

Green Infrastructure Statement

Vyrnwy Reserve

April 2025



**Canal &
River Trust**

Making life better by water

1.0 Introduction

Introduction and Purpose

This Green Infrastructure (GI) Statement has been prepared by FPCR Environment and Design Ltd on behalf of the Canal & River Trust (the Trust) to accompany a planning application for the creation of a new wetland nature reserve, approximately 1km to the north-west of Four Crosses, as shown at Figure 1.

The planning application seeks permission for the creation of an open water reserve, connected to the River Vyrnwy, which over time will allow associated wetland habitat to develop.

In accordance with Planning Policy for Wales (Edition 12), the purpose of this GI Statement is to demonstrate how GI has been incorporated into the proposal. The GI statement demonstrates the positive multi-functional outcomes of the proposed new wetland reserve. The proposals are informed by and evaluated in the context of the Building with Nature standards.

The circa 14.63ha site comprises agricultural land in a rural location, bound to the north and east by the river Vyrnwy, and to the south by to the Montgomery Canal. The Montgomery Canal is a designated Special Area of Conservation (SAC) / Site of Special Scientific Interest (SSSI) for its aquatic emergent and marginal plant communities.

The Montgomery Canal Restoration Project

Following a successful bid to the Levelling Up Fund by the Trust and Powys County Council (PCC), the Montgomery Canal Restoration Project will make a substantial contribution towards the wider, phased restoration of the Montgomery Canal.

The Vyrnwy Reserve proposal is part of this wider Montgomery Canal Restoration Project which, as part of critical repairs and improvements, includes:

- dredging / bank works to the unnavigable section between Llanmynech and Arddleen
- creating a new nature reserve at Wern
- building a new Carreghofa Lane Bridge and Williams Bridge

The overarching aim of the restoration works is to protect the canal's natural standing as a Site of Special Scientific Interest (SSSI) and Special Area of Conservation.



 Application boundary



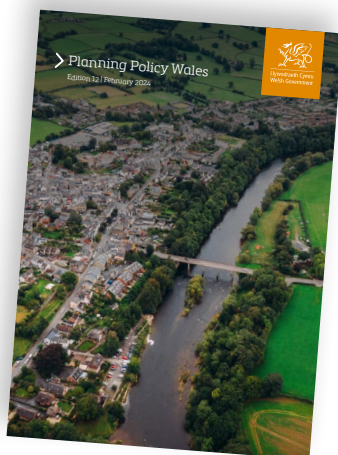
Figure 1: Site Location

2.0 Planning Context

Planning Policy Context

Key national and local planning policies which have informed the development of the GI proposals for the proposed Vyrnwy Reserve are set out below. The GI proposals provide opportunities to address relevant landscape policies:

- Planning Policy Wales (PPW) Edition 12 - (February 2024)
- Planning Policy Wales (PPW) Technical Advice Notes (TAN) (March 2016)
- Environment (Wales) Act 2016
- Powys Local Development Plan 2011-2016 (April 2018)
- Landscape Supplementary Planning Guidance (SPG) - April 2019



Green Infrastructure

Green infrastructure is defined within PPW Edition 12 as ‘...the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places. ... At the landscape scale, green infrastructure can comprise entire ecosystems such as wetlands, waterways, peatlands and mountain ranges or be connected networks of mosaic habitats, including grasslands. ...’

The new PPW places strong emphasis on taking a proactive approach to GI covering cross boundary considerations, identifying key outputs of GI assessments, the submission of proportionate GI statements with planning applications and signposting Building with Nature standards.

The PPW also places further clarity on securing net benefit for biodiversity through the application of the step-wise approach, including the acknowledgement of off-site compensation measures as a last resort and the need to consider enhancement and long-term management at each step. The importance of strategic collaboration to identify and capture larger scale opportunities for securing a net benefit for biodiversity is recognised.

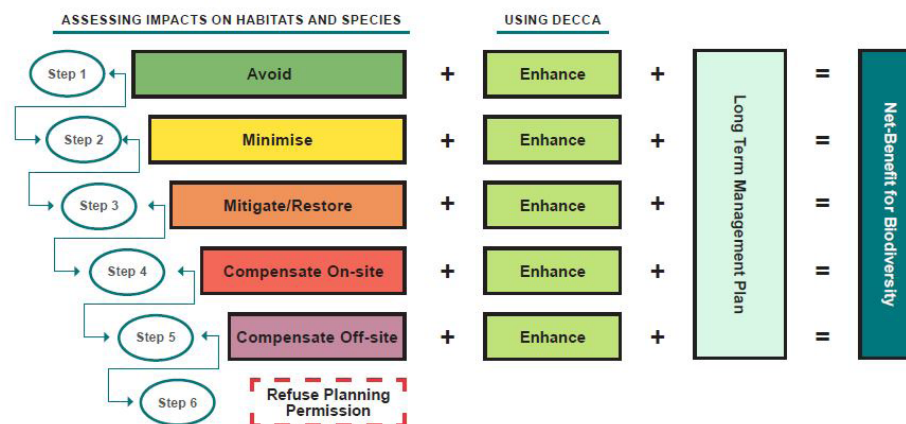


Figure 2: Step-wise approach

3.0 Site Context

Site and Surroundings

This section describes the application site and its surroundings and sets out the surveys undertaken to inform the design proposals.

The site comprises circa 14.63ha of agricultural land in a rural location, circa 1km north west of Four Crosses and south west of Llanymynech. The B4393 is located to the west of the site. A number of residential properties are located along the B4393.

The site is made up of pasture grassland, areas of woodland and occasional standard trees, scrub and hedgerow. The south-western boundary is adjacent to a section of the Montgomery Canal towpath 'Offa's Dyke Path / Public Right of Way (PRoW) 'Carreghofa 35'.

The site is not covered by any national or local landscape designations such as National Park or National Landscape. The nearest heritage and ecological designations include Montgomery Canal, a Site of Special Scientific Interest (SSSI).

Surrounding the site, the wider landscape is dominated by agriculture, with an extensive network of hedgerow lined fields and small residential settlements, with Pentreheylin Hall Farm adjacent to the site's western boundary.

The site itself is at broadly uniform in height, lying at circa 65m AOD. The topography of the site context is varied. The site is predominately open pastureland, with views out to the north and east. Views to the south and west are restricted by the steeply rising wooded slopes, including those of Bryn Mawr.

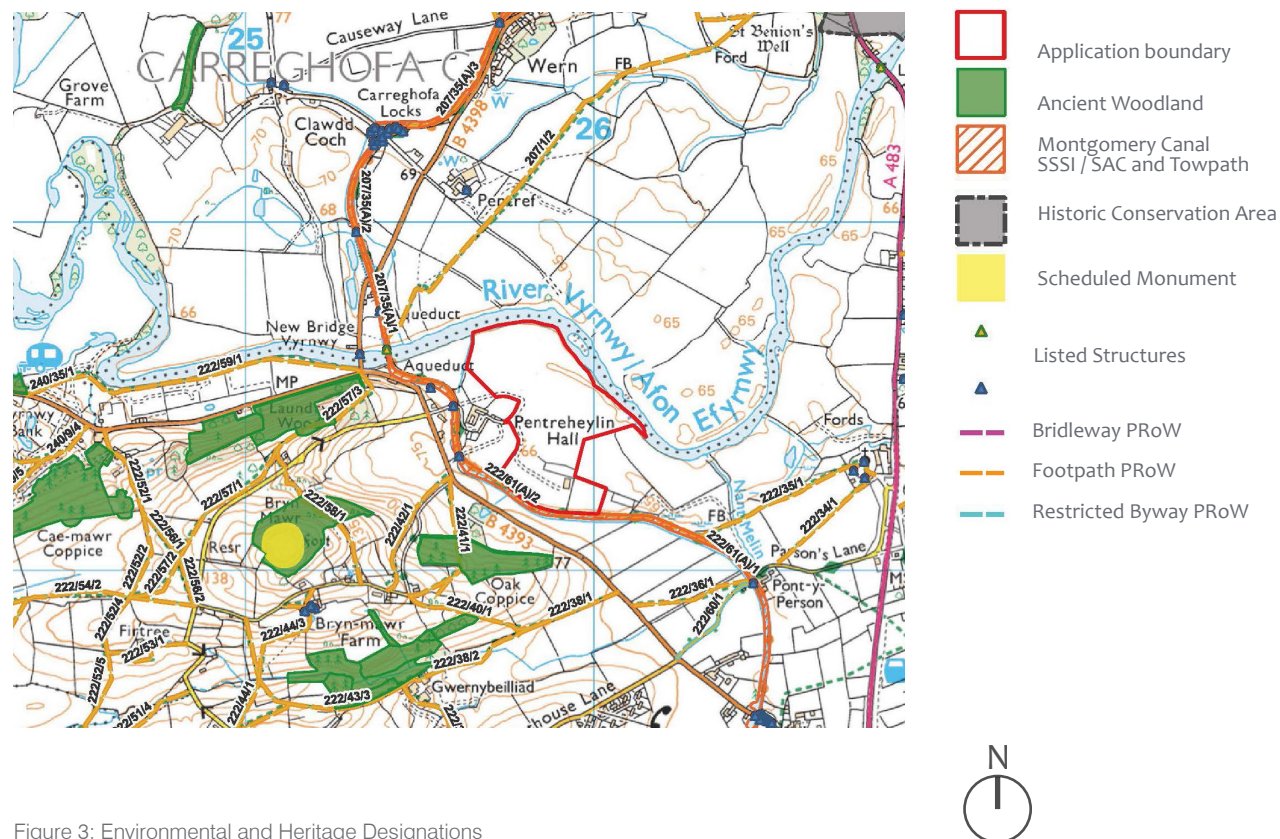


Figure 3: Environmental and Heritage Designations

Landscape and Visual Appraisal

A Landscape and Visual Appraisal (LVA) for the proposed development has been prepared by FPCR Environment and Design Ltd.

LANDMAP Wales divides the landscape into distinct geographical districts and provides five spatial datasets - Geological, Landscape Habitats, Visual and Sensory, Historic and Cultural.

At a national level, the site is located within NCLA 17 'Montgomeryshire Hills and Vales'. At a local level, the site is within Landscape Character Area (LCA) 8 'Severn Farmlands'.

The 'Severn Farmlands' is an extensive open valley landscape along the Severn and Vyrnwy rivers. The LCA is low-lying with a wide floodplain, which lies at around 60m at its lowest point.

Under Key Landscape Qualities and Sensitivities, LCA 8 identifies '*The Montgomery Canal, its numerous listed structures and recreational opportunities*'. LCA 8 also identifies '*... the restoration of the Montgomery Canal and opportunities associated with it, such as improving visitor facilities*' as a future force for change.

Development Management Guidelines for LCA 8 includes:

... protect the setting of the Montgomery Canal, seek opportunities to further enhance access to and enjoyment of the canal and open up / enhance views of the canal.'

Views of the site are restricted as a result of the screening effects of the local topography from the north and east, combined with mature vegetation along field boundaries, as well as along the River Vyrnwy and the Montgomery Canal. Longer distance views are largely restricted to elevated locations to the west and south of the site although heavily filtered by intervening vegetative cover. The LVA notes that the most noticeable visual effects would be experienced by a limited number of properties located in close proximity to the western boundary of the site, including Pentreheylin Hall, and users of the Montgomery Canal and its towpath 'Offa's Dyke National Trail'.

The LVA concludes that the proposed wetland reserve could be successfully accommodated within the local landscape and the landscape proposals would result in some limited and localised beneficial effects, including contributing at a local level to the guidelines for LCA 8 as a result of opening up and enhancing

Ecology and Trees

A Net Benefit Report has been prepared by FPCR Environment and Design Ltd. An Arboricultural Appraisal has been prepared for the Trust by Cura Terrae. In terms of habitat baseline, the Preliminary Ecological Appraisal Report (Habitat Works, 2024) provides full habitat descriptions for the site. In brief, the site comprised largely of other neutral grassland fields, with

areas of modified grassland and other broadleaved woodland present. Several individual trees are scattered throughout the site. A mixture of species rich native hedgerows and native hedgerows are present on the boundaries of field compartments. A stream runs along a portion of the western boundary of the site. Hedgerows are priority habitats and considered to be of key significance in Wales.

The Montgomery Canal SAC / SSSI is designated for its unique aquatic plant life including the Annex II species, floating water plantain *Luronium natans* (a primary reason for Special Area of Conservation (SAC) site selection). This is the largest and the most extensive population of floating water-plantain in Britain.

Habitat connectivity to the wider landscape is provided by the retained vegetation, by the Montgomery Canal and by the River Vyrnwy.

Functional Aspects

The site is predominantly open pastureland, in private ownership. There are no Public Rights of Way (PROWs) within the site. The south-western boundary is adjacent to a stretch of the Montgomery Canal towpath, PROW 'Carreghofa 35'. The Montgomery Canal has a habitat function and is designated a SSSI and a Special Area of Conservation (SAC).

4.0 Green Infrastructure Proposals

Green Infrastructure Objectives

The key objectives of the GI proposals for the new Vyrnwy Wetland Reserve are:

- Achieve an overall design solution which respects and enhances the character of the site and its surroundings
- Mitigate and minimise as far as practicable the potential landscape and visual effects resulting from the proposals, with particular emphasis on protecting views from neighbouring residential properties.
- Deliver recreational benefits for the local community, visitors and users of the Canal alike via a viewing location
- Secure and maximise biodiversity net gain through conservation, enhancement and creation of existing and proposed habitats
- Contribute to the guidelines for LCA 8 'Severn Farmlands'

Key features of GI Proposals include:

- Retention of existing boundary vegetation where possible including scrub and trees along the River Vyrnwy. Where it is necessary to remove a section of vegetation on the southern boundary with the canal, this will be mitigated by replacement planting in that area of the site;

- New ponds and ditches designed and located where possible to ensure the conservation and enhancement of existing key landscape features within the site, such as hedgerows, scattered mature trees and woodland;
- Creation of landscape bunds, circa 2m in height, adjacent to the Montgomery Canal, providing the opportunity to view of the wetland reserve. The bunds will recycle excavated material on site and will be sympathetically designed and integrated with the surrounding topography;
- Additional planting on site as appropriate, including wet grassland meadow, riparian trees and scrub. New planting will mimic the species, assemblages and communities found within the local area and be tolerant of wet conditions where planted within land susceptible to flooding;
- Provision of bird and bat boxes and hibernacula to preserve and increase bio-diverse habitats within the site

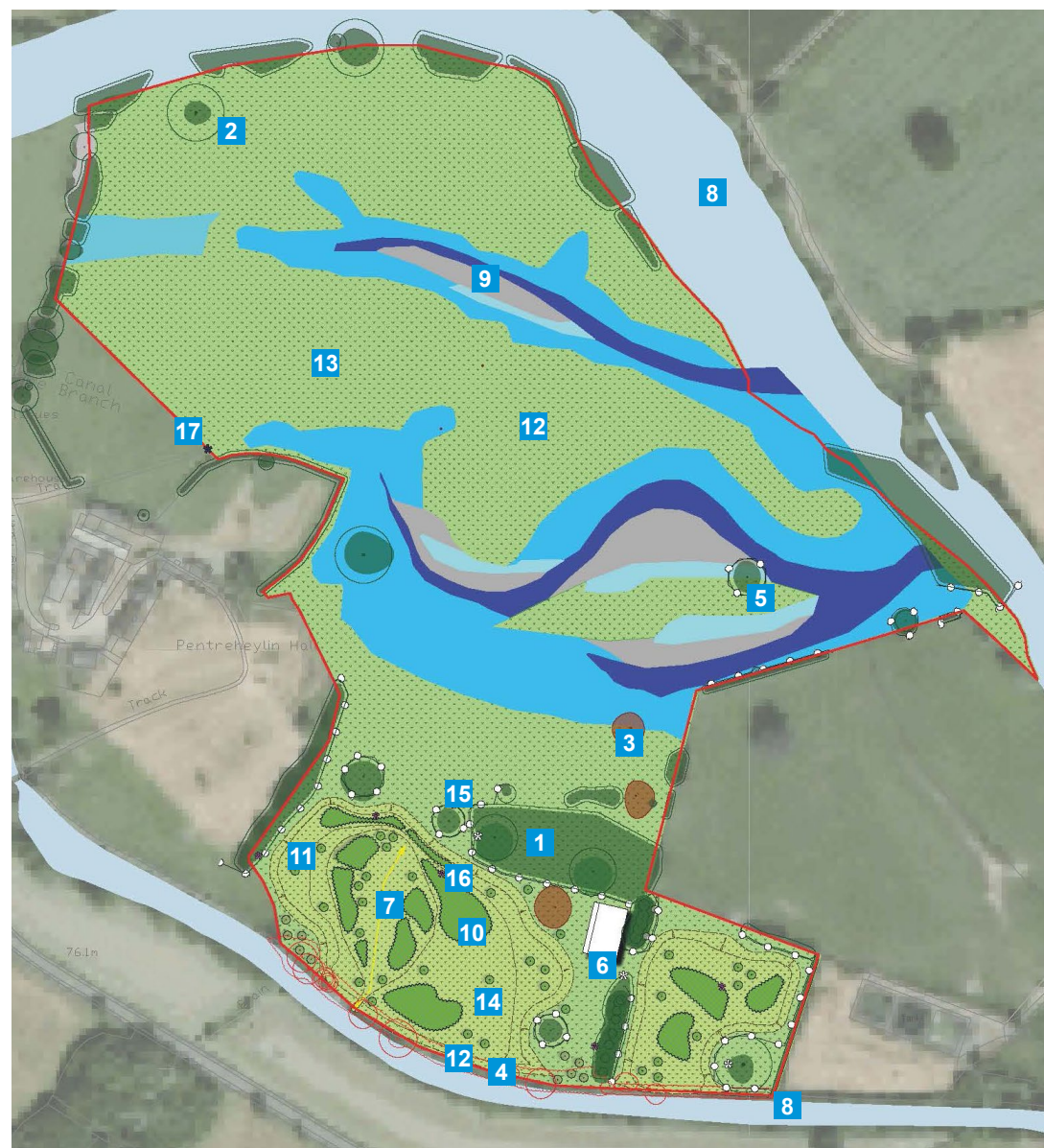
The landscape and green infrastructure (GI) proposals will establish an attractive framework within which to integrate the proposed new wetland reserve, with the retention of existing landscape features and new additional features providing opportunities to strengthen local landscape character as well as biodiversity enhancements.



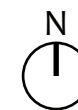
The new reserve will be carefully designed to allow for the retention of existing key landscape features where possible

Management and Maintenance

All landscape areas would be managed and maintained in perpetuity by the Canal & River Trust to ensure the successful establishment, maintenance and monitoring of new and existing habitats.



- 1** Retained existing vegetation
- 2** Root Protection Area (RPA)
- 3** Retained Deadwood for ecological purposes
- 4** Removed vegetation
- 5** Protective Fencing for Trees
- 6** Existing Building Retained
- 7** Informal Mown Footpath to viewing area
- 8** Montgomery Canal & River Vyrnwy
- 9** Proposed Wetland Features
- 10** Proposed Native Scrub Planting
- 11** Proposed Native Standard Tree
- 12** Proposed Native Riparian Tree
- 13** Existing Meadow Grassland
- 14** Proposed Meadow Grassland
- 15** Proposed Bat/Bird Boxes
- 16** Indicative location of log piles (Hibernacula)
- 17** Proposed Maintenance Gate



5.0 Green Infrastructure Evaluation

Building with Nature

This section provides an evaluation of the GI proposals using the Building with Nature (BwN) standards. Taken together, the BwN standards define ‘what good looks like’ by offering a set of quality standards for placemaking and place-keeping, covering the themes of wellbeing, water and wildlife.



- Core Standards 1-6
- Wellbeing Standards 7-8
- Water Standards 9-10
- Wildlife Standards 11-12

1. *Optimises Multifunctionality and Connectivity*

Landscape, Ecology and Arboricultural surveys have been undertaken to identify the GI features and ecological networks within the site and its surroundings. New planting includes individual trees planted to relate to existing areas of tree, hedgerow and woodland cover in the local landscape. Bat boxes and hibernacula would also be provided.

2. *Positively Responds to the Climate Emergency*

The GI proposals demonstrate how the scheme would provide new young trees to replace the trees which need to be removed. Over time once planting has matured, this would provide increased tree cover associated benefits such as increased carbon sequestration.

3. *Maximises Environmental Net Gain*

As detailed on the Green Infrastructure Plan, proposals for the new wetland reserve would incorporate new native tree planting and species rich grassland.

4. *Champions a Context Driven Approach*

The design process has had regard throughout to the location and surroundings of the proposed wetland reserve. The layout and planting is strongly influenced by its rural context and setting. Whilst some vegetation removal works would

be required to allow for the creation of the wetland area, the vast majority of the existing vegetation would be retained and supplemented with new native tree planting and species rich grassland.

The aim is for these new features to have a naturalistic appearance. As new planting establishes, this would further soften the form of the proposed landscape bunds and ensure this feature is well-integrated within the local landscape.

5. *Creates Distinctive Places*

The proposals have been designed to maintain the pleasant, rural aspect of the area, with areas of new grassland and native tree planting.

6. *Secures Effective Place-keeping*

The new wetland reserve would be managed in perpetuity by the Trust in order to ensure the successful establishment and ongoing maintenance of new planting and habitats.

7. *Brings Nature Closer to People*

The proposed viewing area will be an addition of benefit to users of the canal towpath and local community. It will provide elevated views across this area of rural land towards the River Vyrnwy.

8. *Supports Equitable and Inclusive Places*

The Vyrnwy Reserve forms part of the broader Montgomery Canal Restoration Project, which would deliver a series of access improvements along this stretch of the canal.

9. *Brings Water Closer to People*

See comment in relation to Standard 7 above.

10. *Delivers Wildlife Enhancement*

A Net Benefit Report have been prepared to accompany the application. The reports detail the proposed wildlife enhancements and benefits resulting from the proposed new bridge.

11. *Underpins Nature's Recovery*

The proposed biodiversity enhancements include the provision of bird and bat boxes along with on site hibernacula and habitat piles. As noted above, the GI proposals include new planting to mitigate for the vegetation which needs to be removed. The new planting is designed to extend and complement existing habitats within the site and its surroundings.



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