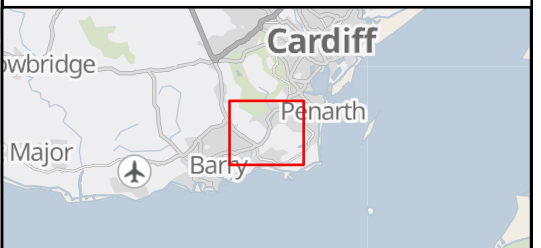
Designed	DW	Date	27/09/2024	Signed
Drawn	DW	Date	27/09/2024	Signed
Checked	HG	Date	27/09/2024	Signed
Approved	BH	Date	27/09/2024	Signed
Scale:	1:15,000	Datum:	AOD	
Original Size:	A3	Grid:	OS	
Suitability Code:	S2	Project Number:	10058585	
Suitability Description:				For Planning

Drawing Number:	10058585-ARC-EGN-ZZ-DR-ZZ-00002	Revision:	P01
-----------------	---------------------------------	-----------	-----



- Legend**
- Planning Boundary
 - Highway Works Boundary
 - 1km Study Area
 - Special Landscape Area
 - SSSI
 - Ancient Woodland
 - Conservation Area
 - Scheduled Monument
 - TPO Group
 - TPO Specimen
 - Listed Buildings
 - ★ Grade II

GB Light Grey: Contains OS data © Crown Copyright and database right
2023 Contains data from OS Zoomstack



Rev	Date	Description	Drawn	Check	Approv
01	27/09/24	Issued for Planning	DW	HG	BH

Client:

PROJECT:
**BIGLIS TO
DINAS POWYS ATR**

Site: Biglis to Dinas Powys ATR **Client:** Vale Of Glamorgan Council

Registered office: 80Fen, 80 Fenchurch Street, London EC3M 4BY
www.arcadis.com

Coordinating Office: 2 Glass Wharf, Temple Quay, Bristol BS2 0FR

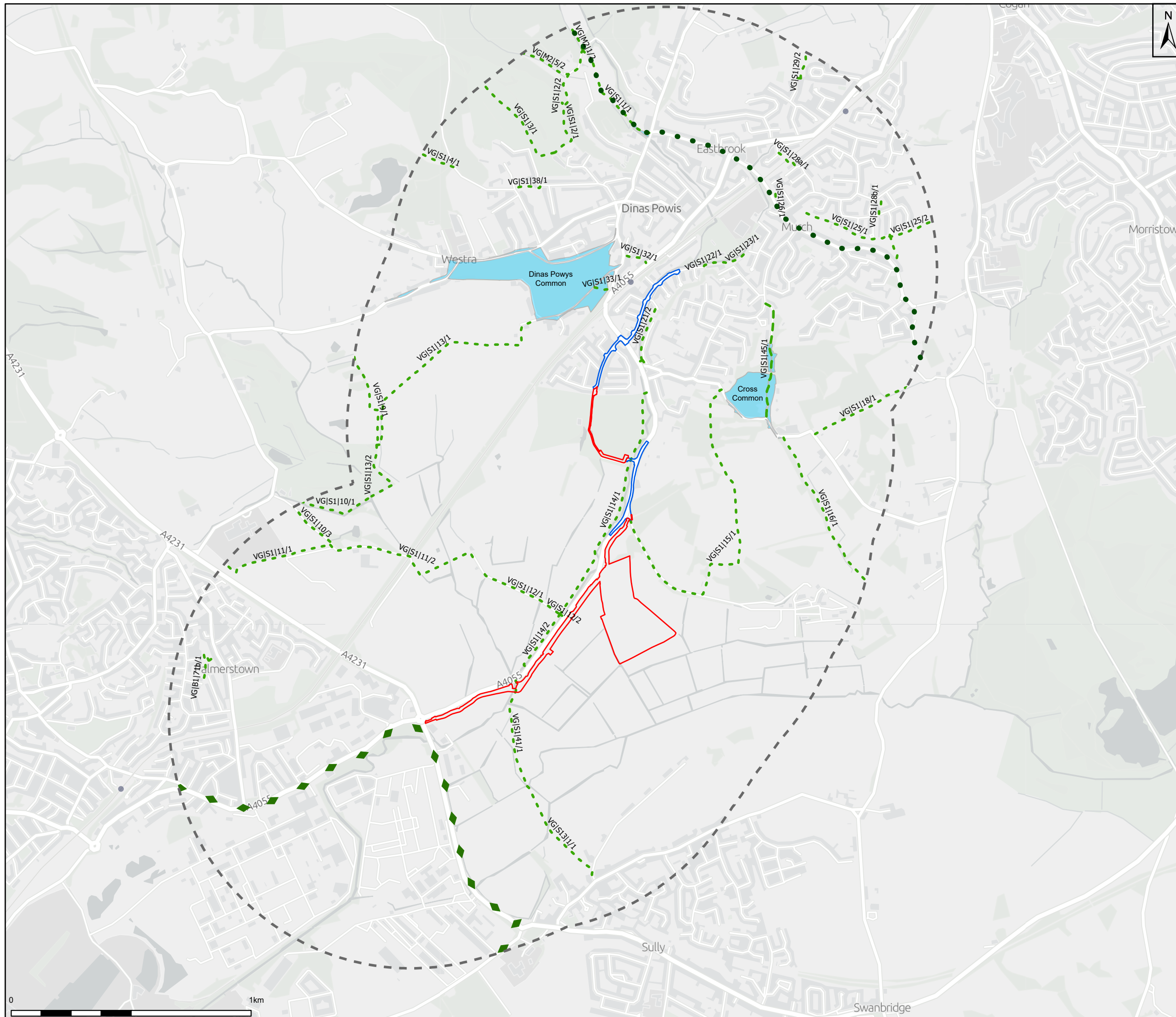
Title:

**Figure 3:
Designations**

Designed	DW	Date: 27/09/2024	Signed
Drawn	DW	Date: 27/09/2024	Signed
Checked	HG	Date: 27/09/2024	Signed
Approved	BH	Date: 27/09/2024	Signed
Scale:	1:15,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	S2	Project Number:	10058585

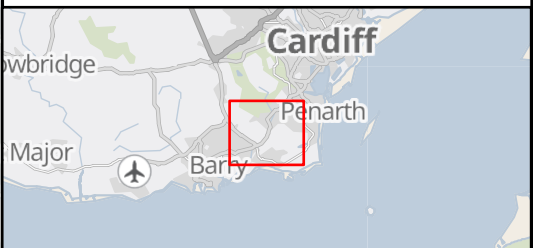
Suitability Description: **For Planning**

Drawing Number: **10058585-ARC-EGN-ZZ-DR-ZZ-00003** Revision: **P01**



- Legend**
- Planning Boundary
 - Highway Works Boundary
 - 1km Study Area
 - Wales Coastal Path
 - Capital Walk LDR
 - CRoW Access Layer
 - VoG Public Rights of Way**
 - Footpath

Notes
 GB Light Grey: Contains OS data © Crown Copyright and database right 2023
 Contains data from OS Zoomstack



Rev	Date	Description	Drawn	Check	Approv
01	27/09/24	Issued for Planning	DW	HG	BH

Client:

PROJECT:
BIGLIS TO
DINAS POWYS ATR

Site **Client**

Biglis to Dinas Powys ATR Vale Of Glamorgan Council

Registered office:
80 Fen
80 Fenchurch Street
London
EC3M 4BY
www.arcadis.com

Coordinating Office:
2 Glass Wharf
Temple Quay
Bristol
BS2 0FR

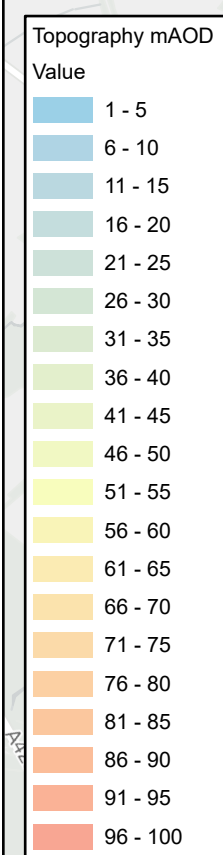
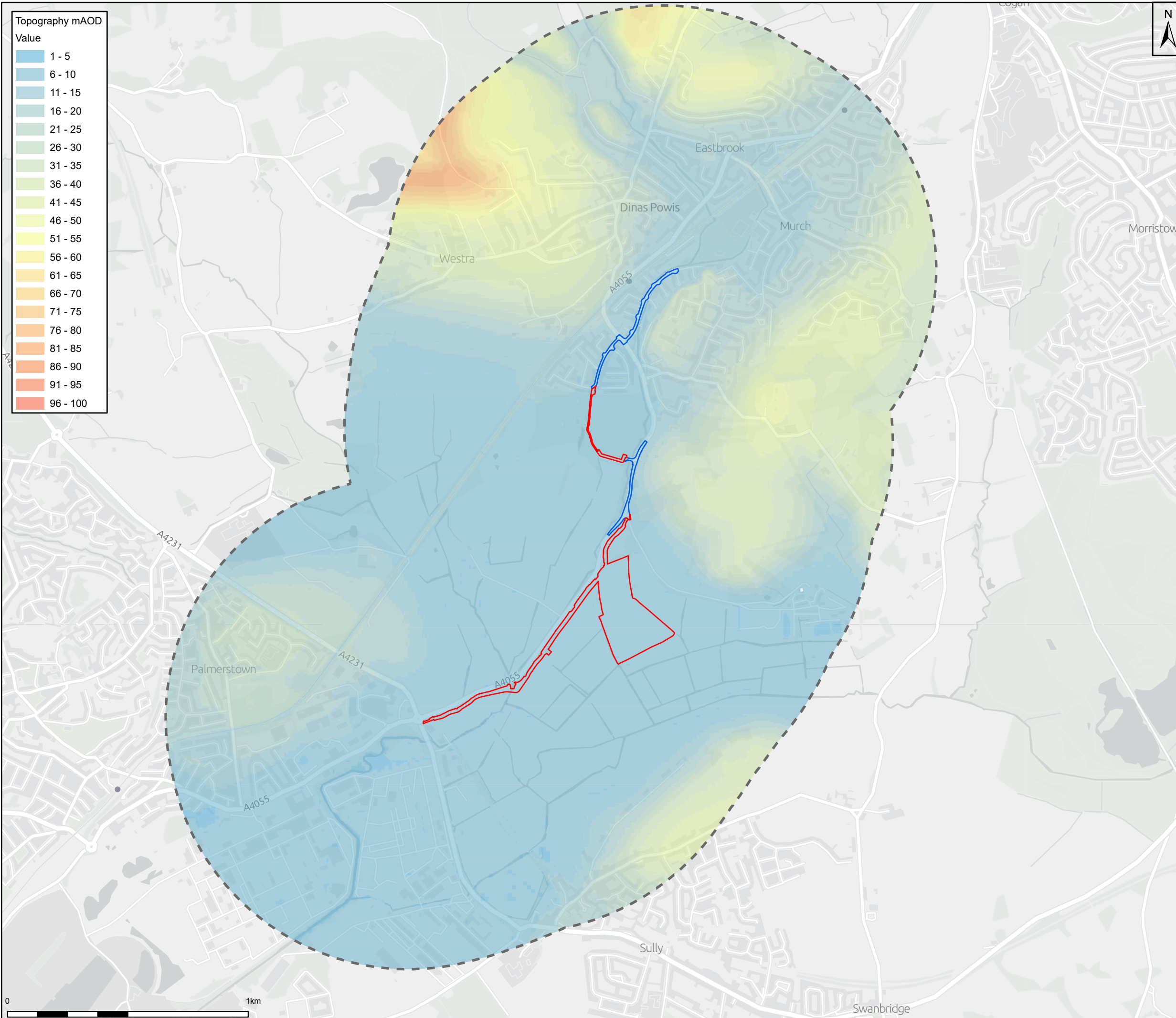
Title:

Figure 4:
Access

Designed	DW	Date	27/09/2024	Signed	
Drawn	DW	Date	27/09/2024	Signed	
Checked	HG	Date	27/09/2024	Signed	
Approved	BH	Date	27/09/2024	Signed	
Scale:	1:15,000	Datum:	AOD		
Original Size:	A3	Grid:	OS		
Suitability Code:	S2	Project Number:	10058585		

Suitability Description: **For Planning**

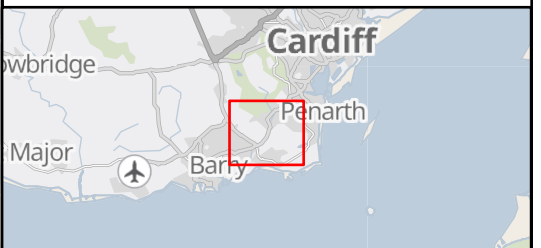
Drawing Number: **10058585-ARC-EGN-ZZ-DR-ZZ-00004** Revision: **P01**



Legend

	Planning Boundary
	Highway Works Boundary
	1km Study Area

Notes
 GB Light Grey: Contains OS data © Crown Copyright and database right 2023
 Contains data from OS Zoomstack



Rev	Date	Description	Drawn	Check	Approv
01	27/09/24	Issued for Planning	DW	HG	BH

Client:

Site
Biglis to Dinas Powys ATR

PROJECT:
BIGLIS TO
DINAS POWYS ATR

Client
Vale Of Glamorgan Council

Registered office:
80Fen
80 Fenchurch Street
London
EC3M 4BY
www.arcadis.com

Coordinating Office:
2 Glass Wharf
Temple Quay
Bristol
BS2 0FR

Title:

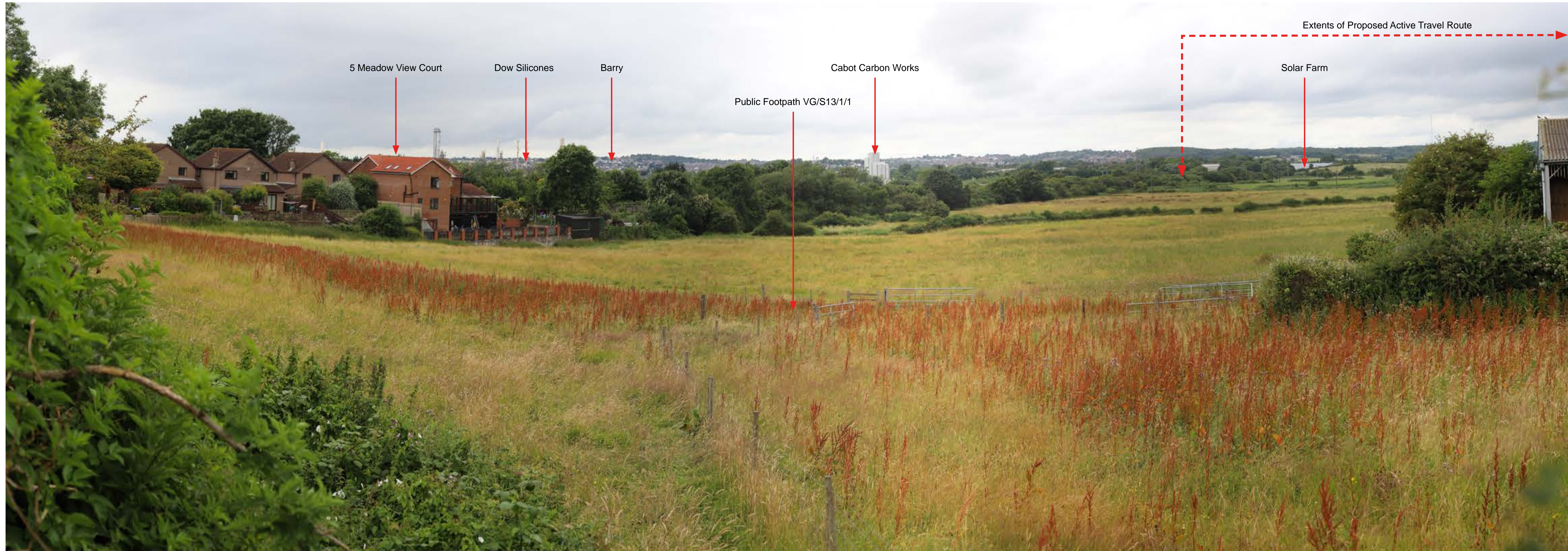
**Figure 5:
Topography**

Designed	DW	Date: 27/09/2024	Signed
Drawn	DW	Date: 27/09/2024	Signed
Checked	HG	Date: 27/09/2024	Signed
Approved	BH	Date: 27/09/2024	Signed
Scale:	1:15,000	Datum:	AOD
Original Size:	A3	Grid:	OS
Suitability Code:	S2	Project Number:	10058585

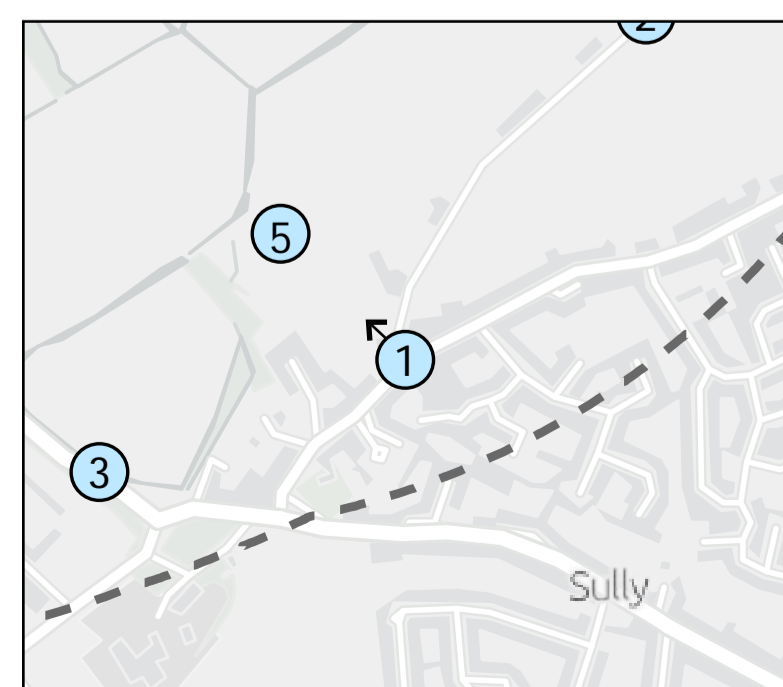
Suitability Description: **For Planning**

Drawing Number: **10058585-ARC-EGN-ZZ-DR-ZZ-00005** | Revision: **P01**

VIEWPOINT 1 - Public Footpath VG | S13 | 1/1



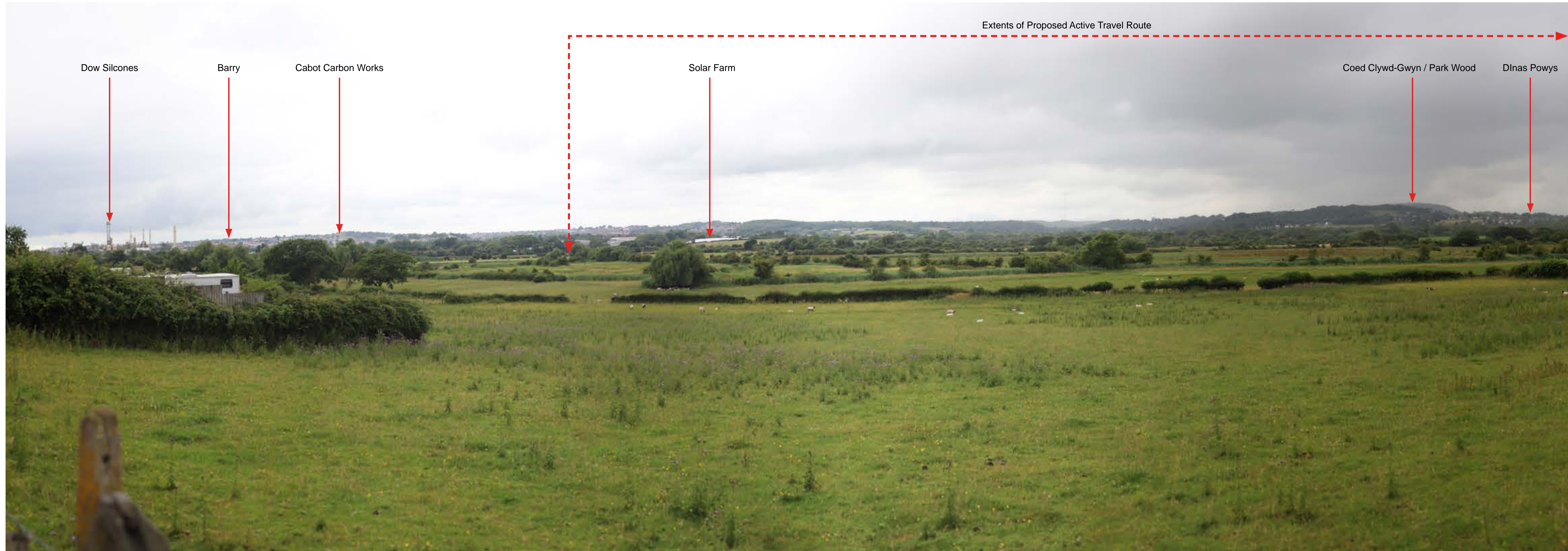
VIEWPOINT LOCATION PLAN



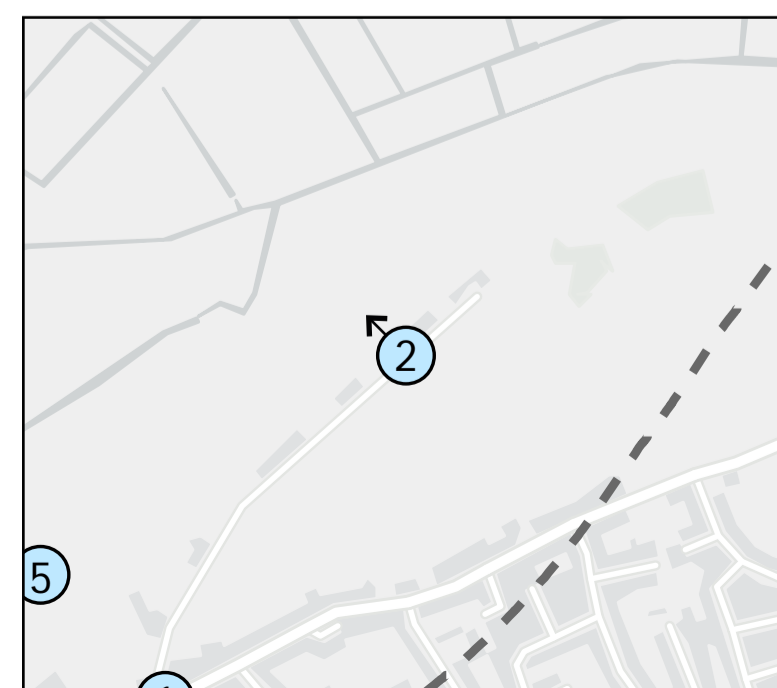
PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.1 - Viewpoint 1

VIEWPOINT INFORMATION: VIEWPOINT 1 - Public Footpath VG S13 1/1					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	08-07-2024 14:04	DIRECTION OF VIEW:	North-west
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2434 Lat -3.1314 Lon	DISTANCE TO SITE (APPROX.):	850m
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	16m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 2 - Ashby Road



VIEWPOINT LOCATION PLAN



PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.2 - Viewpoint 2

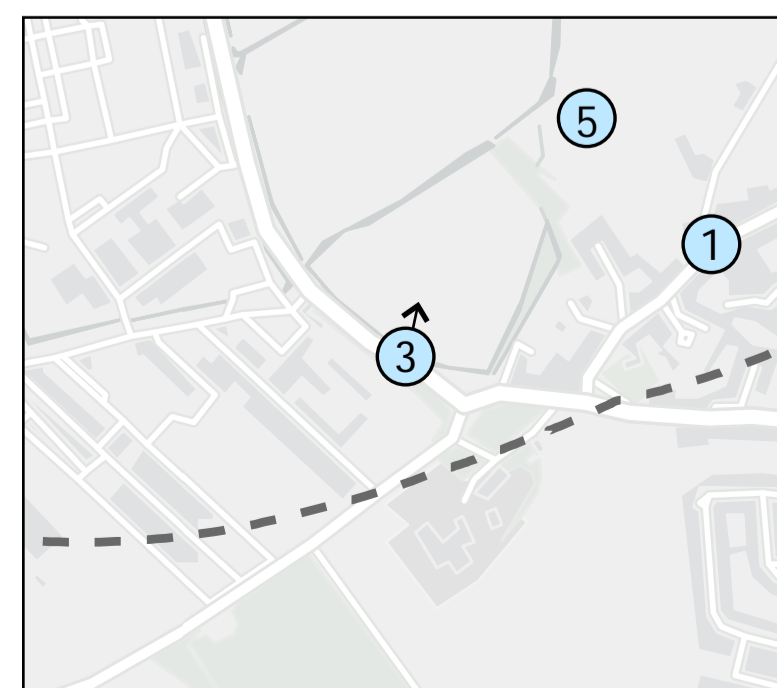
VIEWPOINT INFORMATION: VIEWPOINT 2 - Ashby Road					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	08-07-2024 13:59	DIRECTION OF VIEW:	North-west
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2445 Lat -3.1260 Lon	DISTANCE TO SITE (APPROX.):	700m
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	15m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 3 - Wales Coastal Path - Sully Moors Road



This image provides landscape and visual context only

VIEWPOINT LOCATION PLAN



PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.3 - Viewpoint 3

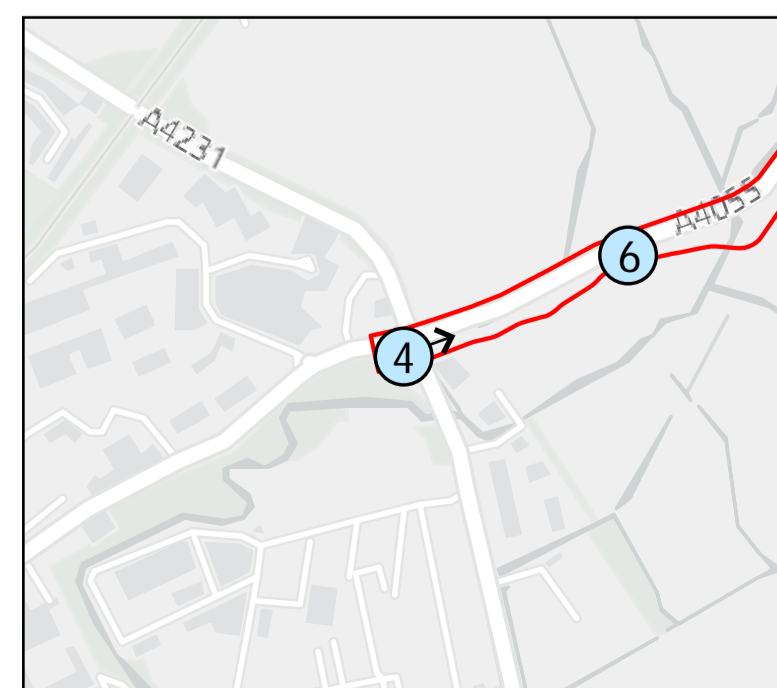
VIEWPOINT INFORMATION: VIEWPOINT 3 - Wales Coastal Path - Sully Moors Road					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	12-08-2024 18:28	DIRECTION OF VIEW:	North
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2428 Lat -3.1333 Lon	DISTANCE TO SITE (APPROX.):	850m
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	6m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 4 - Wales Coastal Path - A4055 Cardiff Road



This image provides landscape and visual context only

VIEWPOINT LOCATION PLAN



PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.4 - Viewpoint 4

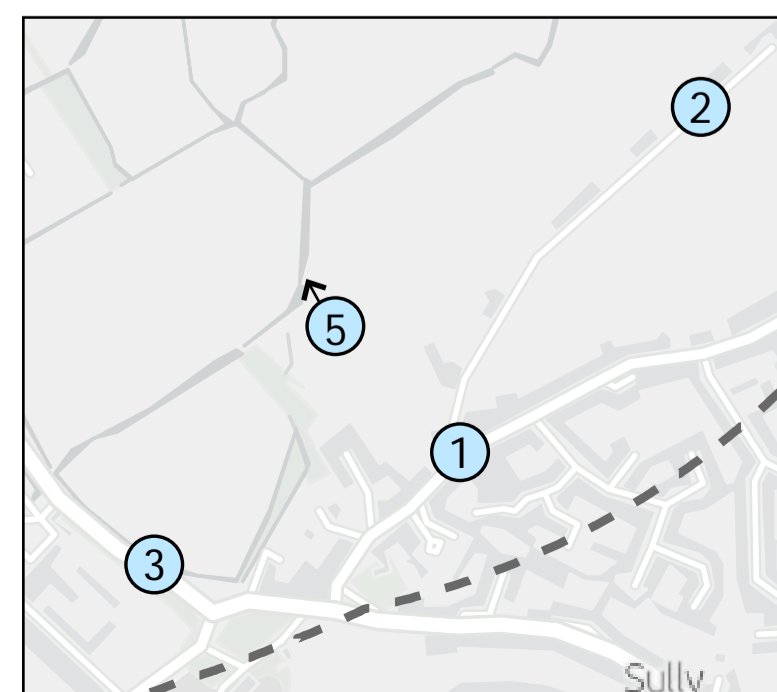
VIEWPOINT INFORMATION: VIEWPOINT 4 - Wales Coastal Path - A4055 Cardiff Road					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	12-08-2024 14:29	DIRECTION OF VIEW:	North-east
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2452 Lat -3.1350 Lon	DISTANCE TO SITE (APPROX.):	30m
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	8m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 5 - Public Footpath VG | S1 | 41/1



This image provides landscape and visual context only

VIEWPOINT LOCATION PLAN



PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.5 - Viewpoint 5

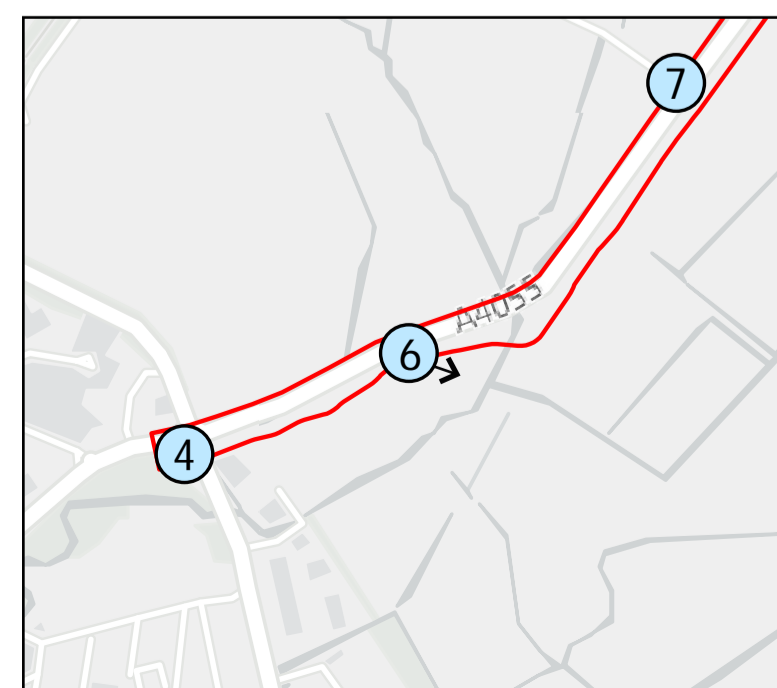
VIEWPOINT INFORMATION: VIEWPOINT 5 - Public Footpath VG S1 41/1					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	12-08-2024 18:38	DIRECTION OF VIEW:	North
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2456 Lat -3.1332 Lon	DISTANCE TO SITE (APPROX.):	800m
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	7m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 6 - Field Access off A4055 Cardiff Road



This image provides landscape and visual context only

VIEWPOINT LOCATION PLAN



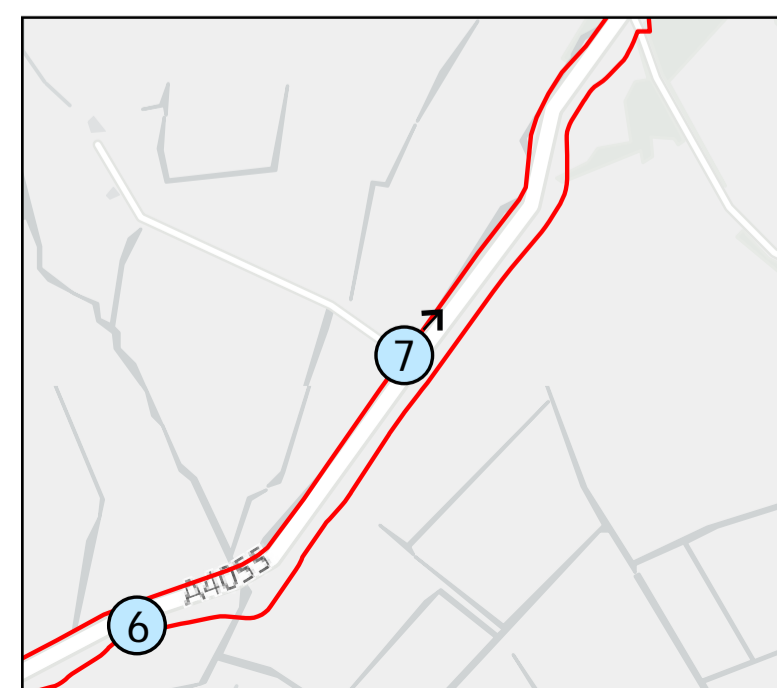
PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.6 - Viewpoint 6

VIEWPOINT INFORMATION: VIEWPOINT 6 - Public Footpath VG[S1]14/2					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	12-08-2024 16:51	DIRECTION OF VIEW:	South-east
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.4157 Lat -3.2279 Lon	DISTANCE TO SITE (APPROX.):	Within Site Boundary
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	8m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°



This image provides landscape and visual context only

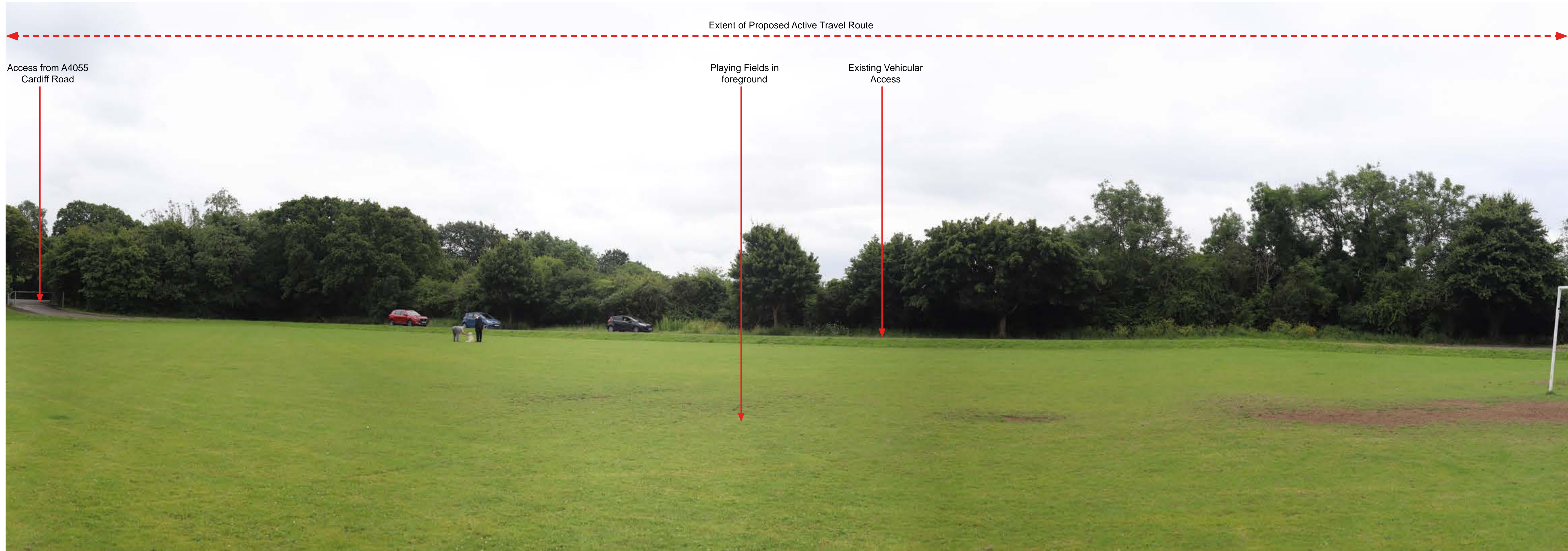
VIEWPOINT LOCATION PLAN



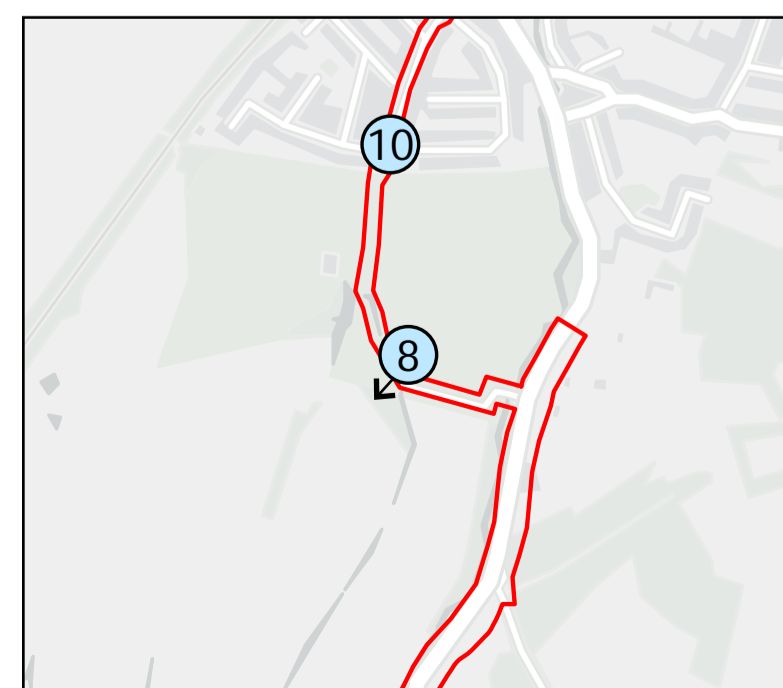
PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.7 - Viewpoint 7

VIEWPOINT INFORMATION: VIEWPOINT 7 - Public Footpath VG S1 12/2					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	12-08-2024 16:14	DIRECTION OF VIEW:	North-east
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2508 Lat -3.1321 Lon	DISTANCE TO SITE (APPROX.):	Adjacent to Site Boundary
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	7m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 8 - Parc Bryn-y-Don



VIEWPOINT LOCATION PLAN

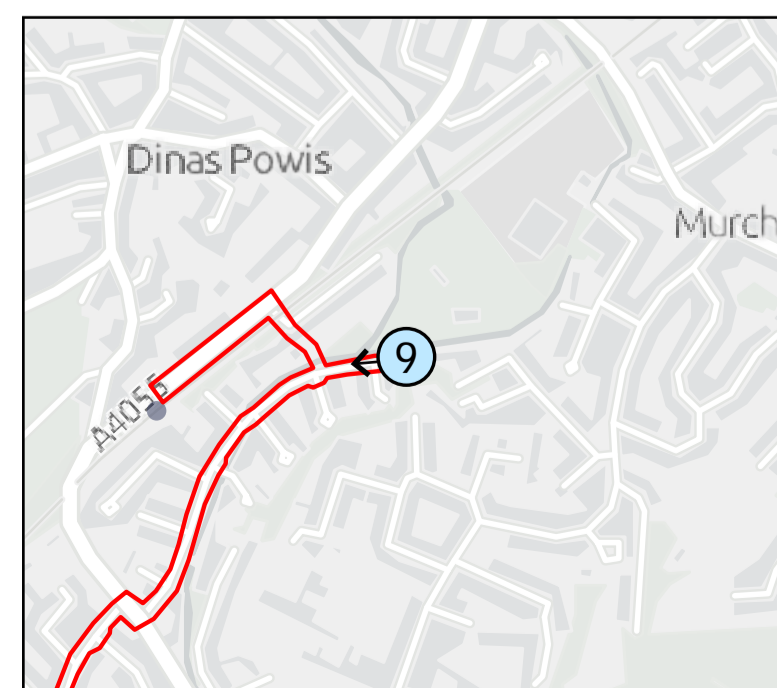


PROJECT: Biglis-Dinas Powys ATR TITLE: Figure 6.8 - Viewpoint 8

VIEWPOINT INFORMATION: VIEWPOINT 8 - Parc Bryn-y-Don					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	08-07-2024 12:48	DIRECTION OF VIEW:	South-west
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2530 Lat -3.1313 Lon	DISTANCE TO SITE (APPROX.):	Adjacent to Site Boundary
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	8m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°



VIEWPOINT LOCATION PLAN



PROJECT: Biglis-Dinas Powys ATR TITLE: Figure 6.9 - Viewpoint 9

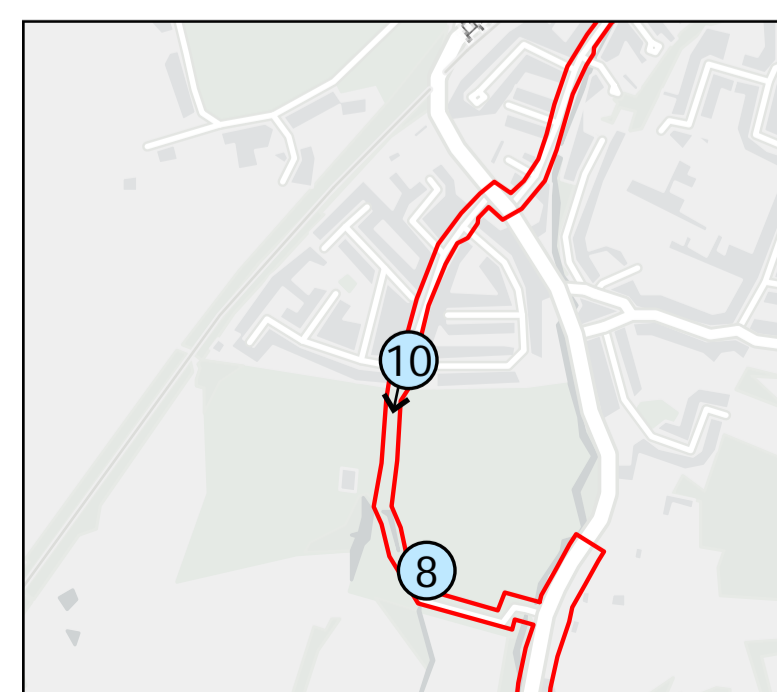
VIEWPOINT INFORMATION: VIEWPOINT 9 - Public Footpath VG S1 22/1					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	08-07-2024 12:29	DIRECTION OF VIEW:	West
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2555 Lat -3.1252 Lon	DISTANCE TO SITE (APPROX.):	25m
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	13m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 10 - Heol-y-Frenhines



This image provides landscape and visual context only

VIEWPOINT LOCATION PLAN



PROJECT: Biglis-Dinas Powys ATR TITLE: Figure 6.10 - Viewpoint 10

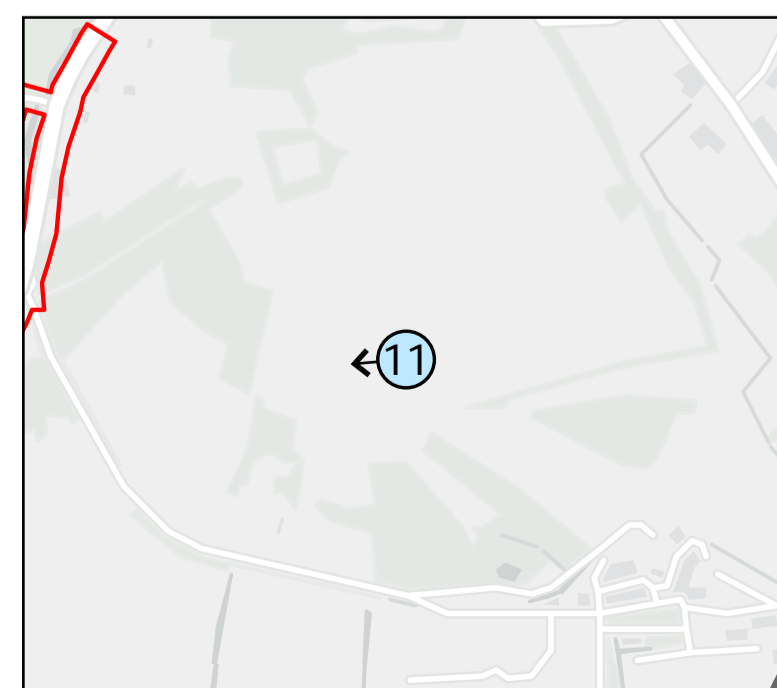
VIEWPOINT INFORMATION: VIEWPOINT 10 - Heol-y-Frenhines					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	08-07-2024 12:39	DIRECTION OF VIEW:	South
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2539 Lat -3.1314 Lon	DISTANCE TO SITE (APPROX.):	Within Site Boundary
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	11m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°

VIEWPOINT 11 - Public Footpath VG|S1|15/1



This image provides landscape and visual context only

VIEWPOINT LOCATION PLAN



PROJECT: Biglis-Dinas Powys ATR
 TITLE: Figure 6.11 - Viewpoint 11

VIEWPOINT INFORMATION: VIEWPOINT 11 - Public Footpath VG S1 15/1					
CAMERA MAKE AND MODEL:	Canon EOS 100D	DATE & TIME:	08-07-2024 13:07	DIRECTION OF VIEW:	West
LENS AND FOCAL LENGTH:	Canon 50mm	OS REFERENCE:	51.2516 Lat -3.1243 Lon	DISTANCE TO SITE (APPROX.):	475m
LI TGN-06/19 VISUALISATION TYPE:	Type 1	ALTITUDE:	36m AOD	PROJECTION:	Cylindrical
PAPER SIZE:	841 X 594mm (A1 size)	HEIGHT OF CAMERA (AGL):	1.5m	HORIZONTAL FIELD OF VIEW:	90°