JUNE 2025

WEYCOCK CROSS

GREEN INFRASTRUCTURE VISION DOCUMENT

Persimmon
Together, we make your home

	Report Ref: edp7604_r005a			
	Author	Formatted	Peer Review	Proofed by/Date
005 Draft	DLe	PDO	JHa	-
005a	DLe	PDO	-	FMi 05062025

Persimmon Together, we make your home — Housebuilder

pad — Masterplanning

edp — Landscape and Heritage

ArbTS — Arboriculture

asbri — Planning

asbritransport — Transport

QuadConsult ENGINEERS IN PARTNERSHIP — Drainage

soltysbrewster ECOLOGY — Ecology

CONTENTS

Introduction

The Land to the South of Port Road West at Weycock Cross (hereafter referred to as 'the site') presents an opportunity to deliver a high-quality, well-integrated residential extension to Barry, accommodating up to 376 new homes. The proposed development is thoughtfully designed to complement the existing residential character, responding sensitively to the site's setting. It will feature a compact, visually appealing, and locally distinctive layout centred around a network of green spaces, offering intermittent views toward Mill Wood and Porthkerry Park. The scheme will include accessible open spaces for community use, including a central area that incorporates the retained Nant Talwg watercourse—supporting local recreation and enhancing biodiversity.

Green infrastructure (GI) plays a key role in shaping and guiding the layout of the new development. From the outset, early consultation was undertaken to understand the ecological and landscape baseline conditions. These assessments, along with the identified constraints and opportunities, have directly influenced the design of the scheme.

The primary objective of the landscape strategy is to safeguard and enhance the site's existing GI functionality while creating a distinctive and easily navigable sense of place. This approach ensures that the development integrates harmoniously with its landscape setting, including the retention and enhancement of significant existing vegetation where appropriate.

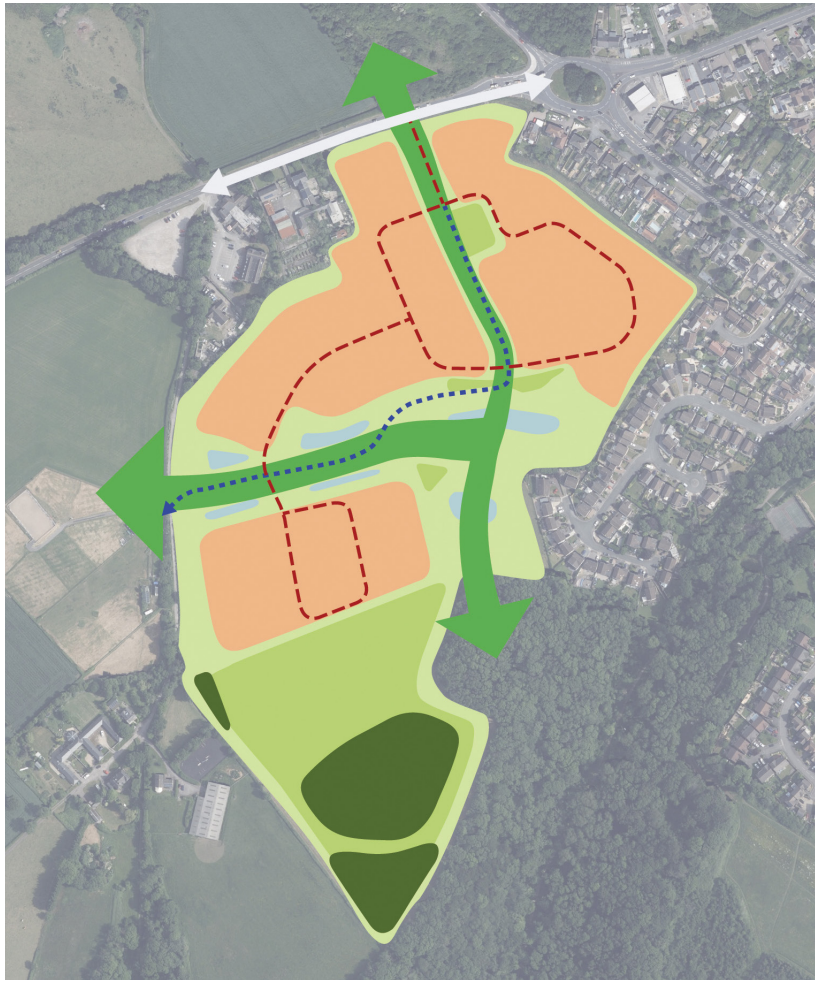

Figure 1: Concept Masterplan (Credit: Pad Design)

PLANNING POLICY WALES 12 (PPW 12): STEP-WISE APPROACH

In accordance with PPW 12 (Section 6), emerging development proposals, such as the land at Weycock Cross, must ensure that the 'step-wise' approach is followed in terms of maintaining and enhancing biodiversity; building resilient ecological networks; and delivering net benefits for biodiversity. In accordance with the step-wise approach, any site's overarching GI strategy and vision must ensure that all potential adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for. In all cases, a GI Statement will prepared as the detailed design progresses, supporting the future Planning Application, which will fully evidence how the final scheme proposals have followed the step-wise approach, and will set out in detail the scheme of enhancements to be provided to ensure a net benefit for biodiversity.

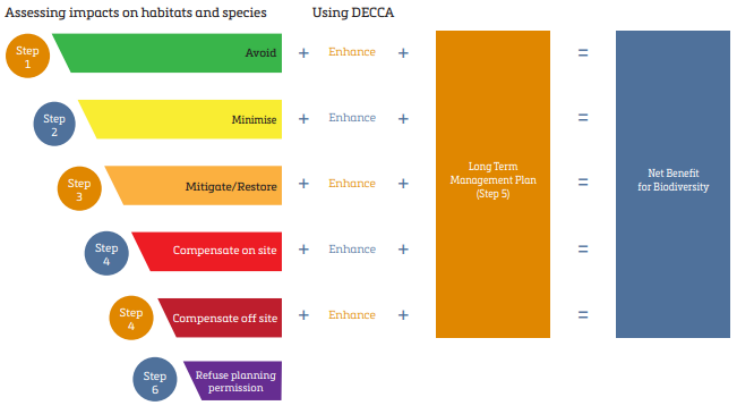

Figure 2: Summary of the Step-Wise Approach (PPW 12)

Onsite Assets and Functionality

Providing a responsive GI Strategy starts with an understanding of the existing GI baseline position. To obtain this, Chartered Landscape Architects have undertaken field surveys to consider the existing quality, condition and disposition of habitats and GI assets across the site. The field work has been augmented by a consideration of the Preliminary Ecological Appraisal (PEA) undertaken by Soltys Brewster Ecology and the Arboricultural report prepared by Arb TS.

The PEA indicates that the site holds no statutory conservation designations but borders the North East of Knock Man Down Wood Sites of Importance for Nature Conservation (SINC) to the south. Desk studies identified six Sites of Scientific Interest (SSSI) within 5km, none ecologically linked to the site, and recorded protected species including foraging bats, badgers, otters, hazel dormice (with on-site evidence), and common reptiles/amphibians within 1km. A Phase 1 survey (see Figure 3), produced in April 2025, classified the site's core as low-value arable fields and improved grassland, bordered by hedgerows and deciduous woodland—both Priority Habitats under Wales' Environment Act. These boundary features have potential to support bats, nesting birds, herpetofauna, and small mammals, with active badger setts observed.

The arboricultural report identifies 47 individual trees, groups and areas of trees, hedges and woodlands. Within these, Cwm Cidi Wood to the south of the site was categorised as A Grade, and four trees on the site boundary were categorised as B Grade.

Overall, the existing GI value and functionality of the site is primarily related to its hedgerow and tree network, which provide movement and foraging corridors likely to be used by a range of species. Hedgerows and mature trees will also provide nesting opportunities for birds, reptiles and small mammals.

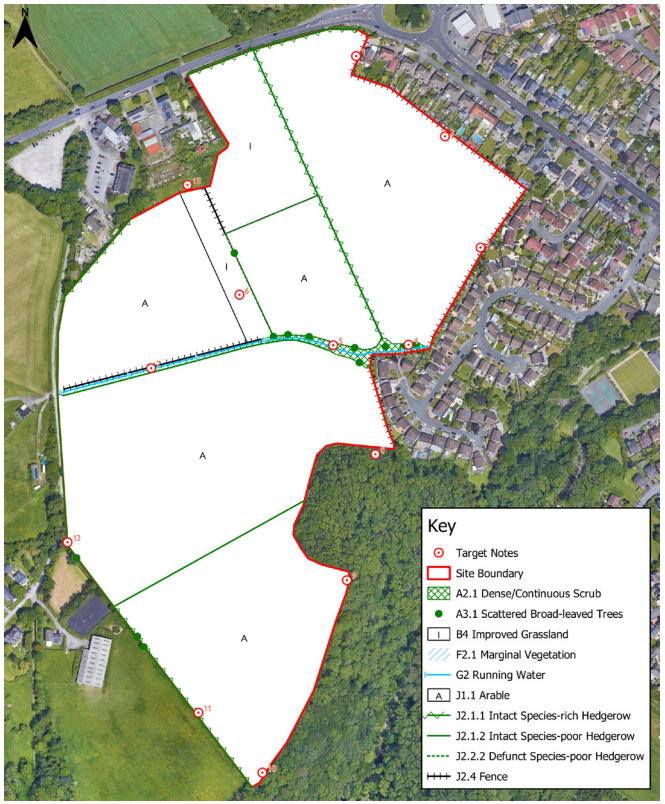

Figure 3: Extended Phase 1 Habitat Plan (Produced by Soltys Brewster Drawing number E25132401 / DR01)

Figure 4: Onsite GI and Connectivity Plan

Context and Connectivity

As well as understanding the existing GI baseline on-site, it is vital to understand the GI context of the site and how the two connect both physically and functionally.

Consideration of the Vale of Glamorgan Council's online Constraints and Proposals plans identifies that there are a number of designate SINCs located to the south and north of the site. These are largely related to the areas of Ancient and Semi Natural Woodland (ASNW) and SSSIs shown on the extract of the constraints mapping at Figure 2 (ASNW shown as green checked hatch and SSSI shown as green wash).

Lying between these areas, the site occupies an important space, providing movement corridors and connections between these ecological features. As noted in the previous section, it is the hedgerows around the site, particularly those associated with the western boundary along Cwm Ciddy Lane, which offer the greatest potential in this regard.

Cwm Ciddy Lane also provides human connectivity in the form of a Public Right of Way (PRoW) which runs parallel to the western boundary of the site. This offers an excellent opportunity for the site (and its future residents) to access the local PRoW network which connects to the Valeways Millenium Heritage Trail within Cwm Cidi to the south and also provides direct connection into Porthkerry Country Park.

Porthkerry Country Park is itself a significant GI asset and home to rare species such as the Wasp Spider and Purple Gromwell plant. It is also home to around 90% of the UK's population of the True Service Tree. The park has an active Wildlife Group and Ranger team and involves the community in management of its various habitats. In recent years, a defunct pitch and putt course has been 're-wilded' to provide further habitat opportunities.

The site's proximity to Porthkerry Country Park, accessible on foot via attractive walking routes, would be a significant benefit for the new community and encourage engagement with and appreciation of the natural world.

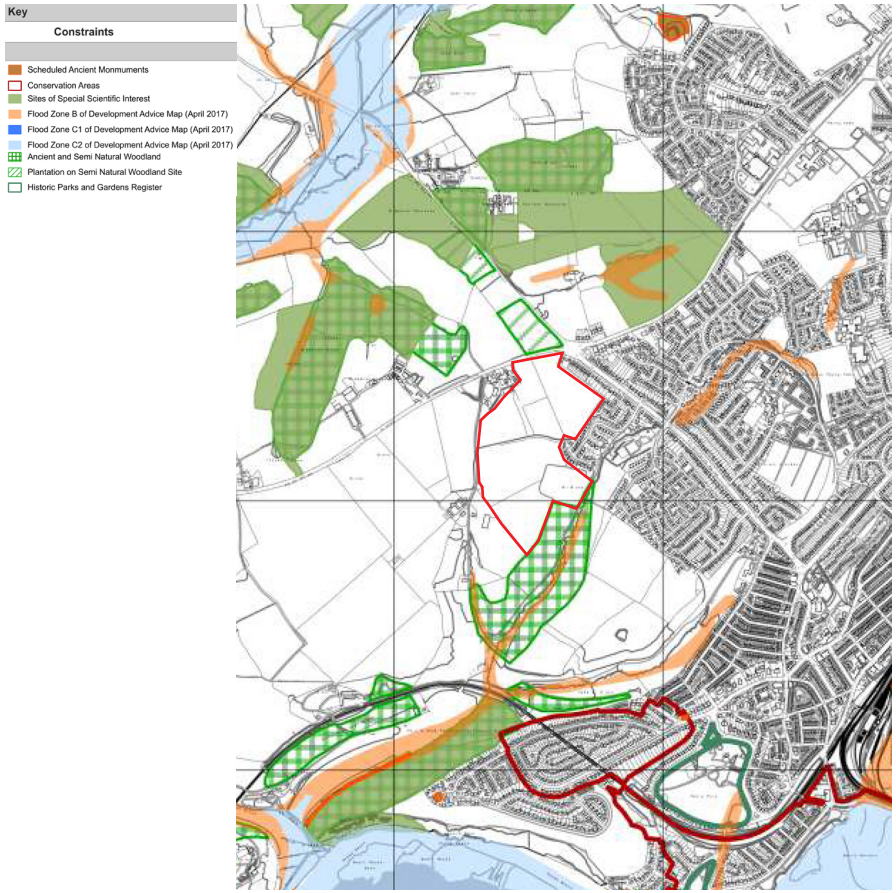

Figure 5: Vale of Glamorgan Constraints Map (Adopted June 2017)

Site Boundary

Range Rings (at 1km int

Ancient Woodland

Green Wedge

Country parks

Public Rights of Way (PRoW)

National Cycle Route

Coastal Path

Pedestrian Connections

Cycling Connections

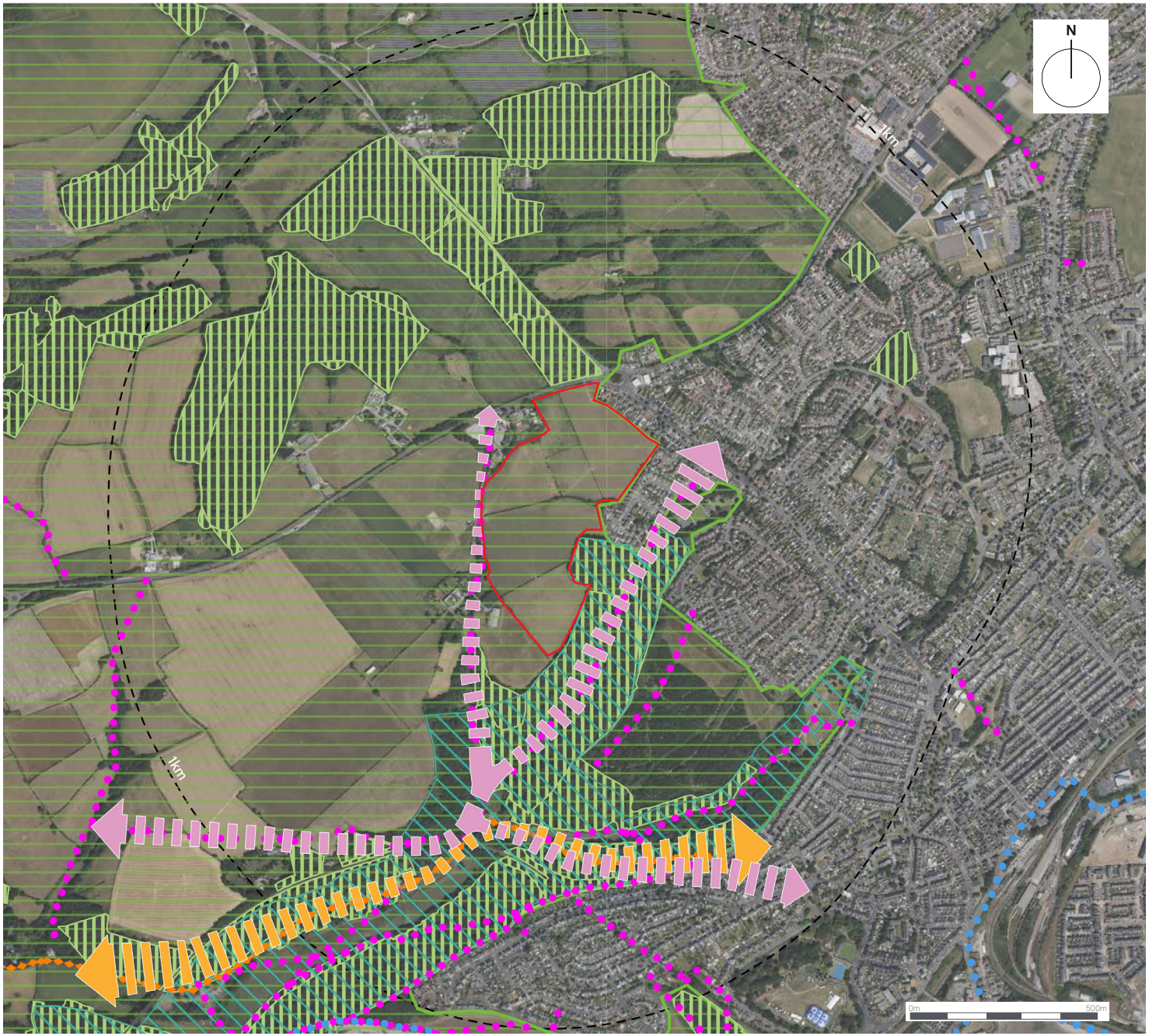

Figure 6: GI Context Plan

Green Infrastructure Strategy

A central green spine will run through the core of the site, connecting a network of internal green spaces to a larger, multifunctional open area along the southern boundary. This southern space will enhance the landscape setting of the development, strengthen local ecological networks, and provide accessible recreational opportunities. Crucially, it also acts as a buffer to the wider landscape and Porthkerry Country Park, which lies within walking distance of the site—offering future residents direct pedestrian access to one of Barry's most valued green assets.

The design has been led by early ecological and landscape assessments, ensuring that GI forms a foundational element in the scheme layout. The objective has been to protect existing GI functions—such as mature hedgerows, tree lines, and habitat corridors—while enhancing legibility, place-making, and long-term biodiversity value. The northern boundary hedgerow will largely be retained and strengthened, not only to define a green entrance to the development but also to accommodate a potential active travel route toward Cardiff Airport, contributing to the site's future connectivity.

To the west, where existing landscape features are more fragmented, the boundary will be bolstered with new hedgerow and hedgerow tree planting. This will create a well-defined, tree lined edge to Barry's urban area while delivering a stronger north–south green corridor, linking patches of woodland situated to either side of the site. In addition, a new block of native woodland is proposed along the north-western edge, improving visual containment and biodiversity resilience.

The site's Sustainable urban Drainage Systems (SuDS) strategy integrates a multi-phase water management approach, using swales, rain gardens, permeable paving, tree pits, and detention basins to manage surface water at source. A central SuDS corridor within the green spine doubles as a wetland park—offering marginal and ephemeral habitats, improved water quality, and educational and amenity features such as dipping platforms and informal wildlife viewing points. These water-sensitive features, essential in modern-day housing developments in Wales, will contribute to climate adaptation, biodiversity uplift, and public engagement with the water cycle.

Ecological connectivity across the site will be maintained and strengthened via retained field boundaries, new habitat creation, and the sensitive integration of development with existing features. Where vegetation clearance is required, this will be mitigated with native species-rich planting. The adjacent stream, which is of local ecological importance will continue to provide movement corridors for wildlife, while newly created grasslands and woodland margins within the site will support pollinators and small mammals. Collectively, these measures will ensure the scheme delivers a Net Benefit for Biodiversity, aligning with PPW 12 Step-Wise Approach.

Overall, the GI at Weycock Cross is not only a functional environmental response—it is also a core design element that delivers landscape character, habitat resilience, sustainable water management, and a strong connection between people and place. The result will be a distinctive and liveable edge-of-settlement community embedded within the green setting of the Vale of Glamorgan.






Figure 7: GI Strategy Plan

The Environmental Dimension Partnership
First Floor, The Bonded Warehouse,
Atlantic Wharf, Cardiff CF10 4HF
t: 02921 671900
e: info@edp-uk.co.uk
w: www.edp-uk.co.uk