

GREEN INFRASTRUCTURE STATEMENT

**Former Tirbach Washery,
Tirbach Road,
Ystalyfera.**

May 2026



Summary

Proposal

Outline planning application for the redevelopment of the former Tirbach Washery comprising the construction of up to 160 residential dwellings and associated infrastructure works.

Location

Former Tirbach Washery, Tirbach Road, Ystalyfera.

Date

May 2026

Project Reference

S19.182

Client

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Report Revision No.

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Introduction

- 1.1 Asbri Planning is appointed as planning agent to Mr Robert Maggs to prepare this Green Infrastructure Statement (GIS) to accompany an outline planning application for the redevelopment of the former Tirbach Washery comprising the construction of up to 160 residential dwellings and associated infrastructure works.
- 1.2 This GIS has been prepared in line with the requirements of Planning Policy Wales Edition 12 published in February 2024. It aims to demonstrate how the proposal adopts a step-wise approach when it comes to maintaining and enhancing the biodiversity credentials of the application site. Furthermore, the proposal aims to address the comments made within the pre-application response in regards to national and local policies relating to biodiversity and green infrastructure.
- 1.3 This GIS is structured as follows:
 - Section 2: provides a description of the site and its surroundings
 - Section 3: summarises the policy context
 - Section 4: provides the baseline data for the site
 - Section 5: discusses the development impacts and the measures to achieve net benefit for biodiversity
 - Section 6: provides a conclusion regarding the overall acceptability of the green infrastructure

Site Description

- 2.1 The site of Tirbach Washery is located within the village of Ystalyfera in the upper Swansea Valley. The site lies approximately 23km north-east of Swansea and approximately 1.7km south-west of Ystradgynlais and centres on the grid coordinates E: 277144, N: 209463. Ystalyfera, which is situated on the A4067, is regarded as a local centre within the Neath Port Talbot Local Development Plan (LDP). The site comprises a parcel of brownfield land that measures approximately 9.56 hectares, of which 6.21 hectares are proposed for redevelopment. Historically, the site has operated as a washery associated with the Tirbach Colliery. The site is considered to be a highly sustainable location. In terms of topography, the site rises sharply along its western boundary, rising above a public footpath with two distinct plateaus towards the northern end. The slopes within the site are largely man-made, with the site generally sloping south-eastwards. The steeper part of the site will be omitted from any development.
- 2.2 A review of the Natural Resources Wales Flood Map for Planning reveals that the site is partially within Flood Zone 2 & 3, and therefore is considered to be at risk of flooding. The application site is within an area known to have flooded in the past; however, the Environment Agency flood map provides additional detail, showing this to be the site river edge embankment only and does not extend onto the proposed buildable part of the site. Despite the site's historic use, a search of Historic Wales interactive map reveals no historic assets at the site in respect of listed buildings nor scheduled ancient monuments. Neath Port Talbot Council's LDP Proposals Map shows the site falls within the Developments Limits Boundary and is allocated for residential development of up to 160 units under policy reference: H1/31.
- 2.3 Vehicular access to the site is currently established via the A4067 which lies along the sites south-eastern boundary. The arrangement of the existing access was primarily designed to accommodate Heavy Goods Vehicles (HGVs) via a 'haul road', with such vehicles transporting materials to and from the site. A new access via the A4067 is proposed to serve the development. The site is well served by public transport, with a bus stop located outside the Tesco Superstore on Wind Road or the health and wellbeing centre on Wern Road/Commercial Street providing travel between Ystradgynlais and Swansea. The site's position on the A4067 makes it well placed to achieve connection to the wider highway network, with links to the M4 Motorway to the south of the site and the Brecon Beacons to the north. The National Cycle Network (NCN) Route 43 runs parallel to the A4067 to the south of the site, providing a safe route for cyclists within the area. NCN Route 43 connects Swansea with Builth Wells.
- 2.4 The surrounding area comprises a range of residential, industrial and commercial uses. It is largely characterised by two-storey semi-detached residential dwellings. Industrial land uses include Gurnos Industrial Estate, which is located to the east of the site, across the river. Commercial development is also prevalent in the area, with a Tesco Superstore on Wind Road and a Home Bargains off Gurnos Road.

Policy Context

- 3.1 Paragraph 6.21 of Planning Policy Wales defines green infrastructure as *"the network of natural and semi-natural features, green spaces, rivers and lakes that intersperse and connect places. Component elements of green infrastructure can function at different scales and some components, such as trees and woodland, are often universally present and function at all levels. 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. At a local scale, it might comprise parks, fields, ponds, natural green spaces, public rights of way, allotments, cemeteries and gardens or may be designed or managed features such as sustainable drainage systems. At smaller scales, individual urban interventions such as street trees, hedgerows, roadside verges, and green roofs/walls can all contribute to green infrastructure networks"*.
- 3.2 The Environment (Wales) Act 2016, provides a context for the delivery of multi-functional green infrastructure. Its protection and provision can make a significant contribution to the sustainable management of natural resources, and in particular to protecting, maintaining and enhancing biodiversity and the resilience of ecosystems in terms of the diversity within and connections between ecosystems and the extent and condition of these ecosystems, so that they are better able to resist, recover from and adapt to pressures. This means that the development of green infrastructure is an important way for local authorities to deliver their Section 6 duty under the Environment (Wales) Act 2016.
- 3.3 The quality of the built environment should be enhanced by integrating green infrastructure into development through appropriate site selection and use of creative design. With careful planning and design, informed by an appropriate level of assessment, green infrastructure can embed the benefits of biodiversity and ecosystem services into new development and places, help to overcome the potential for conflicting objectives, and contribute to health and well-being outcomes.
- 3.4 The DECCA framework is used for evaluating ecosystem resilience based on five attributes and properties specified in the Environment (Wales) Act. These are: Diversity, Extent, Condition, Connectivity and Aspects of ecosystem resilience.

A summary of the definitions is described below:

- **Diversity:** *maintaining and enhancing diversity at every scale, including genetic, structural, habitat and between-habitat levels. This supports the complexity of ecosystem functions and interactions that deliver services and benefits.*
- **Extent:** *incorporating measures which maintain and increase the area of semi-natural habitat/features and linkages between habitats. In general, smaller ecosystems have reduced capacity to adapt, recover or resist disturbance.*
- **Condition:** *The condition of an ecosystem is affected by multiple and complex pressures acting both as short term and longer-term types of disturbance. Both direct and wider impacts should be considered, for example avoiding or mitigating pressures such as climate change, pollution, invasive species, land management neglect etc.*
- **Connectivity:** *This refers to the links between and within habitats, which may take the form of physical corridors, stepping stones in the landscape, or patches of the same or related vegetation types that together create a network that enables the flow or movement of genes, species and natural resources. Developments should take opportunities to develop functional habitat and ecological networks within and between ecosystems, building on existing connectivity.*

- **Aspects** of ecosystem resilience (adaptability, recovery and resistance): ecosystem resilience is a product of the above four attributes. Adaptability, recovery and resistance to/from a disturbance are defining features of ecosystem resilience.

3.5 Paragraph 6.4.11 of Planning Policy Wales states that “*planning authorities must follow a step-wise approach to maintain and enhance biodiversity, build resilient ecological networks and deliver net benefits for biodiversity by ensuring that any adverse environmental effects are firstly avoided, then minimized, mitigated, and as a last resort compensated for. Enhancement must be secured by delivering a biodiversity benefit primarily on site or immediately adjacent to the site, over and above that required to mitigate or compensate for any negative impact*”.



Figure 1: Summary of the Step-Wise Approach (Source: Planning Policy Wales, Edition 12)

3.6 Paragraph 6.4.12 of Planning Policy Wales states that “*a green infrastructure statement should be submitted with all planning applications. This will be proportionate to the scale and nature of the development proposed and will describe how green infrastructure has been incorporated into the proposal. In the case of minor development this will be a short description and should not be an onerous requirement for applicants. The green infrastructure statement will be an effective way of demonstrating positive multi-functional outcomes which are appropriate to the site in question and must be used for demonstrating how the step-wise approach (Paragraph 6.4.15) has been applied*”.

3.7 The Neath Port Talbot Local Development Plan (LDP) was adopted in January 2016. The below LDP policies are considered relevant in terms of green infrastructure.

3.8 Strategic Policy SP15 (Biodiversity and Geodiversity) states:

“Important habitats, species and sites of geological interest will be protected, conserved, enhanced and managed through the following measures:

1. The identification of the following Internationally and Nationally designated sites within the County Borough to enable their protection:

- Special Areas of Conservation (SACs) and Ramsar Sites;*
- Sites of Special Scientific Interest (SSSIs);*
- National Nature Reserves (NNRs).*

2. *The identification and protection of sites of regional and local importance;*
3. *The protection of important natural heritage features."*

3.9 Strategic Policy SP16 (Environmental Protection) states:

"Air, water and ground quality and the environment generally will be protected and where feasible improved through the following measures:

1. *Ensuring that proposals have no significant adverse effects on water, ground or air quality and do not significantly increase pollution levels;*
2. *Giving preference to the development of brownfield sites over greenfield sites where appropriate and deliverable;*
3. *Ensuring that developments do not increase the number of people exposed to significant levels of pollution."*

3.10 Policy EN6 (Important Biodiversity and Geodiversity Sites) states:

"Development proposals that would affect Regionally Important Geodiversity Sites (RIGS), Local Nature Reserves (LNRs), Sites of Interest for Nature Conservation (SINCs), sites meeting SINC criteria or sites supporting Local Biodiversity Action Plan (LBAP) or S42 habitats or species will only be permitted where:

1. *They conserve and where possible enhance the natural heritage importance of the site; or*
 2. *The development could not reasonably be located elsewhere, and the benefits of the development outweigh the natural heritage importance of the site.*
- Mitigation and/or compensation measures will need to be agreed where adverse effects are unavoidable."*

3.11 Policy EN7 (Important Natural Features) states:

"Development proposals that would adversely affect ecologically or visually important natural features such as trees, woodlands, hedgerows / field boundaries, watercourses or ponds will only be permitted where:

1. *Full account has been taken of the relevant features in the design of the development, with measures put in place to ensure that they are retained and protected wherever possible; or*
2. *The biodiversity value and role of the relevant feature has been taken into account and where removal is unavoidable, mitigation measures are agreed."*

3.12 Neath Port Talbot Council also have a Biodiversity and Geodiversity Supplementary Planning Guidance document, as of May 2018, which is also of relevance in terms of green infrastructure.

Baseline Data

- 4.1 This site comprises a parcel of brownfield land historically operating as a washery associated with the Tirbach Colliery. Approximately 9.56 hectares in size, the site has a varied topography, rising sharply along its western boundary, above a public footpath with two distinct plateaus towards the northern end. The slopes on-site are largely man-made, with the site generally sloping south-eastwards. The steeper part of the site will be omitted from any development, subsequently 6.21 hectares of the wider site are proposed for redevelopment. I & G Ecological Consulting have undertaken a number of surveys and reports which are summarised below to provide a broad ecological baseline of the site.
- 4.2 Over time the site has been colonised by a mixed scrub and ephemeral/short perennial vegetation, with large areas of hardstanding and bare ground with broad-leaved woodland forming a central belt and a riparian corridor along the eastern boundary. There were also a number of small ephemeral waterbodies and a large pond, however, this became silted and disappeared some time ago, where a watercourse along its edge developed in its place.
- 4.3 There are two large areas of what can be classed as previously developed land, separated by a band of broadleaved woodland. The western area is on a considerable slope and is made of shale, fine grit and other spoil, presumably the resulting waste product of the former mine workings and washery activity.
- 4.4 The eastern section contains areas of hard standing (bases of former buildings and trackways) as well as larger flat areas of bare ground, some beginning to be colonised by Willow scrub. Of the two belts of Broadleaved woodland, one forms the eastern border which flanks the Afon Twrch, the other is central belt separating the eastern and western areas of previously developed land. Both woodlands support tree species typical of the area (Alder, Sycamore, Hazel, Ash, Birch and Oak).
- 4.5 Much of the western part of the site appears to be kept bare in places, which is likely to create micro-habitats and, together with Rabbit grazing, will maintain a mosaic of short grassland and bare open ground, favourable for many invertebrates, reptiles, and possibly Wax Cap fungi in the grassier parts.
- 4.6 There are patches of both dense and scattered scrub throughout the site. In places Buddleia is the dominant species, while in other areas native species including Gorse, Broom, and Bramble are dominant.
- 4.7 There are a number of notable non-native species evident on site currently such as Japanese Knotweed and Butterfly Bush. Emerging seedlings of Himalayan Balsam are also present along the riparian corridor/eastern boundary. These species are listed on Schedule 9 of the Wildlife and Countryside Act in England and Wales therefore it is an offence to plant or otherwise cause to grow these species in the wild.
- 4.8 The site has a mosaic of habitats including areas of bare ground, with low grassland sward and areas of taller herb, scrub and stone/sleeper retaining walls. Therefore, it has the structural complexity that reptiles require to provide suitable ecotone areas for basking and cover.
- 4.9 The scrub is likely to be too sparse and/or fragmented to suit Dormice, however the larger belts of native woodland may be suitable for use by Dormice and are well connected to longer stretches of Ancient Semi-natural woodland to the north, following the banks of the River Twrch.
- 4.10 No evidence of badger activity was observed within the grassland, scrub or woodland edge vegetation during the walkover survey. Similarly, no evidence of Otter activity was noted on site however there are suitable habitats adjacent to the site's eastern boundary, along the riparian zone of the Afon Twrch.

- 4.11 A considerable number of bird species were observed on site, these include Grey Wagtail, Goldfinch and Green Woodpecker. The mix of scrub and woodland provides good nesting, cover and foraging opportunities for birds.
- 4.12 Taken as a whole, the site is considered to have moderate potential to support roosting bats, and a moderate risk of bats using the site. The activity surveys and Anabat found that up to four species of bat (Common pipistrelle, Soprano pipistrelle, Noctule, and Myotis bats) were using the site for foraging, commuting, and socialising.

Development Impacts and Achieving Net Benefit for Biodiversity

5.1 PPW edition 12 requires a Step-Wise approach to be taken to the mitigation of effects on biodiversity. This entails mitigation measures being employed in the following order:

1. **Avoid** - development should seek to avoid valuable habitats and species wherever possible;
2. **Minimise** – where complete avoidance isn't possible, development should seek to minimise the effects on identified habitats and species;
3. **Mitigate** – where impacts on biodiversity remain after step 1 and 2, mitigation should be provided to balance the harm and provide an overall biodiversity benefit;
4. **Compensate** – where adequate mitigation cannot be provided on site, it may be possible to offset this as compensatory measures offsite. This should preferably be immediately adjacent;
5. **Enhancement** - on site enhancement can be achieved through habitat creation, restoration, and improved connectivity, ultimately benefiting both the environment and local communities; and
6. **Long Term Management** – all Green Infrastructure, retained and proposed, needs to be subject to long term management to ensure its value is delivered and maintained.

The development has sought to actively address each of the above steps as required and this is set out in broad terms as regards principles and overarching strategies to be employed below;

5.2 Avoid

A detailed review of the sites constraints and opportunities has identified a number of key measures to be implemented at the outset of the project to include:

- The retention of the vast majority of boundary vegetation around the perimeter of the site, including hedgerows and trees, with buffers between retained features and built development;
- The enhancement of the boundary vegetation around the perimeter of the site, to encourage habitat opportunities and visual amenity to the variety of site users; and
- Utilisation of good working practices, ecological supervision, and Heras fencing barriers to protect retained features during construction.

5.3 Minimise

The following measures are generic in terms of those anticipated pre-construction and construction impacts associated with development, which can be minimised through the implementation of a detailed site-specific CEMP throughout the construction:

- Minimising the spillage of artificial lighting on existing foraging and commuting/dispersal habitats for wildlife through a sensitive lighting strategy;
- Sensitive clearance of habitats to be removed during appropriate seasons to avoid further impacts on protected species and other wildlife therein; and
- Pre-commencement checks for protected species prior to construction related activities including, nesting birds and bats.

5.4 Mitigate

Mitigation measures, where impacts cannot be avoided or minimised as a consequence of development result in residual effects, include:

- Creation of suitably designed sustainable drainage features as part of a sustainable drainage strategy to increase aquatic habitat provision within the site, in addition to ensuring the adequate management of surface water run-off whilst minimising significant impacts to site hydrology;
- The additional planting of hedgerows, trees, and shrubs across the site to enhance ecological connectivity and further strengthen green infrastructure across the wider development;
- The enhancement of existing, and creation of new sustainable drainage features as part of the new drainage scheme for the development, combined with long-term management; and
- The inclusion of habitat features and specific management to enhance the site for nesting birds, roosting bats, reptiles, amphibians, and notable mammal species.

5.5 *Compensate*

The proposed development seeks to adequately compensate for anticipated losses through the delivery of the following measures, which include:

- New planting of trees, shrub, and scrub where appropriate, to include a diversity of native species of local provenance designed to enhance the existing natural woodland. As well as new planting of well-connected hedgerows considered favourable to wildlife, with species chosen to maximise structural and species diversity, fruiting/flowering potential, and seasonal availability;
- Identification of areas of woodland, hedgerow, tree, and scrub habitat to be targeted for appropriate management and maintenance over the long term, so as to maximise the longevity and carrying capacity of the habitat resource; and
- Monitoring and assessment of habitat quality and/or monitoring of species associated with target habitats.

5.6 *Enhancement*

As well as the above measures regarding habitat provision, the scheme includes further enhancements to the GI baseline with regards to people and placemaking. The following elements form part of the emerging proposals and are included in the I&G Ecological Consulting Biodiversity Enhancement Scheme:

- Interactive Rain Gardens and Attenuation Basins feature strongly, providing an additional 'play' element to the masterplan;
- Mown Areas of Amenity Grass provide informal 'kickabout' spaces as well as retained grassland spaces;
- Areas of Landform Mounding offer variety, visual interest, and additional natural play features within the landscape;
- Provision for bird nesting can be achieved by incorporating boxes/cups into new dwellings;
- Additional wildflower and tree planting will benefit birds, providing food, nesting and shelter. Such planting will also benefit a range of other animal groups such as invertebrates and small mammals;
- To increase additional capacity for bats who may use the site for foraging, can be provided by incorporating suitable artificial roosts/Bat Boxes within/on new buildings and on trees within the site boundary trees;
- All property boundaries will allow free movement of animals, particularly Hedgehogs. Block-built retaining walls will include a purpose made access gap towards the rear end of the gardens, to allow access between new gardens. There will also be gaps in any site boundary fence-line to allow free movement between the site and adjacent existing properties.
- Provision of invertebrate refugia will be incorporated into the scheme with measures such as Insect Hotel and tree or post mounted bee boxes;
- A purpose-built hibernaculum will be constructed using logs, brash, and turf from site. It will be located adjacent to the attenuation pond, and there will be a minimum of 2m of unmanaged vegetation surrounding the hibernaculum; and

- The existing woodland will be managed sensitively to improve its structure and habitat quality. A woodland survey and management plan will be required and will recommend a number of improvements.

5.7 *Long Term Management*

The Construction Environmental Management Plan (CEMP), to be provided by the appointed contractor, will set out detailed mitigation and management proposals for the construction and establishment phases of the development proposals.

A Landscape Management Plan (LMP), to be delivered at the discharge of conditions phase, will outline the ongoing management and monitoring prescriptions for the site for an extended period (to be agreed with the LPA) post development.

In addition to the above, a woodland survey and management plan will be required and will recommend a number of improvements, such as selective thinning to create gaps in the canopy, allowing light to the woodland floor, and the layering and/or planting of shrub-layer species especially Hazel, etc.

This comprehensive approach is considered to fully meet the requirements of Step 6 of the Step-Wise approach.

Overall, those habitat retention, enhancement, and creation measures described above will ensure extent, diversity, and connectivity of those most valued habitat features on-site are maintained. All whilst continuing to provide suitable habitat for a range of protected and notable species, necessary to maintain viable populations, resilient to future change.

Conclusion

- 6.1 It is considered that this proportional Green Infrastructure Statement has been informed by an appropriate level of baseline information and undertaken following the Step-Wise approach advocated in Planning Policy Wales.
- 6.2 As outlined in Section 5, the habitat retention, enhancement and creation measures, will ensure extent, diversity and connectivity of those most valued habitat features on-site are maintained. Furthermore, whilst continuing to provide suitable habitat for a range of protected and notable species, necessary to maintain viable populations resilient to future change.
- 6.3 It is considered that the scheme complies with the updated Chapter 6 of Planning Policy Wales 12 as the development would not have any adverse impact on the site's green infrastructure and adheres to the Step-Wise approach.