

Proposed Development at Llandarcy Park, Neath

Green Infrastructure Statement

26/02/24



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1. Introduction and Background

This Green Infrastructure (GI) Statement is prepared by The Urbanists Ltd on behalf of LP2 Ltd. It accompanies the full planning application for the proposed development of Llandarcy Park, Neath for a drive-through restaurant.

The purpose of this GI Statement is to describe how green infrastructure has been incorporated into the proposal and to therefore demonstrate compliance with requirements of the updated Chapter 6 of Planning Policy Wales (PPW edition 12 released 07/02/24). It sets out how GI has been considered throughout the design of the scheme.

It provides the key legislative and national planning policy context for GI Statements and covers: the site's baseline GI, the design processes that were followed, and the best practice considerations of the final development proposals. It then assesses the proposals against this context.

The Statement is informed by the existing reports and statements which accompany this planning application including:

- Site Location Plan
- Proposed Site Plan
- Preliminary Ecological Appraisal
- Reptile Survey
- Proposed site layout, sections and topographical plans

2. Policy and Legislative Context

This section sets out the key legislative, planning policy and guidance which inform the requirements and the approach to Green Infrastructure Statements.

2.1. Legislation

2.1.1. Environment (Wales) Act 2016

The act introduced an enhanced duty for public authorities in the exercise of their functions - the biodiversity and resilience of ecosystems duty (referred to as the section 6 duty).

This requires that public authorities must seek to not only maintain, but enhance, biodiversity, so far as consistent with the proper exercise of their functions (as required by other legislation); and, in so doing promote the resilience of ecosystems. It requires statutory reporting (as above) which will form an evidence base from which public authorities can seek to ensure they meet these responsibilities.

Section 7 (Part 1) of the Act sets out a requirement for Welsh Ministers to publish lists of species and habitats of 'principal importance', of which ministers must take all reasonable steps to maintain and enhance (without prejudice to Section 6), and encourage others to take such steps (including Local Authorities). They must do so applying the principles of the sustainable management of natural resources.

The Environment (Wales) Act 2016, provides a context for the delivery of multi-functional green infrastructure, and this is an important way for local authorities to deliver their Section 6 duty, as set out in the Act, and consider Section 7 species as is appropriate.

2.2. National and Local Policy

2.2.1. Planning Policy Wales, Edition 12

Planning Policy Wales (PPW) is the principal planning policy document of the Welsh Government and informs all planning decisions and appeals. The current version of which is PPW Edition 12.

Chapter 6 of PPW 12 explains that a GI Statement should be submitted with all planning applications, and also explains the general standards that any statement should seek to meet.

It explains that GI comprises 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. 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” (par.6.2.1).

It further advises that:

“proposals should be informed by the priorities identified in green infrastructure assessments and locally based planning guidance” (par.6.2.5).

It also sets out how proposed development should be assessed within, or potentially impacting upon, designated sites, including non-statutory designated sites. It introduces the ‘Step-wise approach’ which is expected to be applied to such consideration and therefore should be evidenced in any GI statement. This approach regards the resilience of ecosystems (ER) and therefore their ability to continue to deliver value from GI, when under pressure or differing demand.

It explains that, in terms of protection for non-statutory designated sites, which includes Site of Nature Conservation Interest (SINCs), development can be appropriate where adherence to the Step-wise approach is demonstrated (including a net benefit for biodiversity) and there is no reduction in overall conservation value of the designated area or feature.

The PPW Chapter 6 update also covers trees, woodland, and hedgerows, and sets out the expectations to retain and protect such assets, where they are capable of making a significant contribution to an area. Where loss occurs, replacement will be required,

which is expected to be in line with the standards and ratios set out, and any permanent removal is only appropriate where there would be significant and clearly defined public benefit. Compensatory planting is required to be proportionate to the proposed loss as identified through an assessment of green infrastructure value by way of three specific aspects of biodiversity, landscape (amenity) and carbon capture values.

2.2.2. Future Wales: The National Plan 2040

Future Wales (FW) - The National Plan 2040 was adopted in February 2021 as the national development framework (NDF) setting the direction of development in Wales to 2040. The NDF provides a strategy to address key national priorities through the planning system, including developing a vibrant economy, developing strong ecosystems, achieving decarbonisation and climate-resilience and improving the health and wellbeing of communities.

Policy 9 of FW focuses on 'Resilient Ecological Networks and Green Infrastructure', and sets out that planning authorities should identify areas of importance and opportunities for Green Infrastructure, for safeguarding and enhancement.

Given that Future Wales strategy and national priorities can be in part addressed through Green Infrastructure, any GI Statement would be expected to align with those and support the delivery of it, where possible.

2.2.3. Technical Advice Note 5 - Nature Conservation and Planning (1996)

TAN5 provides national guidance on how the land use planning system should contribute to protecting and enhancing biodiversity and geological conservation. The guidance indicates that biodiversity conservation and enhancement is an integral part of planning for sustainable development. The guidance advocates a collaborative approach where LPAs, developers and key stakeholders in conservation should work together to deliver sustainable development.

2.2.4. Neath Port Talbot County Borough Council Local Development Plan (2011-2026) - Adopted January 2016

Policy SP15 Biodiversity and Geodiversity

In summary, this policy requires the identification of, and subsequent protection, conservation, and enhancement of designated and non-designated sites, as well as important natural heritage features.

Policy EN6 Important Biodiversity and Geodiversity Sites

In summary, development affecting a range of statutory and non-statutory designated sites or supportive of local or national priorities 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 for unavoidable adverse effects.

Policy EN7 Important Natural Features

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 have been taken into account and where removal is unavoidable, mitigation measures are agreed upon.

2.2.5. Neath Port Talbot County Borough Council Supplementary Planning Guidance Biodiversity and Geodiversity SPG

This SPG sets out a version of the Step-wise approach as a means to enact in development the general principles of:

- Anticipate all potential biodiversity impacts of a development proposal as early as possible in the planning process.
- Protect designated sites, protected species, priority / S7 habitats and species.
- Ensure development does not lead to a net loss of biodiversity.
- Identify opportunities for development to contribute towards a net gain for biodiversity and protection of geodiversity.
- Take account of indirect and cumulative impacts.
- Recognise the importance of, and protect wildlife corridors and stepping stones.
- Prevent and aim to reverse habitat fragmentation and species population isolation.

Indicative information requirements for developers include a baseline survey of a proposed development site's existing biodiversity and geodiversity values; a consideration of linkages with habitats outside the site; consideration of the [ecosystem] services provided and how these can be retained, including consideration GI assets and their contributions to [ecosystem] function on-site and the wider environment; assessment of direct and indirect impacts on bio/geodiversity and proposed protection [avoidance], enhancement, mitigation [and minimisation] or compensation measures; and a quantitative assessment of biodiversity net loss or gain for each habitat / species [assumed as a simple areas or number of suitable features calculation; comparing pre- and post-development].

This SPG also sets out that a consideration of the development's effects on ecosystem resilience (ER) will be required, where it may be significant, and sets out the DECCA framework as the manner by which this should be assessed. It goes on to suggest a green infrastructure approach could be used, to consider ER. It further sets out that

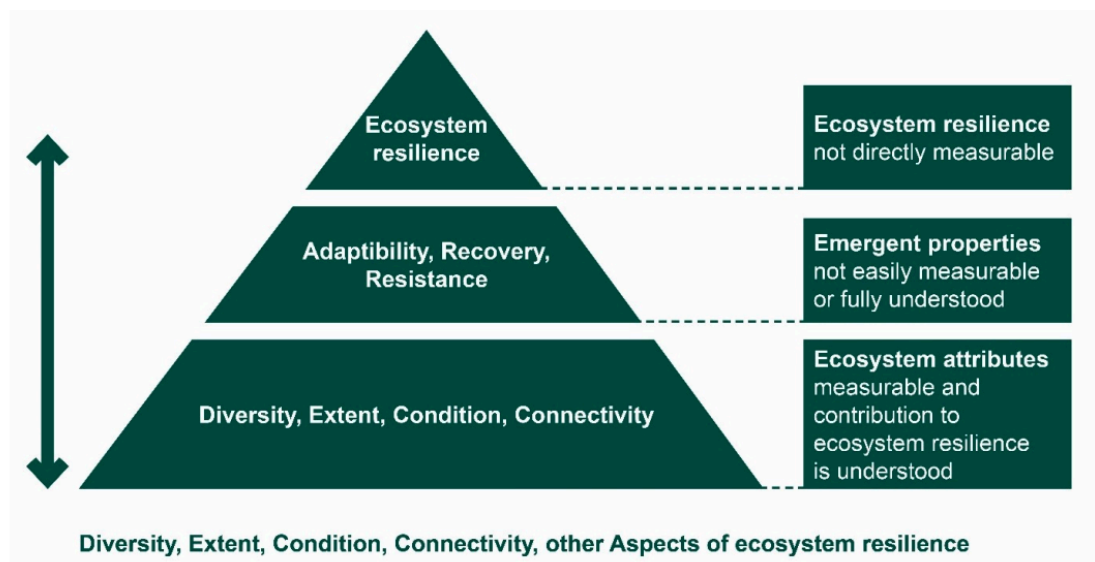
ecological constraints and opportunities plan would be beneficial to inform proposed developments design.

2.3. Frameworks, Approaches, and Best Practice Guidance

2.3.1. DECCA Framework and Ecosystem Resilience

This DECCA framework (see Figure 3 below) sets out 5 key considerations of habitats and species which lead to Ecosystem Resilience (ER). The first four are the attributes of Diversity, Extent, Condition and Connectivity of species (genetics and populations) and/or habitats. There is also the fifth combined aspect of Adaptability, recovery and resistance, which is an emergent combined property resulting from the other four attributes (see Figure 3 below).

Figure 3: Extract from Natural Resource Wales - *Ecosystem Resilience in a Nutshell 1: What is ecosystem resilience?*¹



¹<https://cdn.cyfoethnaturiol.cymru/media/696279/ecosystem-resilience-in-a-nutshell-1-what-is-ecosystem-resilience.pdf>

In practice, the assessment of the Diversity, Extent, Condition and Connectivity attributes is a realistic and an appropriate method to understand the emergent *Adaptability, Recovery, and Resistance* at a basic level. From this comes a similarly basic, but at least partial, understanding of the more complex concept of Ecosystem Resilience (ER).

The DECCA framework is a useful 'proxy method', as ER is not itself directly measurable, because of its extremely high complexity. While not strictly comparable, it can be generally assumed that improvements to any one attribute (DECC...) will lead to an improvement in emergent properties (...A), and therefore also in ER. It cannot as easily be assumed that the loss of any of these attributes will be adequately compensated for by a similar scale improvement in another (e.g. extent exchanged for diversity), unless gains can be considered particularly large or multiple. A default inclusion of a requirement for enhancement of attributes overall, above those existing for any development site can help ensure exchanges do not result in any unforeseen ER loss due to uncertainties caused by the use of a proxy method.

2.3.2. Ecosystem Services Framework

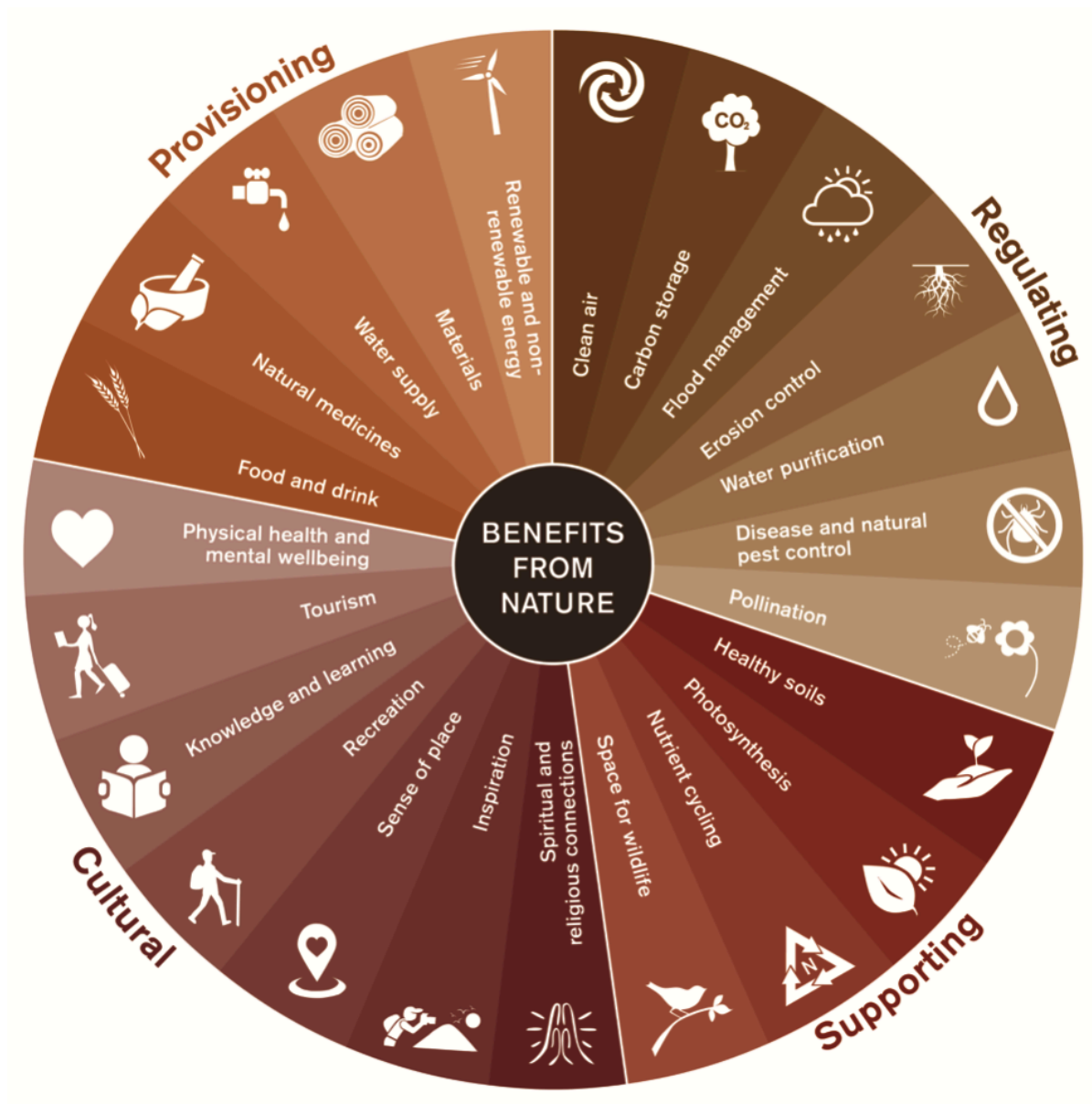
Ecosystem Services (ES) can be utilised as an effective means by which to understand the flow of benefits from Green Infrastructure to humans, and therefore what we value.

Ecosystems are made up of the living and non-living components in them, which in turn form Processes of energy flows, water and nutrient cycles. These interactions are hugely complex and dynamic (having ups and downs), but generally stay in a stable range or state of being, which ER supports. Ecosystem Functions can be thought of as the capacity of Processes to create goods and services with the potential to satisfy human needs and produce well-being. The actual benefits humans receive from Ecosystem Functions are what we call 'Ecosystem Services', and are the realisation or exploitation of those natural goods and / or services.

We experience these ES as Cultural, Regulating, Provisioning, and Supporting services; as a common standard of division (see Figure 4 below). Cultural services are non-material benefits to society that help deliver cultural advancement. Regulating

services are those that help moderate natural phenomena to the benefit of people. Provisioning services are those that deliver a material benefit to people, via the extraction of resources. Finally, Supporting services are those that ensure the continued production and maintenance of those other services; these can be thought of as those services which deliver ER.

Figure 4: Ecosystem Services (source: Nature Scot)



In this statement, the changes in ES are to be qualitatively assessed alongside ER, as set out above. It will therefore be demonstrated that the step-wise approach has been carried out alongside a wider consideration of GI values.

2.3.3. Ecosystem Resilience and Ecosystem Services

As Natural Resource Wales' 'State of Natural Resources Report (SoNRR)'² sets out, ER is important for the sustainability of ES. Both concepts are inherently linked to the structure of an ecosystem (its Processes and resultant Functions), with ER being an emergent property of an ecosystem's structure and ES being a resultant (beneficial) outcome.

While ER and ES are two different concepts that can be used to understand aspects of and then 'improve' ecosystems, they both share a fundamental aspect of being nature-based approaches. When considering changes in GI, no single concept should be considered without the other, as fundamentally both are needed to ensure a suitable (valuable and sustainable) GI enhancement.

Under the Environment (Wales) Act, public bodies should seek to maintain and enhance biodiversity and the resilience of ecosystems. Multifunctional GI sets out as a means to maximise benefits from those aims. By the Planning Policy Wales Ed. 12 content update, the specifics of a GI approach are further prescribed, and the components of a nature-based approach are established.

2.3.4. Step-wise approach

PPW 12 requires the Step-wise approach to be demonstrated within proposed development designs. This approach sets out the procedure of following the Mitigation (capital 'M') hierarchy for impacts to habitats and species: avoid; minimise; mitigate (lower-case 'm') / restore; compensate on-site; compensate off-site (last resort). The manner of these is not prescribed and could be physical protections, habitat or species

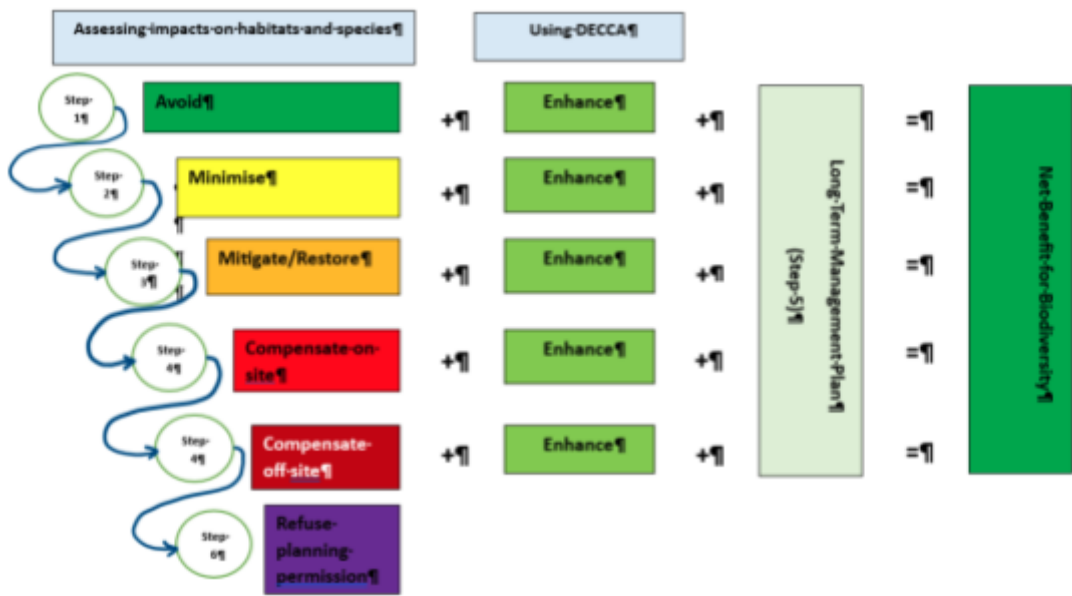
² <https://naturalresources.wales/media/679405/chapter-4-resilience-final-for-publication.pdf>

management, or habitat / species features creation. They could also be procedural measures such as actions (e.g. a written safety procedure) to safeguard or better manage risks / benefits, and potentially requiring further physical means.

It further requires additional enhancement, using the DECCA framework, at all Mitigation hierarchy stages. Likewise, these enhancements could be physical or procedural; of which is not prescribed. It also covers the requirement to have a component of long-term management planning, that would ensure those measures are delivered and would result in a Net Benefit for Biodiversity (NBB) proposed. This approach is expected to be followed by all proposed developments to demonstrate their suitability for approval.

Should the Mitigation hierarchy not be possible to follow (i.e. no stages of the hierarchy are possible) then planning permission should be refused. Should the enhancements not be present for each stage of the hierarchy, and/or no suitable long-term management plan possible, then a NBB is unlikely to be possible, and planning permission is again likely to be refused.

Figure 5: Step-Wise Approach - Extract from PPW Chapter 6.



While this Step-wise approach is focused on ensuring ER, as set out above, it can coincide with a similar or follow-on ES consideration of GI benefits. I.e. avoiding,

minimising, mitigating/restoring and compensating on-site/off-site and further enhancing ES by the form of proposed development or long-term management alone.

2.3.5. Building with Nature (BwN) Standards

The Building with Nature Standards are focused on guiding and assessing the multifunctional benefits of GI, such that maximum value is gained. An ES framework of assessment can serve to assist in considering the attainment of these values.

BwN are a set of privately developed standards, for which the general principles are freely available, but accreditation for development comes with a fee. PPW Chapter 6 sets out that these principles should be regarded, especially if no Green Infrastructure Assessment has been undertaken for an authority area.

Should there be no up-to-date GI Assessment for the local authority area (as is the case for Neath Port Talbot County Borough Council), the assessment of proposed development against these standards can also serve to evidence compliance with the more general requirements of PPW Chapter 6.

These BwN standards set out several main criteria, and sub-criteria, by which to assess green infrastructure, including:

- CORE Standards
 - Standard 1 Optimises Multifunctionality and Connectivity
 - Standard 2 Positively Responds to the Climate Emergency
 - Standard 3 Maximises Environmental Net Gains
 - Standard 4 Champions a Context Driven Approach
 - Standard 5 Creates Distinctive Places
 - Standard 6 Secures Effective Place-keeping
- WELLBEING Standards
 - Standard 7 Brings Nature Closer to People
 - Standard 8 Supports Equitable and Inclusive Places

- WATER Standards
 - Standard 9 Delivers Climate Resilient Water Management
- Standard 10 Brings Water Closer to People
- WILDLIFE Standards
 - Standard 11 Delivers Wildlife Enhancement
 - Standard 12 Underpins Nature's Recovery

Importantly the core standards set a foundation for high-quality GI which are supported by the other standards. There is no weighting of any one criteria, and principles within each need to be demonstrated to evidence high-quality GI.

In their vast majority, these standards can be considered as an illustration of ES enhancement and a means of guidance for maximising the ES benefit when designing schemes. The ES framework integrates with these standards, and this statement will utilise a consideration of ES values to do so.

3. Specialism Baselines

This baseline consideration sets out the existing conditions of the proposed development site and wider area of ownership, with regard to habitats and / or species, GI features, and various initial GI values. This consideration is informed by the various specialist surveys and reporting, in their standard formats, in support of the proposed development at the site. These specialist considerations have in turn informed and helped development of the proposed scheme's design including Green Infrastructure.

3.1. Ecological Summary

A preliminary ecological appraisal (PEA) was commissioned in support of the application and undertaken in February 2023. A reptile survey recommended by the PEA was carried out between late June and late August 2023.

The PEA found that the habitats recorded within and adjacent to the survey boundary were semi-natural broadleaved woodland, poor semi-improved grassland, bramble scrub and other. The area affected by the proposed development would mainly be the other habitat formerly a hard surfaced sports pitch, and some of the scrub habitat. Japanese knotweed as well as other possible invasive non-native plants were identified at the site and wider area.

No protected species were observed during the Phase 1 survey, but the woodland and scrub were thought likely to provide shelter to small tree nesting birds and provide linear features along which bats are likely to commute. The scrub area was also thought to be suitable for reptiles and small mammals such as hedgehog and weasel. While records of protected and notable species were returned in records, it was considered generally unlikely that these would be present within the survey area.

The results of the further reptile survey confirmed the presence of a single juvenile grass snake. This was suggestive of a viable population in the nearby areas with some use of the survey area. No other species-specific surveys were considered required.

Table 2. Woodland

Habitat reference/type	Semi-natural broadleaved woodland
Location details	Southwest corner of the plot
Species list	alder (<i>Alnus glutinosa</i>) oak (<i>Quercus robur</i>) holly (<i>Ilex aquifolium</i>), goat willow (<i>Salix caprea</i>), sycamore (<i>Acer pseuplatanus</i>) elder (<i>Sambucus nigra</i>) cherry (<i>Prunus</i> sp) hawthorn (<i>Crataegus monogyna</i>) and silver birch (<i>Betula pendula</i>); Leyland cypress (<i>Cupressus</i> x <i>Leylandii</i>) (southern boundary only); understorey of abundant bramble (<i>Rubus fruticosus</i>) and ivy (<i>Hedera helix</i>), frequent broad buckler fern (<i>Dryopteris dilata</i>), as well as occasional scaly male fern (<i>Dryopteris affinis</i>) and hart’s tongue fern (<i>Asplenium scolopedrium</i>)
Management	None

Table 3. scrub.

Habitat reference/type	Bramble scrub
Location details	Covering the majority of the sloping ground above the former pitch toward the northern corner of the plot was dense bramble scrub occurring abundantly.
Species list	In the vast majority bramble, moderate frequency goat willow, buddleia (<i>Buddleia davidii</i>) and gorse (<i>Ulmus europeus</i>). Between the taller vegetation frequently cocksfoot (<i>Dactylis glomerata</i>), carnation sedge (<i>Carex panacea</i>) and rosebay willowherb (<i>Chamaenerion angustifolium</i>) with creeping buttercup (<i>Ranunculus repens</i>), ribwort plantain (<i>Plantago lanceolata</i>) and soft rush (<i>Juncus effusus</i>) occurring occasionally. Rarely herb robert (<i>Geranium robertianum</i>), pendulous sedge (<i>C. pendula</i>) and evening primrose (<i>Oenothera bienis</i>).
Management	None

Table 4. Grassland - adjacent to site / wider area

Habitat reference/type	Semi-improved neutral grassland
Location details	outside and adjacent to northern tip of site boundary
Species list	creeping bent (<i>Agrostis stolonifera</i>), cocksfoot, oxeye daisy (<i>Leucanthemum vulgare</i>), ribwort plantain, black knapweed (<i>Centaurea nigra</i>), common sorrel (<i>Rumex acetosa</i>) wild carrot (<i>Daucus carota</i>) and cuckoo flower (<i>Cardamine pratensis</i>)
Management	Maintained via regular cutting

Table 5. Dry Ditch

Habitat reference/type	Dry Ditch
Location details	Northern boundary of former hardstanding pitch and adjacent to eastern roadside

Species list	No species were associated with this feature - only bare ground
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Table 6. Hardstanding

Habitat type	Hardstanding former sports pitch
Location details	flat area of land to south of plot
Species list	Covered almost entirely by mosses, liverworts and lichens of same unknown 3-4 species.

Table 7. Invasive Species

Habitat type	Stands of Japanese Knotweed (JK), and some Rhododendron and cotoneaster
Location details	covering across the site and in some of the wider ownership area, but in particular JK along the east boundary, extending into the middle of site / wider area.
Species list	Covered almost entirely by mosses, liverworts and lichens of the same unknown 3-4 species.

Opportunities and Constraints

The opportunities and recommendations for mitigation, as well as existing constraints, are set out within the PEA. A summary of these is below:

Table 8. Habitat / Species constraints and opportunities.

Habitat / Species	Constraints	Opportunities and Recommendations
Semi-natural broadleaved woodland	Value of woodland and its trees as habitat, requiring suitable compensation in line with PPW 12 if to be removed.	Recommendation to remove no woodland trees, and to establish root protection measures for all trees. Given the limited diversity and structure (varying heights and

		vegetation types) of the woodland understorey, there is the opportunity for improved woodland management to support increased opportunity for ground flora and shrubs to increase the diversity and condition of woodland structure.
Bramble Scrub	Potentially supportive habitat for Reptiles (known to be on-site / in the wider area)	Scrub, while valuable, has descended to a low quality and low diversity habitat. Improved overground management would help ensure better habitat condition (structure) and consequential greater opportunity for species diversity. That extends to improved opportunities for reptiles.
Poor Semi-improved grassland	Outside the site and wider ownership - None	Outside the site and wider ownership - None
Hardstanding	None	New natural or semi-natural habitats as part of any development proposal will likely be an enhancement.
Ditches	None	Roadside ditch to be reinstated and managed by 5-year cycles of dredging such that these areas will naturally recolonise with ruderal and primary colonising species. Opportunities to oversow to

		increase the species diversity, and to manage vegetation to better encourage any diversity.
Birds and Bats	None - except standard lighting practices for bats at woodland edge and elsewhere where possible	Recommend that nest boxes for both birds and bats are erected in retained woodland areas, on suitable trees and at suitable orientations.
Reptiles	The presence of reptiles presents a constraint to the removal of suitable habitat and construction commencement	It is recommended that a translocation exercise take place to remove reptiles from the construction area while this is underway. Suitable habitat enhancements to retained areas are further recommended
Invasive species	JK and potentially other species located on-site / wider area are included in Schedule 9 of the Wildlife and Countryside Act 1981 - it is an offence to plant or cause any such species to grow in the wild.	The removal of JK and other Schedule 9 species would be a large enhancement for the site / wider area, removing the potential harm this species is likely to cause, and creating greater opportunities for native species. It is recommended that the removal of this species occurs, as is likely required otherwise by law to enable commencement of development.
New Native Hedgerow	None	Recommended that new hedgerows be established to create enhanced connectivity and diversity of habitat / species

		across the site / wider area, and a compensation for suitable reptile habitat to be lost.
New Pond feature	None	Recommended that a new pond feature be established, as suitable compensation for any lost reptile habitat.
New Hibernacula	None	Recommended that several hibernacula features suitable for reptile shelter are constructed, as suitable compensation for any lost reptile habitat.
New Management Regime	Habitats present and the need for some to be managed as amenity spaces	It is recommended that management of retained and new habitats, where possible, are managed for the benefit of reptiles specifically and wildlife more generally. This includes practices to best create or maintain a suitable diversity of species and habitats, and control invasives.

3.2. Landscape GI Summary

Overall the woodland in the wider area creates the largest contribution to ecosystem services, through its proportionally larger visual-amenity cultural, regulating and supporting services associated with trees, and their collective as a woodland block.

Other areas would appear to contribute little to other existing ecosystem services from the site / wider area, except their contribution to the sustainment of faunal species and the services they provide, such as regulating pest populations (grass snakes) and others.

The presence of invasive species and the hardstanding habitats generally create an ecological dis-service through their increased pressure or harm to other ecosystem services. For example, through the dysregulation of native ecosystem dynamics by invasives, and by the increased run-off and potential harm to soil health from hardstanding capping.

Some features, such as on-site drains, are generally neutral with regard to ecosystem services delivered. Potentially they provide some regulating services, such as by water management, but this is limited by the ecological scarcity of these.

4. Proposed Scheme of Development

The Step-wise approach relates only to habitats and species, and the 'DECCA' framework within it is used to consider ER specifically. Considerations of that approach and framework are required by PPW Chapter 6, to demonstrate how a proposed development scheme has achieved an adequate net benefit for biodiversity.

The proposed scheme should also offer GI value that meets people's needs. A review of ES approach to understanding site / wider area values and their changes will be used to help demonstrate the well-being benefits of the proposal.

In summary, the vast majority of the proposed development is to be restrained to an area of the development site which is largely identified as scrub, hardstanding and invasive species. The development site also includes areas of ditches. In a wider area of ownership is the identified woodland, and some areas of scrub, which are subject to enhancement management and measures only, as part of the proposed development.



Figure 6: Existing site habitats (phase 1) and proposed development area and habitats.

4.1. Avoidance (retained habitats) + Enhancement

By exclusion from the site area, retaining these in the wider area, and the protection of areas where roots may extend within the site, negative impacts to the woodland will be avoided. Additional positive management of development avoided areas of woodland, as well as avoided areas of scrub, both avoidance and enhancement are demonstrated.

Table 9. Woodland - Wider ownership area

Habitat / Feature / Area of Concern	Semi-natural deciduous woodland
Baseline Summary	This woodland is relatively an excellent habitat within the wider site, although with a generally limited understorey. These areas are of some greater ES value, regarding cultural, regulating and supporting services, in the context of the site / wider site.
Proposed Step-Wise Mitigation (avoidance)	The woodland is to be located in the wider ownership area, and not within the development area (redline). Its root protection zone will be established and avoided during construction. Only habitats compatible with the root protection zones are proposed in areas near that woodland.
Proposed DECCA Enhancement	Suitable enhancement by management is proposed, such that the thinning or other suitable management is carried out to increase the opportunities for variability in ground flora. The management of scrub ground flora (bramble) such that this is not dominant and doesn't become so.
GI Value (ES)	The enhanced management of the woodland should allow a more established cover of ground flora, and variability in woodland structure. This consequently enables a greater diversity of species, as well as the conditions of that habitat.

Table 10. Scrub - Wider ownership area

Habitat / Feature / Area of Concern	Scrub
Baseline Summary	Scrub can be found across large areas of the site / wider area and is dominated by bramble, generally of a poor diversity. Invasive species are also present within these stands in places. These areas are of little ES value.
Proposed Step-Wise Mitigation (avoidance)	Scrub in the wider area of ownership is to be retained.
Proposed DECCA Enhancement	In areas of wider ownership the management of scrub will lead to enhanced diversity, condition, and retain connectivity opportunities.
GI Value (ES)	By retaining this habitat, overall diversity of the site / wider area

	is better ensured, and the benefits of this for supportive services by the range of species that may use the site, and any resultant regulating services from these species or newly established floral species.
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4.2. Minimise + Enhancement

The design of the building and other proposed hardstanding and features have taken into account the low ecological value of much of the site and wider area of ownership, and looked to focus built elements where they would do the least harm. The proposed new hardstanding and built forms are complemented by new amenity habitats, of which are aimed to create suitable features for wildlife.

Table 11. Hardstanding, scrub, and invasive species

Habitat / Feature / Area of Concern	Hardstanding, scrub, and invasive species
Baseline Summary	Hard-standing areas offer no significant ecological value. It has begun to support some lichens, bryophytes, and liverworts of which could easily colonise other undisturbed hardstanding areas. This area has an active Ecosystem Dis-service. Areas of scrub are a common and widespread habitat within the site / wider area, but do offer some relatively poor condition habitats suitable for nesting birds and reptiles, as well as potential for other species. These areas offer some ecosystem services associated with the support of other species, and some regulating services, but little else. Invasive species are concentrated to the east of the site / wider area along its boundary, and particularly Japanese Knotweed (JK). Other invasives and JK can also be found in other areas of the site including adjacent areas of scrub. These areas offer little ecological value and an Ecosystem Dis-service.
Proposed Step-Wise Mitigation (minimise)	The minimisation of impacts to those most valuable areas, by way of the careful location of the proposed development to other areas leads to the sustainment of the entire woodland area, and significant areas of scrub (maintaining connectivity north-south). The boundary ditch features to the east of site is

	to be unimpacted and therefore future potential for enhancement is ensured. The development has located hardstanding and amenity spaces over where the identified large area of invasive species. This enabled the minimisation of potential future impacts from treatment and containment of JK, should it be required, to those less valuable new habitats.
Proposed DECCA Enhancement	Those areas of habitat to be lost to the proposed development will be replaced with a range of both hardstanding but also amenity planting, including hedgerow and other habitat that will enhance connectivity; and will ensure dispersal opportunities across the site and wider area are still possible. These will specifically ensure that opportunities for reptiles including grass snake, to be impacted by the proposed development are minimised.
GI Value (ES)	The changes to existing hardstanding, scrub, and areas of invasive species will be generally positive. The little ES value held by many of those existing areas will be replaced with more functional areas, which will increase hardstanding, but also commensurately natural habitat of value and multifunctional benefits. The proposed ditch renewal, pond, and hedgerow will be beneficial to the provision of regulating, supporting, and cultural services as areas adjacent to publicly accessible areas.

4.3. Mitigation / Restoration + Enhancement

There is to be some minor impact to areas of habitat suitable for both nesting birds and potentially bats more generally, and potentially a range of common small mammals, but also grass snake specifically. The most suitable mitigation for losses as part of the proposed development is to be the improvement of retained areas of habitat, such that their condition and diversity are enhanced and connectivity maintained. Further restoration of the ditch feature would be further enhancement of an existing feature, to create better conditions and opportunities for wildlife.

Table 12. Birds and bats

Habitat / Feature / Area of Concern	Birds and Bats
Baseline Summary	No specific surveys were considered necessary, given the limited opportunities presented by the site and wider area. It is considered likely that the site and wider supports some commuting and foraging opportunities for bats and foraging, shelter, and nesting opportunities for a range of common bird species.
Proposed Step-Wise Mitigation (mitigation)	Given the loss of scrub habitat within the site that may present opportunities for both species, a suitable improvement of the extent of those same opportunities to be lost in retained habitats is considered appropriate. As such improved management of the retained areas of wider ownership woodland and scrub should occur such that the floral and structural diversity of these areas is improved, commensurate with the loss of scrub. A further assurance that connectivity north-south across the site is maintained in the wider area, is considered suitable mitigation to the potential loss of commuting and dispersal corridors of woody vegetation.
Proposed DECCA Enhancement	The proposed provision of bird and bat boxes within the young woodland will create an enhancement of nesting and roosting opportunities long before that same woodland may naturally have such features become present. As such, the scale of these boxes recommended would produce a clear enhancement of the opportunities for a range of bird and bat species within the site.
GI Value (ES)	The value from the enhancement of retained habitats, and the provision of opportunities for roosting and nesting mean that the cultural, and bat and bird species contributions to other ecosystem services (supporting and regulating) are improved. In particular, the value of the provision of nesting boxes nearby to those amenity areas of the site provides the opportunity for greater interaction of people with wildlife.

Table 13. Reptiles - Grass Snake

Habitat / Feature / Area of Concern	Grass Snake
Baseline Summary	Grass snakes are known to be present within the site and wider area in small numbers. Any within the site / wider area are likely to be part of a breeding population in the local area, and the site / wider area is the pinnacle of any territory used

	(given the hardstand and/or other development areas north, east and west).
Proposed Step-Wise Mitigation (mitigation)	Suitable mitigation for the loss of scrub and potential basking areas of hardstanding would be the improved management of retained scrub and woodland areas. Particularly, that management which creates a more variable structure for these areas, especially where on eastern-southern slopes, which may create improved shelter, hunting and basking opportunities.
Proposed DECCA Enhancement	By the improvement of habitats retained, suitable mitigation for the loss of some minorly valuable scrub habitat is ensured. A further enhancement, over the diversity and condition of those retained habitats, is in the improved connectivity from new hedgerow habitat, restored ditch habitat, and new pond habitats. All these new / restored features serve to further enhance the condition of the site and wider areas habitats overall, as suitable for reptiles and more widely. A proposed hibernacula is recommended (within ecological reporting) to be sited to the north of the wider area and would serve to enhance shelter and hibernation opportunities for reptiles and other species.
GI Value (ES)	The presence of this species within the site / wider area is not an insignificant regulating service, providing predation control of populations of other species. The enhancement of highly suitable pond and ditch habitat, and that in close proximity to publicly accessible areas, increased the likelihood of interaction with this species and the cultural value this would bring.

4.4. Compensation + Enhancement

Compensation for the loss of scrub habitats is to be generally from the removal of invasive species from within the site, although there will be other benefits as noted in regard to avoidance, minimisation, and mitigation considerations.

Table 14. Scrub and Invasive Species

Habitat / Feature / Area of Concern	Scrub and Areas of Invasives
Baseline Summary	Scrub, woodland and independent stands of invasive species are present across the site's non-hardstanding areas. Most significant is the large stands of Japanese Knotweed to the East of the site, while the interception of other areas with

	Rhododendron and Cotoneaster (potentially invasive varieties) is also a negative aspect of the site's ecological and ecosystem service values.
Proposed Step-Wise Mitigation (compensation)	Suitable compensation for the loss of scrub is considered to be the removal of all invasive species from the site / wider area. The existing state of invasives present within the site / wider area dictates the need to remove invasives to develop the site but is considered to be a significant ecological enhancement in its own right. Given the need to remove some scrub as part of the proposed development, this removal is considered suitable compensation for the loss.
Proposed DECCA Enhancement	The proposed amenity planting types and features which support them, are a highly relevant enhancement of ecological features. The native selection of species for proposed hedgerow, and amenity lawns being of a species mix to maximise floral diversity, as well as the opportunities for new species created by the restored ditch and new pond recommended would further significantly enhance the diversity of species within the site / wider area. The location and form / type of these features has been carefully considered such that their connectivity enhancement is ensured (as previously mentioned in relation to species mitigation / minimisation), and that tying in to the improved condition of these new habitats compared to this they replace.
GI Value (ES)	The overall loss of scrub is considered to be a minor change to regulating and supporting services, in exchange for a much larger cultural and improved scale / variety of regulating and supporting services (despite losses of habitat extent, overall).

4.5. Suitable Management approach - To ensure mitigation, compensation, and enhancement.

The specific management measures for the proposed scheme are to be set out within a suitable detailed Landscape and Ecological Management Plan (LEMP).

While all management measures and methods are not to be set out within this document, the principles of the management required for Green Infrastructure to deliver the benefits set out above include the following general habitat management prescriptions:

- **Hedgerow** - The suitable management of native hedgerow planting such that these maximise structural and species benefits by having as much diversity as possible.
- **Woodland** - The management of woodland areas should be as advised in the ecological reporting, to improve the structure of the woodland through selective thinning.
- **Scrub** - similar to woodland; the improved management by the selective thinning or clearance where suitable, to create greater diversity.
- **Ditch Features and Pond** - the suitable management of the restored ditch feature and pond such that they can naturally recolonise and are managed in a manner that ensures that ecological values are sustained.
- **Amenity Grasslands** - It is recommended that, where possible, accounting for the functionality of the proposed development in the site, the amenity grassland is maintained with an annually cut long-sward and where not areas with a suitable mixture of flowering lawn species maintained by regular mowing.
- **Bat and bird boxes** - to be managed in line with suppliers' guidance to ensure the best sustainment of those opportunities. The cleaning of those boxes annually, where bat boxes aren't self-cleaning.
- **Understorey habitat** – new understorey habitat, expected to become better established in areas of retained scrub and woodland is to be left to naturally recolonise.
- **Invasive Species** - Where invasive species are within the site or wider area it is expected these will be required to be controlled and removed. A continued vigilance of the site / wider area for these species and suitable control management to be implemented should they again become established.

A significant part of achieving the benefits of the Step-wise approach, as set out above, is the management to maintain and reach the scale of benefits set out. The time to achieve those benefits overall is variable but with the potential for significant enhancements in a short space of time (with the removal of invasives). Further benefits beyond the lifespan of the management plan for the proposed development are likely, should the proposed scheme of landscaping continue to develop and age further.

5. Assessment

Section 4 and the ecological reporting (including all recommendations made) has illustrated how a net benefit for biodiversity (NBB), with increases in ER within the site and wider area of ownership, would result from the proposed scheme's implementation. That section also outlines the multifunctional benefits for people (ES) of which the proposed scheme achieves, in tandem with a NBB and ER increase.

The changes to existing and proposed habitats are illustrated in Figure 6, which shows the large natural habitat areas to be retained in the wider area, and the built / semi-natural habitats proposed for the development site.

5.1. Building with Nature Standards

The proposed scheme and its achievements, as already set out in regard the step-wise approach, wider ES values, and these ES are reviewed again below with regard to the Building with Nature Standards, and the level of compliance with these, to more clearly demonstrate the multifunctional GI benefits from the proposal.

Table 15. BwN Standards - Review

Standard	Assessment	Outcome
Core Standards		
Standard 1 Optimises Multifunctionality and Connectivity	Given that the proposed design looks to maximise the retention of area of ecological value, opportunities elsewhere for multifunctional and connection of people to natures have been made as best as possible, giving regard to ecological	Moderate compliance with the standard, only limited by the nature of the maintenance of wider site areas to be free of access for best ecological resilience benefits.

Standard	Assessment	Outcome
	resilience as primary concern. This retention, and further enhancement of those areas, will reinforce the GI corridor effect of the wider site's western boundary, as well as a higher value ecological stepping-stone feature. The few connectivity opportunities east-west are maintained by the eastern boundary features, which connect to wider site / off-site GI corridors. The proposal of restoration of habitat features, new semi-natural features of benefit to species known from the site, and the provision of new nesting and roosting opportunities, all in close proximity to public areas, connections to nature will be apparent. The landscape amenity habitats, including those associated with water or its management, create a clear balance of multifunctionality across the publicly accessible areas of the site. The improvement of retained and the native and naturalistic proposed planting looks to ensure that the scheme will improve adaptability to future pressures on the site / wider area, and for known / likely species there.	
Standard 2 Positively Responds to the Climate Emergency	The proposed development, as already mentioned above, looks to provide a resilient ecosystem within the site /	A low but positive compliance with the themes, with some response to the climate impacts most likely

Standard	Assessment	Outcome
	wider area that will serve to better manage future pressures including climate change impacts. The provision of on-site management of water in ditch and pond features, and the maintenance of woodland and scrub areas adjacent to hardstanding and build development ensure that appropriate benefits from their evapotranspiration and shading effects are more likely to be experienced. Species selected for native hedgerow are to be carefully considered and suitable for the soils present or replaced should they fail to become established.	to impact the development due to the proposed development type's inherent form and functions (i.e. water management, and cooling effects).
Standard 3 Maximises Environmental Net Gains	The proposed scheme has made a large consideration of the ecologically valuable areas of the site, and those important for protected species using the site. These are maximised with respect to ecology, but the site contains areas with a much larger human focus on management of environmental aspects of water, combined with an additional improvement for people's interactions with wildlife.	A generally good compliance with the themes of this standard is achieved by the proposal. Given the large division of wider site retained habitats and site habitats more for the amenity of the site, environmental gains have been appropriately maximised.
Standard 4 Champions a Context Driven Approach	The design proposed responds to the context of the site's ecological aspects by looking at retaining and enhancing those most valuable areas, and removing those harmful elements, with some	Without any community priorities being known, and the local policy only having limited engagement with GI specifically, the proposal has taken lead from the physical landscape and most importantly habitats

Standard	Assessment	Outcome
	restoration and replacement of other habitats of moderate or little ecological values. The local context of the site has been taken into account and the main massing of vegetation retained is alongside an approximately north-south edge of the site / wider area, with a similar woody belt on the opposing side of a road from the site. That north-south habitat connects to further habitat to the south of the site / wider areas, and there are spans east-west across the site to ensure linkages of GI in the local area are ensured.	connecting or significantly nearby the site / wider areas; and their ecological values. As such, the design has appropriately responded to the local context and delivered a scheme in good compliance with this standard.
Standard 5 Creates Distinctive Places	The existing character of the site is a mixture of urban, native natural, and non-native introduced invasive elements, and as such the design does little to change this. The exemption to this change is the removal of those invasive aspects, and increasing the enhancement of more formal native but urban amenity planting and built environment. The ecotone has been more formalised, with a clear divide between amenity spaces and 'wild' spaces retained and proposed to be delineated by hedgerow, but softened by recommended management of grass verges at boundary areas. New proposed features or those restored look to create greater interest and diversity, alongside management approaches to proposed and	The GI proposed reinforces positive aspects of the existing site, while removing many of those negative. As such it responds appropriately to the context while creating a distinctive and high quality space. The proposed design is considered to quite successfully align with this standard.

Standard	Assessment	Outcome
	existing habitats.	
Standard 6 Secures Effective Place-keeping	By avoidance of anything except minor beneficial enhancements to retained features, the restoration of some ditch, and the introduction of new features there is only a requirement for simple management to enhance ecological opportunities and the GI of the site. As most of that management is in regard to amenity areas, and the public utilise the site, it is in the proposed development's operator to ensure the proposed management. While no formal arrangement is in place, the form of management can be made to align to expectations by planning condition, and its delivery ensured by the operator's interest in such delivery.	The appropriate management of the proposed development is to be of a natural benefit to any operator of the site, and the form of this can be secured by way of a planning condition. As such the proposed development generally aligns well with this standard, should expected planning conditions be applied.
Wellbeing Standards		
Standard 7 Brings Nature Closer to People	The proposed Mitigation measures and enhancements are designed to secure some segregated areas retained for nature, but also proposed features and management actions that would make the site / wider area more accessible for proposed development users to interact with nature. Given the high volume public use of the site, this is any opportunity for a large degrees of engagement	The proposed site looks to successfully align with the priorities of this standard, with spaces that are passively accessible by people in a setting which this wouldn't be the normal expectation, but where a large benefit can occur. While proposed features could be more closely accessible, a suitable balance has been met between the proposed use of the site, ecological impact and benefits, and that accessibility.

Standard	Assessment	Outcome
Standard 8 Supports Equitable and Inclusive Places	By the proposed development form and its accessibility to the general public, as well as those aspects which maintain GI benefits in the local area, the design is inherently very equitable and inclusive.	The proposed development aligns extremely well with this standard, despite the benefits not being particularly large.
Water Standards		
Standard 9 Delivers Climate Resilient Water Management	The current site / wider area has aspects negatively impacting water management, and some features positive but ineffective in their current state. The proposed renewal of ditch features, installation of a pond, and more formal management of water from new hardstanding and built form to be part of the proposal. Together with the retention of woody vegetation on sloping areas of the site, new hedgerows at boundary areas, an overall enhancement to the climate resilient water management on the site is to be ensured; and this with a ecological and commensurate water quality benefit.	The proposed development offers enhanced opportunities for delivery of climate resilient water management in the context of the site and wider area, beneficial for the potential impact the site may currently have on the local area during times of climate induced water stress.
Standard 10 Brings Water Closer to People	The retention of boundary ditches and the restoration of these, alongside the retention of vegetation on slopes and the increased interception by new hedgerow, those management features within the site / wider area are in	The site appropriately responds to the need to integrate water management into the proposal in an accessible manner, while being multifunctional in its benefits. As such, it appropriately responds to this standard.

Standard	Assessment	Outcome
	evidence and form part of the overall landscape strategy, alongside the new pond features. By way of the ditch and pond being recommended ecological features, the value of these is maximised, including by people's ability to interact with that ecological value.	
Wildlife Standards		
Standard 11 Delivers Wildlife Enhancement	The proposed development scheme is primarily concerned with ecological resilience and adequately demonstrates this is overall protected through the Mitigation hierarchy and by the above consideration of the Step-wise approach further enhanced. The integration of GI into the site's proposed developments, and the enhancement of the wider site's habitats, as well as the headlines of appropriate management ensure the benefits of the scheme are maximised and feasible to secure long-term.	The adherence of the proposed design to this standard is apparent in consideration of the Step-wise approach already set out.
Standard 12 Underpins Nature's Recovery	The Step-wise approach's element of ecological resilience enhancement helps to underpin the proposals DECCA framework enhancements, especially diversity, condition and connectivity; including with habitats which are part of the wider GI network in the local area.	The proposed development suitably aligns with this standard as demonstrated by the Step-wise approach.

Given the proposed developments alignment with national and local policy with regard to GI, the proposed development also accords with the UN Global Biodiversity Framework (2022). It meets key target areas: especially relating to reducing threats to biodiversity; but also sustains use and benefits sharing (to meet people's needs), especially in an urban context; and utilises tools and solutions for implementation and mainstreaming an ecocentric approach to proposed development.

5.2. Neath Port Talbot County Borough Council Local Development Plan and SPG

With regard to the priorities of the local policies and SPG, the protection of biodiversity was identified as most valuable and the enhancement of the site / wider area overall (via the Mitigation hierarchy) ensures that the proposed development aligns with all local requirements. This is demonstrated by way of the above GI considerations, including the BwN standards to demonstrate best practice has been followed, of which also aligns with local requirements.

5.3. Legislative and policy consideration

A suitable NBB, and ER enhancement, have been demonstrated through the application of the step-wise approach.

As part of a wider ES review of the site and proposed development, other multiple ES benefits have been ensured. Those ES benefits also show adherence to the BwN standards, as best practice and in place of any regard to local priorities for GI.

A specific consideration is given for Section 6 species and Section 7 habitats that are either existing / potentially present, or proposed / potentially present in the future. Due regard is had for the legal requirements outside the planning permission regulatory process, and the need to control invasive species as per Schedule 9 of the Wildlife and Countryside Act 1981.

The scheme is therefore evidenced as complying with not only the requirement of PPW Chapter 6 but also other PPW chapters and the FW national policy, Local Policy as well as relevant legislation regarding or associated with aspects of Green Infrastructure. A decision can therefore be positively made with regard to these, as well as the statutory duties of a local planning authority with regard to Environment (Wales) Act 2016.

6. Conclusion

This GI Statement is considered to be proportionate to the proposed development and the comprehensive scheme of overall enhancement which is proposed. The statement sets out the measured baseline, the predicted impacts from the proposal and how these are managed, and examines how these resources will be enhanced through the mechanism of the step-wise, DECCA, and BwN standards. It also shows how the scheme complies with the relevant local policy and, of course, PPW 12. The scheme is considered to be an appropriate design with regard to GI, in the context of the site / wider area of ownership, as well as the local context.