

Welsh Government

Development Upper Farm Cosmeston

Design and Access Statement September 2020

Austin-Smith:Lord





CONTENTS

- 1.0 INTRODUCTION
- 2.0 SITE & CONTEXT ANALYSIS
- 3.0 INTERPRETATION
- 4.0 DESIGN DEVELOPMENT
- 5.0 THE PROPOSAL
- 6.0 CHARACTER AREAS
- 7.0 CONCLUSION

Austin-Smith:Lord Ltd
Cardiff
Bristol
Glasgow
Liverpool
London

one Dunleavy Drive, Cardiff, CF11 0SN

Cover: View from above the
masterplan site looking east

Left: View from the above the
masterplan site looking north

+44 (0)29 2022 5208
cardiff@austinsmithlord.com
www.austinsmithlord.com





1.0 INTRODUCTION

Aerial view from the East of the site looking West towards Cosmeston Lakes.

1.1 PROJECT BACKGROUND

This Design and Access Statement is part of an Outline Planning application for the development of land located on the southern fringes of Penarth, and allocated for residential development in the Vale of Glamorgan's recently adopted 2017 LDP.

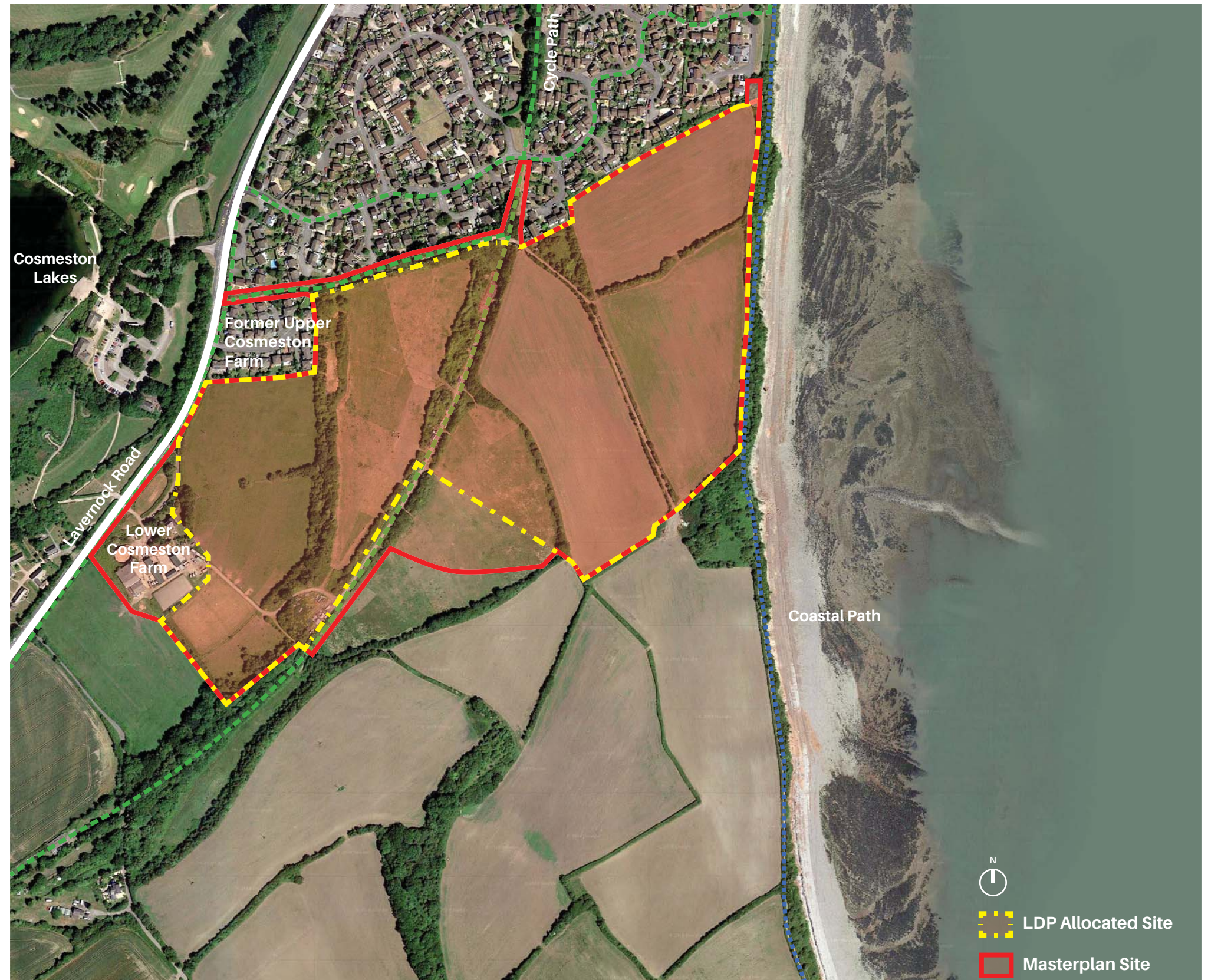
Austin-Smith;Lord are appointed by Welsh Government to produce a masterplan and associated documents including an Environmental Statement and to prepare and submit an Outline Planning application for the comprehensive development of the site.

The Welsh Government owns 54ha of land at, and to the South of, Upper Cosmeston Farm.

22 Ha of the Welsh Government's landholding has been allocated for residential development within the recently adopted Vale of Glamorgan LDP. The LDP allocation and masterplan boundary are indicated to the right.

PROJECT TEAM

1. Planning Consultant : Asbri
2. Masterplanning : Austin-Smith;Lord
3. Landscape : Austin-Smith;Lord
4. Ecology : ESP
5. LVIA : ESP
6. Archaeology : ESP
7. Traffic : Asbri Transport
8. Civil and Structural Engineers : Cambria
9. Air Quality : AQ Consultants
10. Acoustics : Inacoustics
11. Project Management : KTA
12. Quantity Surveyors : RPA
13. Market Advisor : Rawlins and Madley
14. Site Investigation : ESP



1.2 VISION & OBJECTIVES

The development will adopt and drive the principles of the Wellbeing and Future Generations Act 2015 and 'Creating Sustainable Places Together', Sustainable Development Policy and Delivery Guidance through use of the Sustainable Development Integration Tool.

The Masterplan will create a framework for future development which seeks to minimise the associated energy demand and carbon emissions to Net Zero Operational Energy standards. Operational energy is defined as the amount of energy needed over the life of a building to operate the heating, lighting, ventilation and to power electrical appliances.

The Masterplan will also provide biodiversity and ecosystem resilience in accordance with the Environment Wales Act 2016 by protecting and enhancing the existing ecology on the site.

The masterplan will advise on the standard for quality and sustainability of future development whilst having sufficient flexibility for developers to respond to rapidly changing social, environmental and economic needs.

The development will have its own character and distinctive identity, offering a range and choice of housing in accordance with the requirements of Planning Policy Wales Edition 10 (2018), and based upon a high standard of Urban Design and Place-making, taking into account all elements of "Good Design" and the principles of "Route to Good Design" as set out in Technical Advice Note 12: Design (2016).

A high quality 'Garden By the Sea'¹ community where a diverse range of people live, learn and work; which prioritises walking and cycling, achieves net zero operational energy standards and protects, enhances and celebrates the natural features of the site. A safe place which invites residents and visitors to coalesce at the connected key spaces which navigate through the site's topography along two predominant links; from the coast to Cosmeston Lakes and, the Southern Gateway to Penarth and Cardiff via National Cycle Route 88.

1 Owen, David (22 September 2002). "The Garden by the Sea". BBC Wales. Archived from the original on 7 October 2010. Retrieved 3 March 2012

1.3 BRIEF

APPLICANT'S BRIEF

The Welsh Government has a legal duty with regard to sustainable development. The Well-being of Future Generations (Wales) Act 2015 and the Environment Act 2016 embed these principles across the Welsh Government and wider Welsh public sector. The Well-being of Future Generations identifies seven well-being goals for Wales:

- A prosperous Wales
- A resilient Wales
- A healthier Wales
- A more equal Wales
- A Wales of cohesive communities
- A Wales of vibrant culture and thriving Welsh Language
- A globally responsible Wales

These goals present a legally-binding common purpose for government at a national and local level to work together and improve the well-being of Wales. The masterplan aims to accommodate these goals by:

- Creating the conditions that will help foster a cohesive community that is an attractive place to live and visit designed to 21st century standards;
- Incorporating legible streets and maximising connectivity within the development and the surrounding residential area;
- Promoting a positive link between important local amenity spaces such as the Coastal Path and Cosmeston Lakes;
- Employing a holistic approach to design with ecology, sustainable drainage and sustainable design principles considered from the outset.

LOCAL DEVELOPMENT PLAN ASPIRATIONS

The LDP housing allocation consists of 576 dwellings with associated community facilities, including the retention of 1ha of the site for the provision of a primary school. This land allocation equates to a single form entry school. A more detailed breakdown of the brief is as follows:

HOUSING

The Vale of Glamorgan has provided guidance on the amount and mix of Affordable Housing to be provided on site, which is 40% of the total housing provision. This have been uplifted to 50% to meet the aspirations of Welsh Government Minister for Housing and Local Government. All Affordable and market housing will be DQR compliant.

The proposed make up of the Market Housing has been derived from a market analysis of current demand in the area and contains a mix of house types and apartments. The mix has been further influenced by the site context together with the application of the principles of the Wellbeing of Future Generation Act 2015 and Place-making.

PUBLIC OPEN SPACE

The Local Planning Authority requirement is:

- 1 ha of the site to be developed as public open space
- 3,340.80m² equipped children's play space comprising;
 - 1 x NEAP
 - 3 x LEAP
 - 4 x LAP
- 7,349.76m² ha other children's play space
- 21,381.12m² outdoor sports space including a community accessible football pitch, suitable for 7 a-side

PRIMARY SCHOOL

Discussions with the Vale of Glamorgan indicate that their requirement is for a two form entry (2FE) primary school. This requires a land allocation of 1.75Ha, in contrast to the 1Ha referenced within the LDP. Consultations with the Vale of Glamorgan Council identified the potential to incorporate the area occupied by Lower Cosmeston Farm to accommodate this increased Education requirement.

NCN88 CYCLE ROUTE

To be extended through the site

COMMUNITY FACILITIES

0.1 – 0.2 ha to be allocated, potentially combined with or within the school.

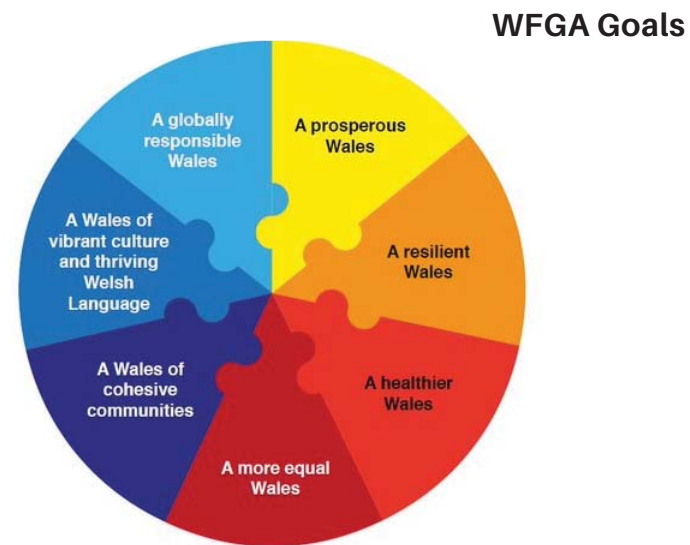
1.4 OVER-ARCHING GOALS

The over-arching goal of the masterplan is to create an ideal framework for a sustainable, cohesive and healthy community to emerge and grow within a new development which creates a unique, site-specific sense of place.

Penarth has long been famous as a ‘Garden by the Sea’¹, a term first used to market it as a desirable destination during Victorian times. The development will be a natural continuation of this theme. By providing new key connections through a clear narrative of open public spaces and by drawing on local precedents for its design the new development will become an intrinsic part of Penarth’s urban fabric and also contribute to a more sustainable and cohesive wider community.

WELL-BEING OF FUTURE GENERATIONS ACT

Adoption of the principles of the WFGA is a core Value to be complied with. The Masterplan has been assessed in terms of its contribution to WFGA Goals



Contribution to WFGA



High Quality

- Placemaking-led design
- All homes to DQR standards
- Secure by Design
- High Quality green spaces and public realm
- Distinct Character Areas
- Encourage a sense of ownership, responsibility and civic pride through community facilities and spaces
- Inclusion of Commercial facilities
- Full-fibre broadband infrastructure

Sustainable

- Designed for walking and cycling
- Fabric first approach
- Achieves net zero operational energy standards
- Protects, enhances and celebrates the natural features of the site
- Celebrates local culture
- Integration of sustainable drainage and place making
- Electric vehicle infrastructure
- Advocating carpooling schemes
- Advocating Co-working and working from home provisions
- Affordable housing

¹ Owen, David (22 September 2002). "The Garden by the Sea". BBC Wales. Archived from the original on 7 October 2010. Retrieved 3 March 2012





2.0 SITE & CONTEXT ANALYSIS

Aerial view from the upper portion of the masterplan site looking South towards Sully and the coast.

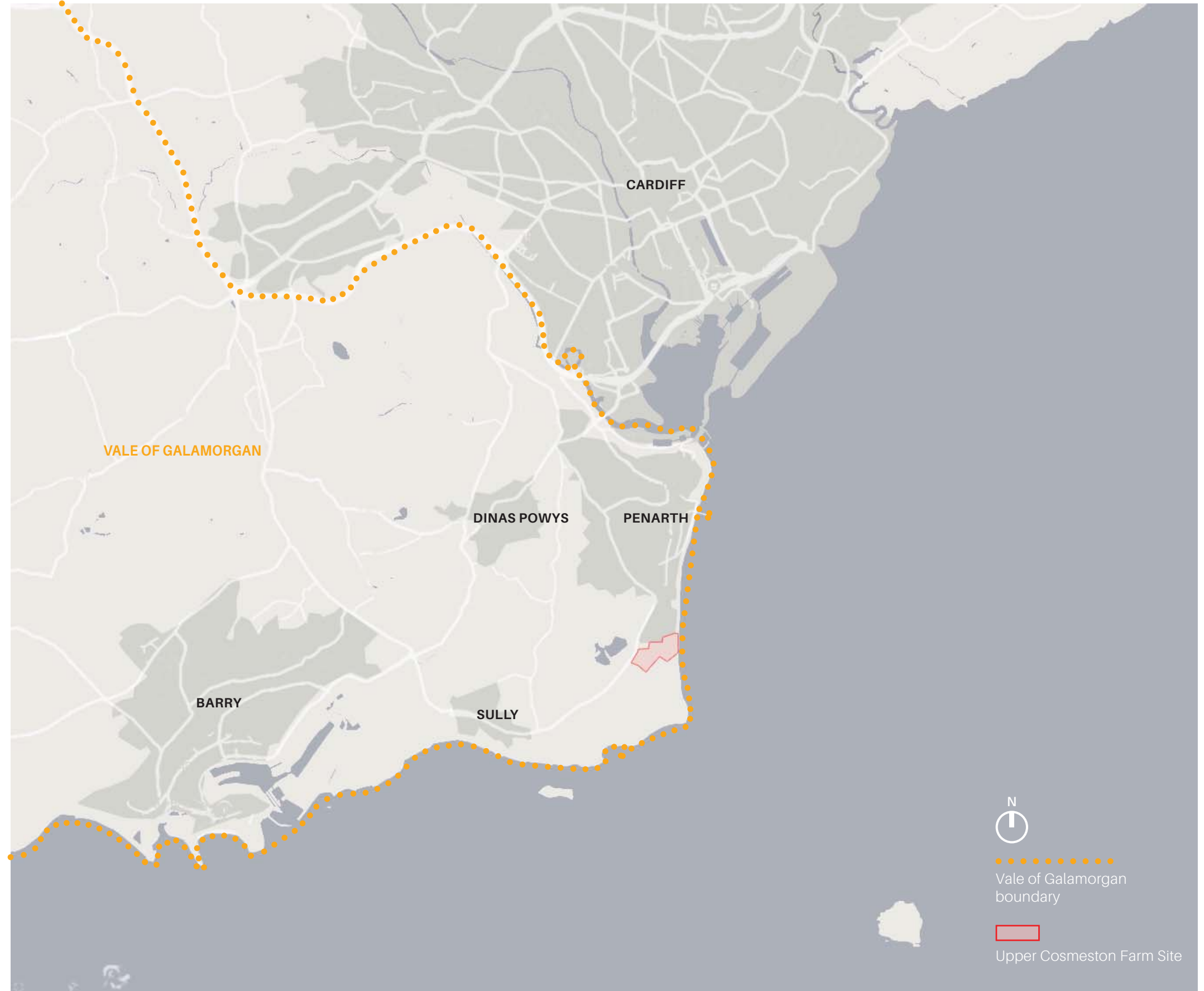
2.1 REGIONAL CONTEXT

The proposed masterplan site falls within the Vale of Glamorgan County Borough. The recently adopted LDP identifies the impact of the Vale's proximity to Cardiff; significantly affecting the employment market, local economy and pressure on new residential development in the borough.

Whilst located in the Ward of Sully, the site lies on the southern edge of Penarth and forms a natural extension.

According to the LDP, the Vale of Glamorgan has the highest rate of out-commuting in Wales, with the majority commuting to Cardiff. Conversely, nearly half of in-commuters come from Cardiff. The site is situated on the B4267 Lavernock Road and 2.5 miles by car or 2 miles on National Cycle Network Route 88 from Penarth Railway Station.

The Vale of Glamorgan has a mixed socio-economic profile with some of the most affluent and most deprived areas in Wales. The Welsh Index of Multiple Deprivation identifies a concentration of the most deprived areas as being in Barry with 4 areas amongst the 10% most deprived in Wales, whilst Penarth has 5 areas amongst the 10% least deprived areas of Wales.



2.2 LOCAL CONTEXT

Penarth is described in the LDP as a service centre settlement, with an established town centre providing local employment, cultural, educational and community facilities and is a hub for those living in nearby settlements. Key area objectives for Penarth identified in the Local Development Plan include:

- Promote Penarth as a 'sustainable transport town' by encouraging new and enhanced walking and cycling links within the town and between the town and adjoining residential and commercial areas, including Cardiff Bay, and facilitating park and ride provision.
- Support the provision of modern, fit for purpose education and training facilities including the Penarth Learning Community.
- Provide for an appropriate level, range and choice of housing, including affordable housing to meet local need.

The site itself is approximately 1.6 miles from Penarth Town Centre and is passed by commuters travelling to Penarth from Sully on the B4267 Lavernock Road. Despite its direct adjacency to Penarth's neighbourhoods the site is in Sully ward.

Caravan parks and holiday homes dot the coastline between Lavernock Point and Sully which are connected to Penarth, Barry and beyond by the Coastal Path.



Penarth Head viewed from near the site



Penarth Pier viewed from near the site



Coastal Path and view towards the site



2.3 PLANNING POLICY CONTEXT

The planning policy framework for the determination of this application is provided by the content and scope of National Planning Policy, which is contained within the tenth edition of Planning Policy Wales (PPW) and its associated Technical Advice Notes (TANs), together with the Local Planning Policy and its supplementary planning guidance.

The planning policy context for this application is provided in detail in the Planning Statement that accompanies this application. For a full review of pertinent policies please refer to the Planning Statement.

PLANNING POLICY WALES

National planning policy is contained within the tenth edition of Planning Policy Wales (PPW), published by the Welsh Government in December 2018. PPW is supported by 21 topic-based Technical Advice Notes (TANs), which are also relevant. PPW is the Welsh Government's principal planning policy document, setting out the context for sustainable land use planning policy, within which Development Plans are prepared and developed.

Section 3.17 of PPW relates to Design and Access Statements (DAS) confirming that a DAS should communicate what development is proposed, demonstrate the design process that has been undertaken and explains how the objectives of Good Design and placemaking have been considered from the outset of the development process.

TECHNICAL ADVICE NOTES

This application has been prepared in deference to the latest version of TAN 12: Design, which was updated in March 2016 and TAN 18 (Transport).

WELL-BEING OF FUTURE GENERATIONS ACT (2015)

The Well-being of Future Generations (Wales) Act came into force in 2015 and seeks to improve the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals in order to make sure that everyone works towards the same vision. The well-being goals are set out in the Planning Statement.

SUPPLEMENTARY PLANNING GUIDANCE

The following supplementary planning guidance's are also of relevance to the proposed development:

- Affordable Housing (October 2018);
- Biodiversity and Development (April 2018);
- Planning Obligations (July 2018);
- Sustainable Development; and (2006)
- Travel Plan (July 2018)

2.4 LOCAL DEVELOPMENT PLAN

VALE OF GLAMORGAN LOCAL DEVELOPMENT PLAN

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning application decisions should be made in accordance with the authority's adopted development plan, unless material considerations indicate otherwise. In this instance, the statutory development plan for this application site is provided in the Vale of Glamorgan Local Development Plan (2011-2026). Relevant planning policies are contained in the table provided to the right.

The Local Development Plan Proposals map confirms the site is located within the settlement boundary and is allocated for housing with infrastructure including educational and community facilities. The allocation provides for a cycle route through the site. A section of the site is designated as a dormant mineral site. The coastline adjoining the site's eastern boundary is designated as a Special Area of Conservation, RAMSAR site and Site of Scientific Interest.

POLICY REFERENCE	RELATING TO
<i>Strategic Policies</i>	
SP1	Delivering the Strategy
SP3	Residential Requirement
SP4	Affordable Housing Provision
SP7	Transportation
SP9	Minerals
SP10	Built and Natural Environment
SP11	Tourism and Leisure
<i>Managing Growth Policies</i>	
MG1	Housing Supply in the Vale of Glamorgan
MG2	Housing Allocations
MG4	Affordable Housing
MG6	Provision of Educational Facilities
MG7	Provision of Community Facilities
MG16	Transport Proposals
MG19	Sites and Species of European Importance
MG20	Nationally Protected Sites and Species
MG21	Sites Of Importance For Nature Conservation, Regionally Important Geological And Geomorphological Sites And Priority Habitats And Species
MG24	Dormant Mineral Sites
MG27	Glamorgan Heritage Coast
MG28	Public Open Space Allocations
<i>Managing Development Policies</i>	
MD2	Design of New Development
MD3	Provision for Open Space
MD4	Community Infrastructure and Planning Obligations
MD5	Development Within Settlement Boundaries
MD6	Housing Densities
MD7	Environmental Protection
MD8	Historic Protection
MD9	Promoting Biodiversity
MD19	Low Carbon and Renewable Energy Generation

2.5 LOCAL AMENITIES

Previous developments, extending Penarth southwards have been dominated by housing and have included very little by way of amenities and placed reliance on existing commercial, education and health facilities within the older established town centre core. These developments also tend towards the provision of large numbers of similar house types and sizes. Outdoor space has however been well catered for, particularly along the Coastal Path and the former rail track has been used to create a cycle track.

The site is located in close proximity to large high quality outdoor recreational areas, such as Cosmeston Lakes and medieval village as well as the Coastal Path that are popular walking destinations for local residents and visitors. The nearby Glamorganshire Golf Club is well established and one of the oldest golf clubs in Wales. Considering the popularity and adjacencies of the Coastal Path and Cosmeston Lakes, there is very little connection between the two and it is difficult to navigate from one to the other through the existing residential avenues.



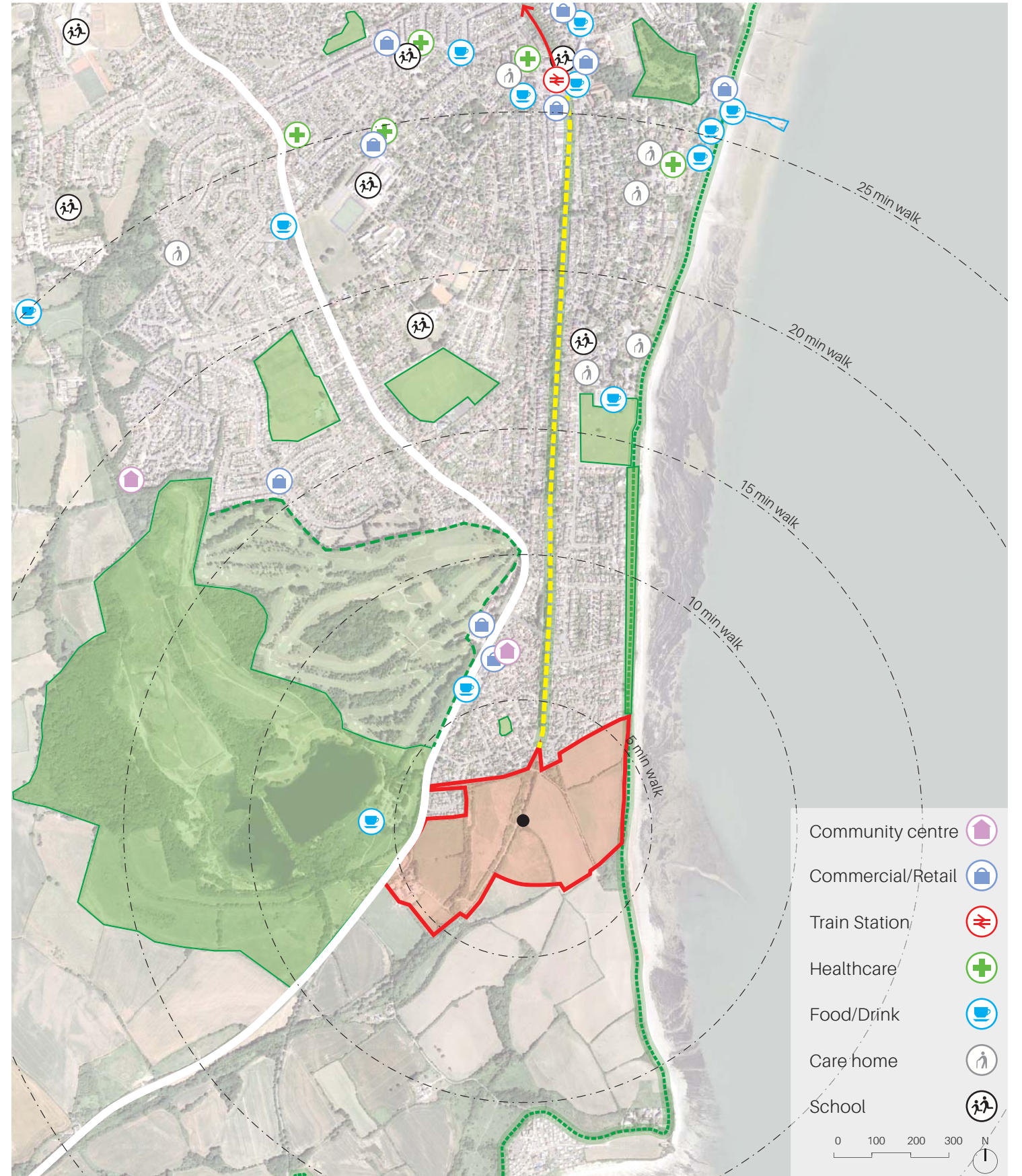
Coastal Path



Cosmeston Lakes



Coastal Path



2.6 ACCESS & MOVEMENT

PEDESTRIAN AND CYCLE

Due to the private nature of the site, it is currently impermeable to the public. The NCN88 cycle route, identified in the LDP, runs from Penarth town centre along a former railway line and presently abruptly stops just north of the proposed site. It is intended to be extended through the site and this will help improve connectivity with the neighbouring residential area and help promote sustainable travel.

The Coastal Path runs along the Severn Estuary and continues along the Vale of Glamorgan. From Penarth town centre to the northern corner of the site, the path is open and reminiscent of a formal Victorian esplanade with iron railings and open green spaces. The nature of the path changes dramatically alongside the development site. It becomes less formal, with protection from the cliff edge provided by dense vegetation and trees with a hedge along the site boundary itself providing an enclosed 'corridor'.








VEHICULAR

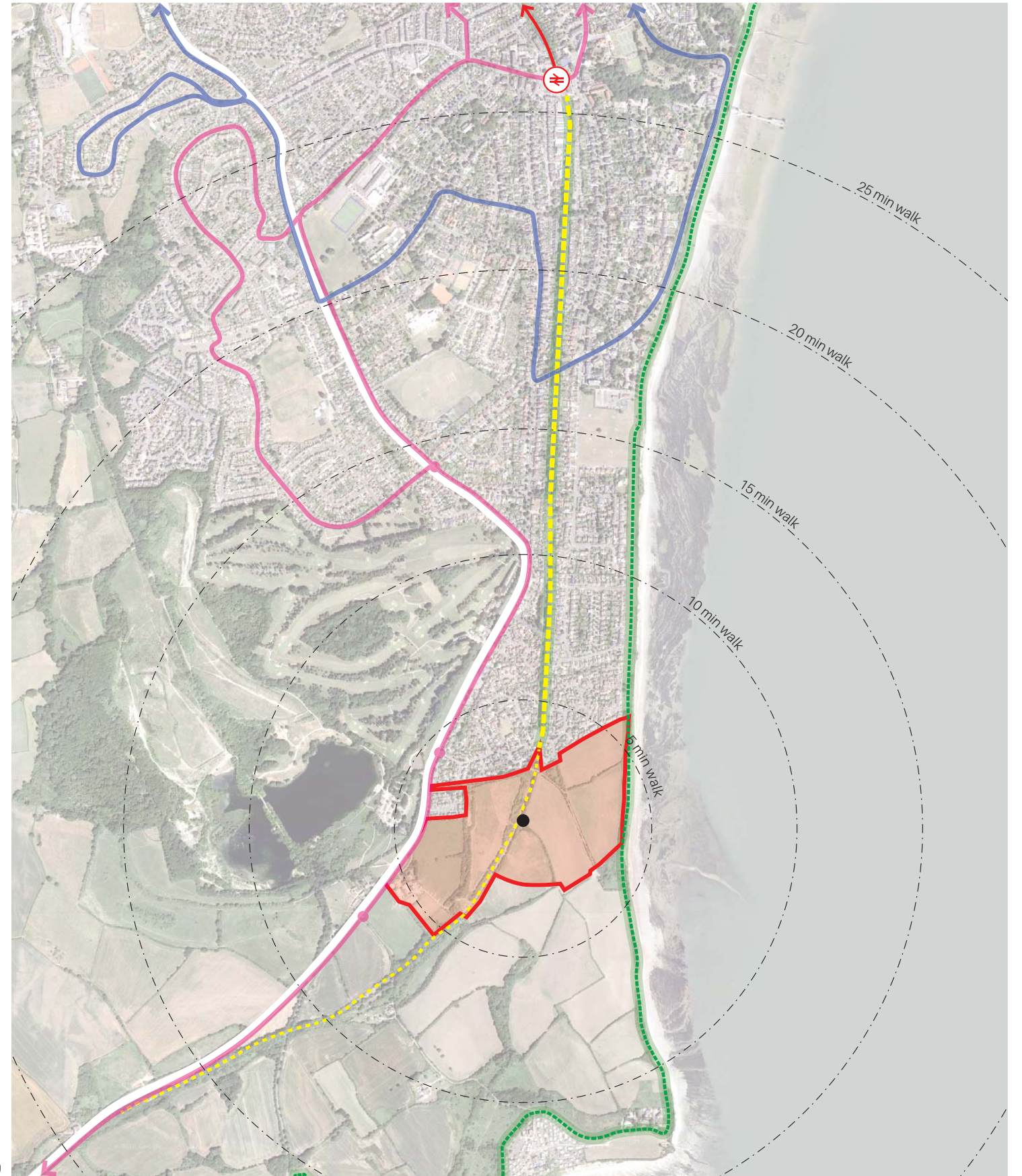
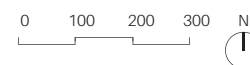
Lavernock Road is a main vehicular route into Penarth and Cardiff to the north and towards Sully and Barry to the south. Currently, the national speed limit applies along the site frontage, reducing to 30mph at the edge of the former Upper Cosmeston Farm residential development.

PUBLIC TRANSPORT

Public transport currently comprises bus routes that run along Lavernock Road forming part of the LDP's strategic highway network. They connect the site to Penarth town centre and onwards to Cardiff, as well as to Barry and Sully to the south.

The nearest train station, Penarth, is a 30 minute walk or 7 minutes cycle away. An old railway line used to run from Penarth through the centre of the site with another station just south of the masterplan site. There are no plans to reinstate this line, but it does form the NCN88 cycle route. The width and alignment of the route will be protected to allow for potential future changes in transport mode, such as tram systems.

- Cardiff Bus route 
- Bus Stop 
- NAT Bus route 
- NCN88 Cycle Path 
- Coastal Path 
- Lavernock Road 
- Train Station 



2.7 THE SITE

The Site is bordered to the north by a housing estate that stretches from the coast to Lavernock Road. To the west of the Site lies Cosmeston Lakes, and is bordered to the east by the coastal path and cliff edge facing the Severn Estuary. To the south of the site is the more green field land owned by Welsh Government.

The image opposite indicates the relationship of the masterplan site to the LDP allocated site. The masterplan extends beyond the LDP site to ensure the masterplan can deliver important pedestrian and cycle linkages into and out of the site and also accommodate the increased educational requirement for a two form entry primary school.

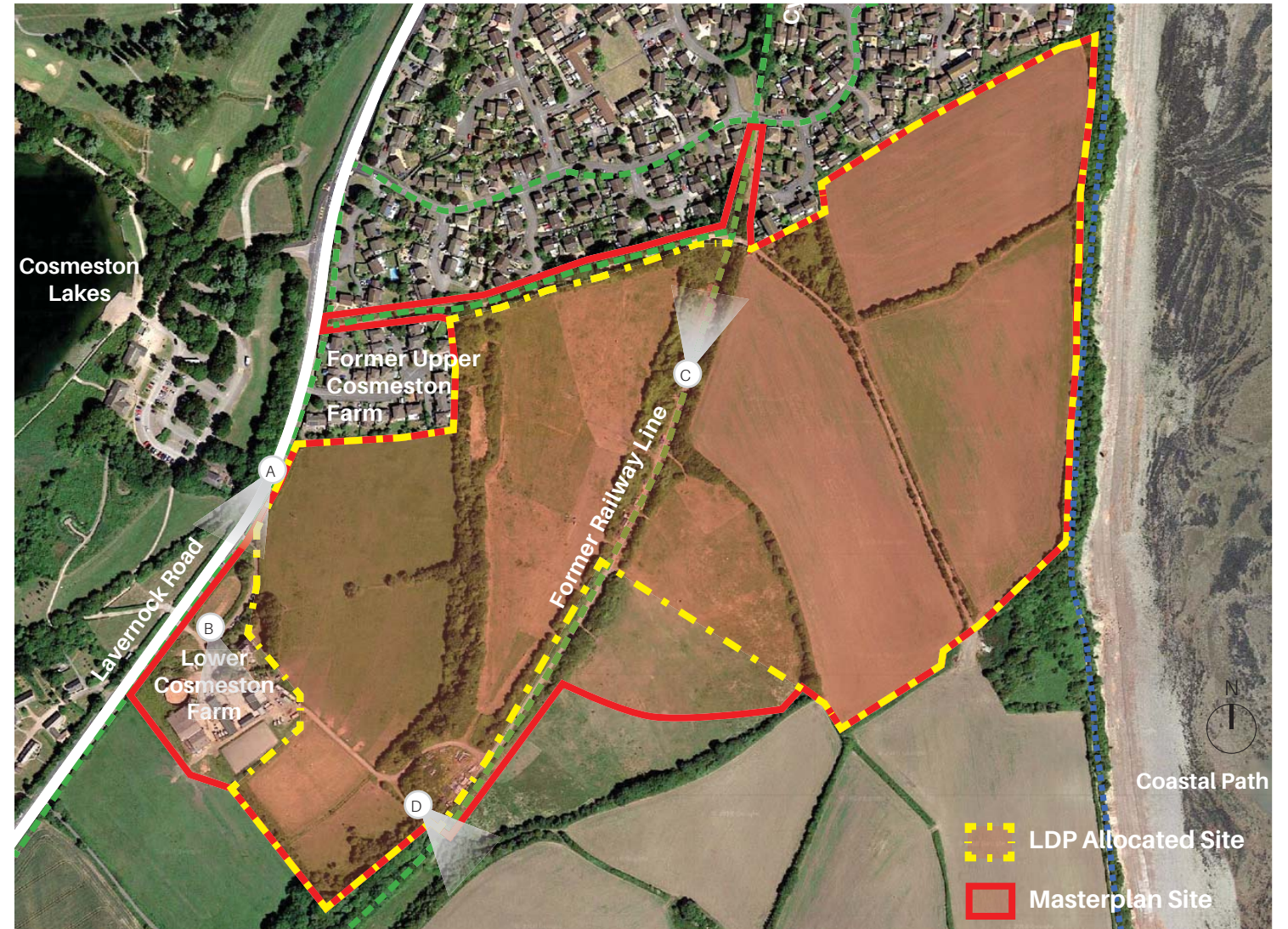
To the north, the masterplan site extends to provide linkages to the existing cycle path and coastal path and to the south extends to provide an improved cycle/footpath to the southern boundary.

The masterplan extends to include Lower Cosmeston Farm, currently allocated as Green Wedge, replacing these 'end of life' buildings with a new community school and playing fields by cojoining the farm and LDP allocated land.

The site contains challenging terrain and complex levels that are further described in the Topography section of this report.



(A) Lavernock Road with site on the left



(B) Lower Cosmeston Farm



(C) Bridge on northern boundary



(D) Bridge on southern boundary

2.8 URBAN CONTEXT

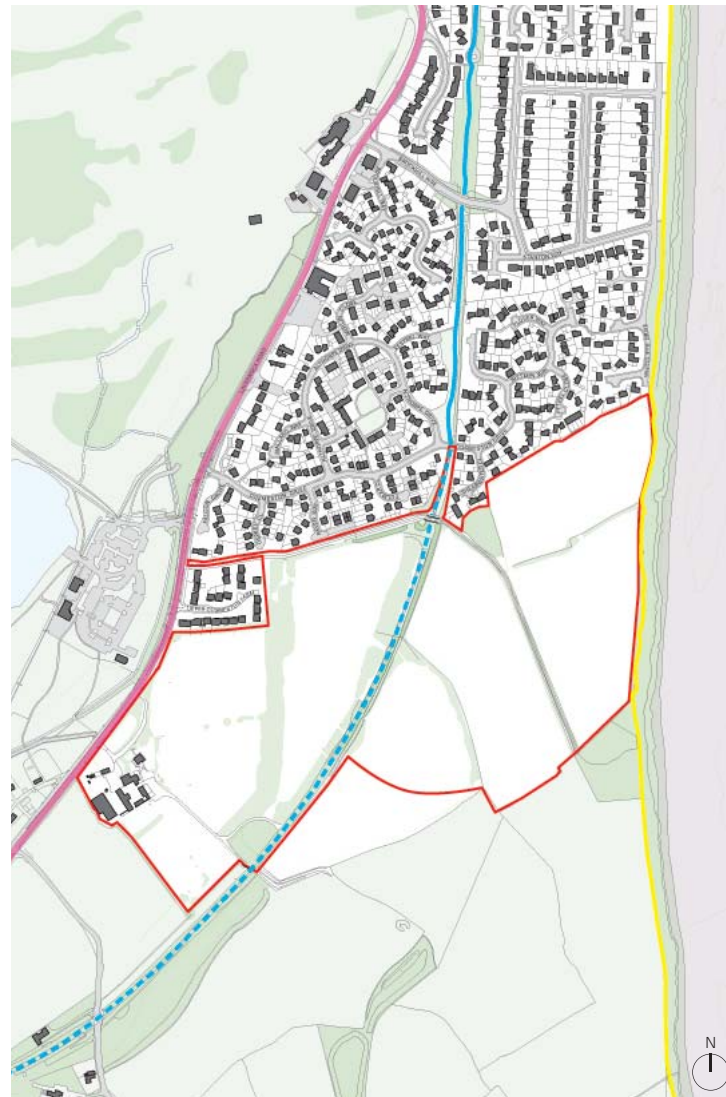
The urban grain in Penarth town centre is typified by straight, tree lined streets with terraced or semi-detached housing and grand villas, some overlooking the Bristol Channel. Interspersed within this are feature buildings in Victorian and Edwardian architectural styles constructed during the town's period of rapid growth between 1865 and 1910.

Penarth Conservation Area is the largest conservation area in the Vale of Galmorgan. It includes among other areas most of the town centre, Penarth Headland, the seafront promenade and the outstanding green spaces of Alexandra Park and Windsor Gardens. Due to its beautifully landscaped public gardens commanding expansive views over the Severn Estuary, Penarth is popularly known as 'the garden by the sea'.

In the second half of the 20th century the town expanded to the South and West. Its straight tree lined Edwardian street pattern with rigid hierarchy dissolved into typical for the period sprawling and 'winding' suburbia. Any new green spaces were designed as smaller and scattered, with little or no connectivity with an apparent absence of formal landscape features.

The residential development immediately to the north of the site, and currently forming the southern edge of Penarth, is a labyrinth of cul-de-sacs lined with two storey detached and semi-detached houses. There is little diversity of architectural design or scale which hinders wayfinding. Apart from the green area surrounding the former train line, there is one pocket of green space with no apparent landscape features. There is little clear connection to the beautiful surrounding amenity spaces on the coastal path or Cosmeston Lakes. The neighbourhood relies heavily on car use to access useful facilities which are located predominantly towards Penarth town centre.

The promenade facing the cliff edge, south of the more historic parts of the town, is home to larger properties that have been added to overtime, particularly through first floor balconies and terraces that capitalise on views across the estuary, but maintain a modest, appearance that is gradually becoming more elaborate as individual owners add balconies and adhoc extensions to their properties.



Site location plan showing the neighbouring residential development and a stark contrast in layout from the more formally organised areas laid on the patterns akin to the heritage parts of Penarth.



View of grand Victorian villas near Penarth town centre.



Sully Terrace facing NCN88 cycle route is composed of Edwardian houses of comparably modest size and detailing probably built to house quarry and railway workers and their families.



An example of prominent Art Deco architecture in the town centre.



View of Upper Cosmeston Farm Development to the north west of the site.



View from Windsor Gardens



View of Whitcliffe Drive to the north east of the site.

2.9 HISTORIC CONTEXT

Although desk-based research suggested there was potential for at least medieval activity within the site, the non-intrusive geophysical survey and subsequent trench evaluation found only a single undated post-hole and a linear ditch or gully in one very small area and nothing else of archaeological significance. As such, it is highly unlikely that development of the site will have anything more than a minimal impact on archaeological remains.

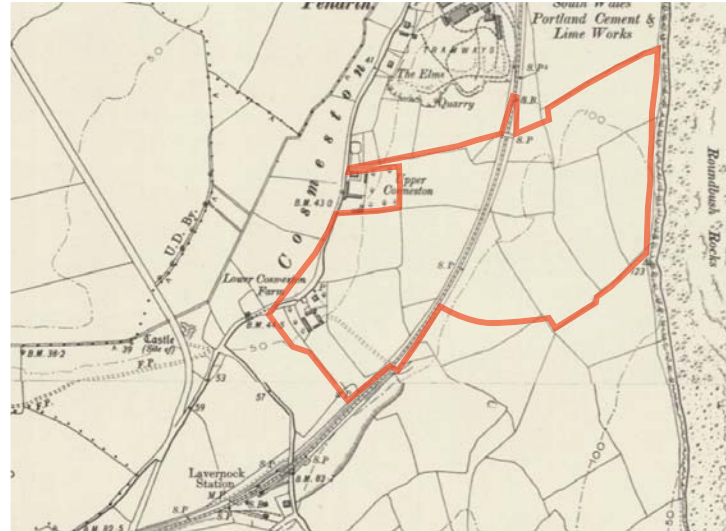
As can be seen from the following historic maps, Upper and Lower Cosmeston farms, as well as the golf course, have existed on the site from before the introduction of major quarrying and infrastructure that has occupied the site from the turn of the 20th century.

The buildings of Lower Cosmeston Farm have been subject to investigation and assessment as part of the application process. This has demonstrated that the oldest of the buildings is a house dating from the 17th century (more recently converted into stables) and confirmed that the majority of the buildings are more recent additions. All of the farm buildings have suffered from modernisation and unsympathetic alteration, as well as a paucity of maintenance and positive management, which have adversely affected their architectural and historic significance.

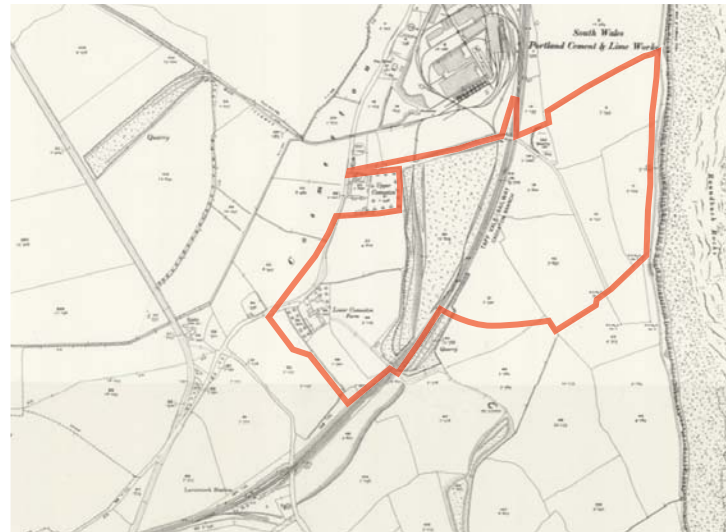
The Cosmeston Cement Works would have been a significant landmark visible from the coast. The surrounding quarries excavated limestone and have significant consequences on the ground conditions. Due to this fact several areas of the site are unsuitable for development.

Railway lines once permeated the site. Most significant is the decommissioned line connecting Penarth to Barry that cuts through the centre of the site and leaves behind a steep bank as well as tunnels and bridges to maintain access across the line. The now defunct Lavernock railway station used to lie just to the south of the site.

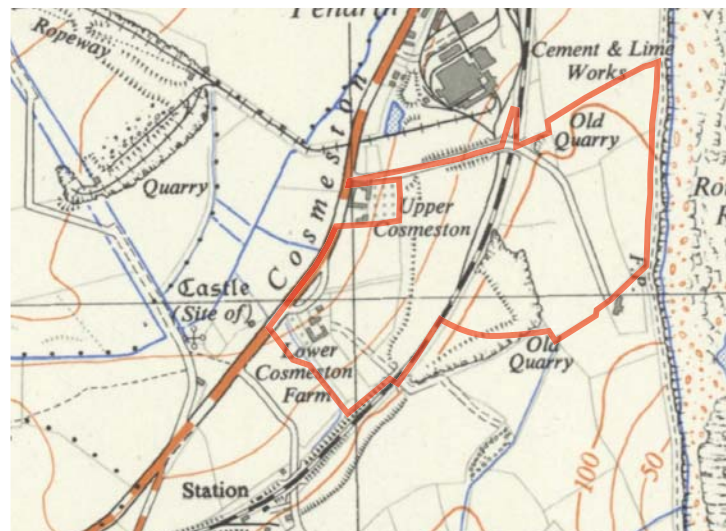
Cosmeston Lakes has repurposed some of the quarries to create valuable outdoor recreation areas and remains of the old tracks and quarrying machinery are left for display.



1880s



1900s



1950s



Cement works looking north



Cement works looking north east



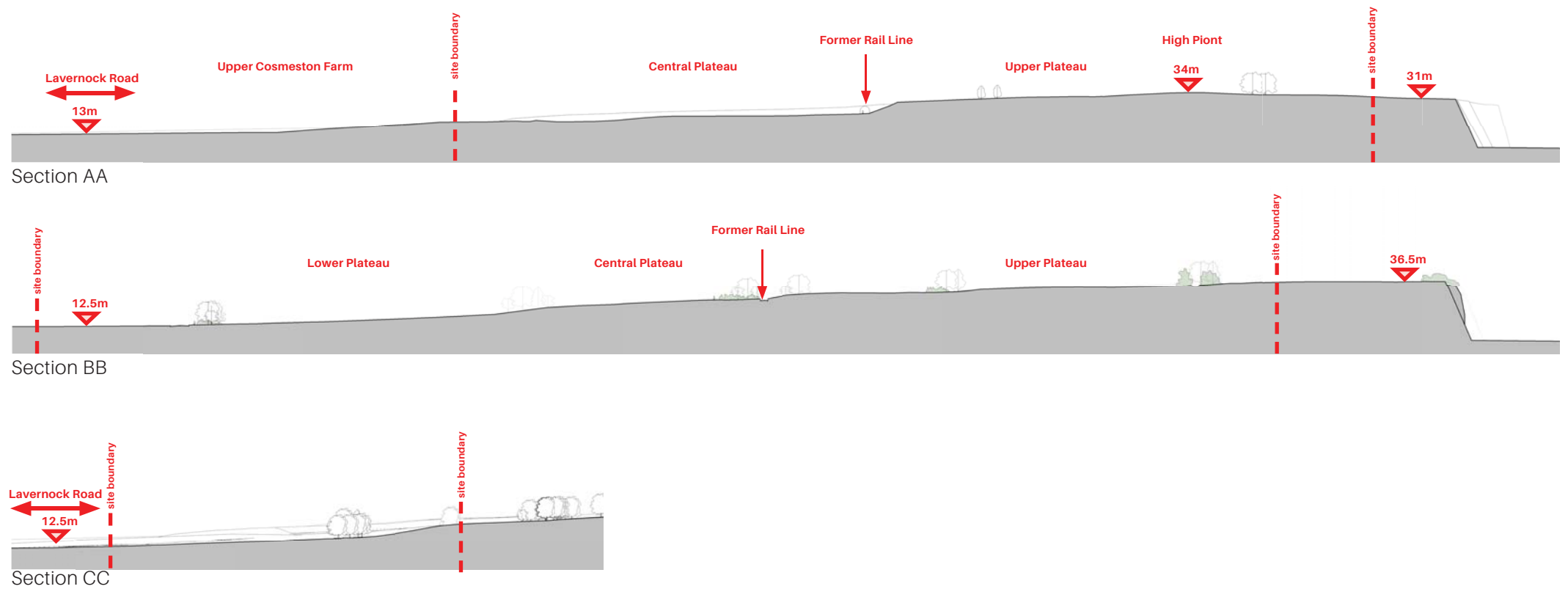
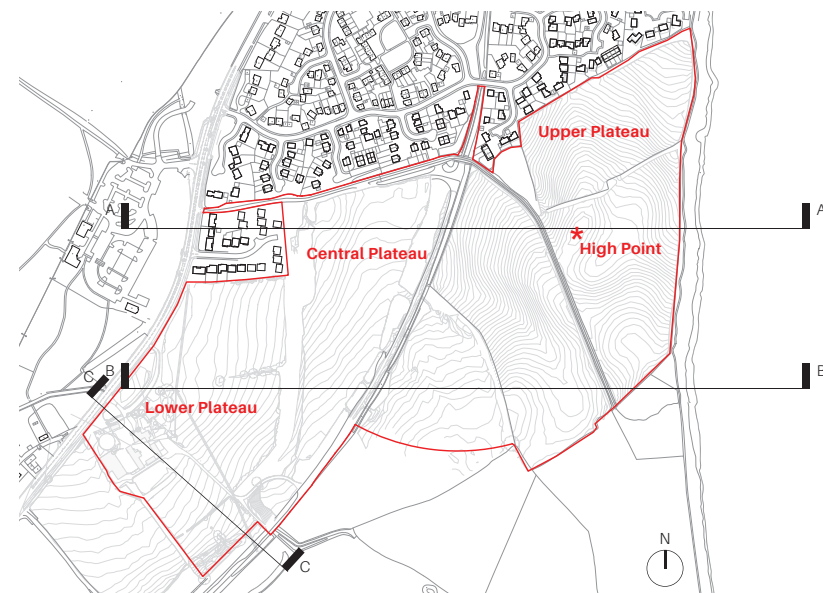
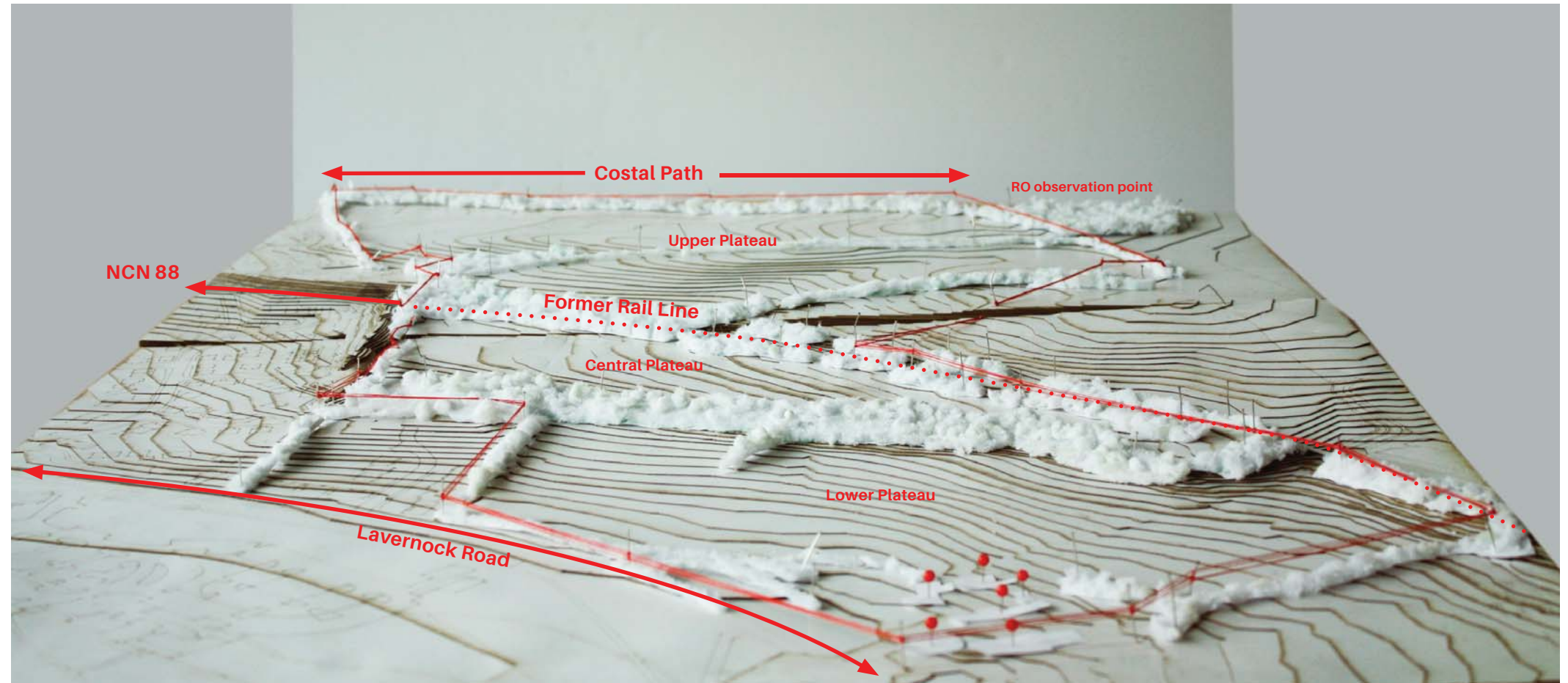
Cement works looking east

2.10 TOPOGRAPHIC CONTEXT

A topographic survey of the site has been undertaken. The topography of the site is complex, with three distinct plateaus and a maximum difference of height across the whole site of up to 24m, rising up from the lowest point along Lavernock Road to the highest point towards the cliff edge. A combination of topography and existing trees and landscape means that the whole site is never visible at once, unless in an elevated or aerial position and each plateau reveals itself as you walk eastwards from Lavernock Road, up through the site.

The former railway line splits the central and upper plateaus with a steep man made bank cut into the landscape. To the north of the site, along the central plateau, lies a track that rises up and bridges over the former railway line and continues to the upper plateau towards the former Royal Ordinance observation point. At the southern end of the site the railway line bridges over a track leading to the lower plateau.

The cliff edge is an area of potential coastal erosion. The site falls under the Severn Estuary Shoreline Management Plan whose preferred policy is for no active interventions in the short, medium or long term. The National Coastal Erosion Risk Mapping suggests that the cliff will erode 6.6m in 100 years with the potential for up to 10 metres to collapse in a single event. The impact on the masterplan site is minimal as the majority of the site boundary is much further than 10m from the cliff edge.



2.11 ECOLOGY

Located between the Severn Estuary European Marine Site and Cosmeston Lakes Site of Special Scientific Interest (SSSI) the Site provides opportunities for a range of protected and notable species including bats, dormouse, amphibians and reptiles, contributing to the wider biodiversity of Penarth. Informed by extensive survey effort the Masterplan has therefore sought to retain, protect and enhance the biodiversity interest on site, delivering ecological benefits throughout the lifetime of the development through implementation of the following principles:

- Retention, protection and enhancement of hedgerow habitats, including central wooded corridors combined with the creation of new habitat features, throughout the site maintain ecological links between north and south and east and west;
- The creation of a network of interconnected green open space managed in the long-term for wildlife whilst also providing benefits to public and visual amenity;
- The integration of wildlife features within a sustainable drainage strategy including ponds and reed beds, providing opportunities for breeding birds, amphibians and reptiles and complementing the character of Cosmeston Lakes nearby;
- The inclusion of new habitat features within wildlife areas across the site including bird nesting and bat roosting features;
- The sensitive management of retained and newly created habitat features so that the development continues to deliver ecological benefits over the long-term whilst encouraging natural dispersal of wildlife across the landscape.



2.12 LANDSCAPE, NATURE & WILDLIFE

The site is characterised as greenfield land with long stretches of significant hedgerows. For a site adjacent to a coastal path there are very limited areas where you can experience sea views due to the large hedgerows that border the eastern edge of the site. Impressive views are afforded from the high points on the upper plateau over to Penarth and the distinctive St Augustine’s Church tower. Looking West and south are vistas of rolling green hills of farm land and the Glamorganshire golf club.

It is not possible to view the whole site from one particular point on the site due the site levels and number of hedgerows. It is also difficult to appreciate the height that is climbed from Lavernock Road reaching the top of the upper plateau.

The ecological value of the hedgerows is predominantly in providing north to south corridors across the site. Dormice have been found on the site. There has been no evidence of newts but they are known to be found in the local area. The strategy will be to replace any hedgerows that are lost and to enhance natural habitats wherever possible. Bats are present on site and their flight paths through the site will be maintained as much as possible.



(A) Hedgerow between middle and upper plateaus



(B) View towards golf course



Hedgerows providing habitat for wildlife on the site



(C) View of hedgerow in upper plateau



(D) View of Flat Holm island



(E) View of Penarth and St Augustine’s Church

VIEW LOOKING NORTH TOWARDS PENARTH & ST AUGUSTINE'S CHURCH



VIEW LOOKING SOUTH WEST TOWARDS COSMESTON LAKE

