Building with Nature

Standards Framework

(BwN 2.0)

I am delighted to be able to present the Building with Nature Standards Framework (BwN 2.0). The original Standards Framework (BwN 1.0) was first developed in 2015 and has been tried and tested the length and breadth of the UK, on a range of types and scales of development and on a variety of policy documents. Our Standards Board, comprised of green infrastructure experts and representatives from industry, government, professional bodies, and other key stakeholders, have ensured that the new Standards have been rigorously reviewed from multiple viewpoints against current industry good practice, the new legislative environment, and the need to positively respond to the Climate, Ecological and Health emergencies. I would like to thank our Standards Board, UK-wide Approved Assessor Network and key partners (The Wildlife Trusts, Landscape Institute, Royal Town Planning Institute, and the Chartered Institute for Ecology and Environmental Management) for this collaborative endeavour which ensures that the Building with Nature benchmark continues to lead the way in defining high-quality green infrastructure for the built environment industry in the UK.

Dr Gemma Jerome FLI
Director, Building with Nature

As Chair of the Building with Nature Standards Board, I am proud to have led a team of senior built and natural environment professionals on the Standards Board through a deliberative process to review the Building with Nature Standards, leading to the rationalisation and simplification of the Standards whilst still maintaining their robustness, integrity and focus on delivering high quality green infrastructure across the UK.

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Standards Framework 2.0

The Green Infrastructure:

CORE Standards

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Standard 6	Secures Effective Place-keeping

WELLBEING Standards

Standard 7	Brings Nature Closer to People
Standard 8	Supports Equitable and Inclusive Places

WATER Standards

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WILDLIFE Standards

Standard 11	Delivers Wildlife Enhancement
Standard 12	Underpins Nature's Recovery

Introduction

Building with Nature

At Building with Nature our mission is to put high-quality green infrastructure at the heart of placemaking in the UK, maximising benefits for people and wildlife. By bringing people closer to nature and building great places for us to live, work and play, development can make a major contribution towards better health and wellbeing in our communities and tackling our climate and ecological emergencies.

Building with Nature (BwN) is a non-profit organisation which began in 2015 as a research initiative between Gloucestershire Wildlife Trust and the University of the West of England, Bristol. Originally funded by the Department of Business, Energy, Innovation and Skills, the project has since received funding from the Ministry of Housing, Communities and Local Government, the Natural Environment Research Council, the Royal Society of Wildlife Trusts, and the Esmée Fairbairn Foundation.

Building with Nature was created in partnership with planners, developers, and other key stakeholders, focused on the key question: *what is preventing the consistent and effective delivery of green infrastructure in the UK or in development?* The findings confirmed that what we need in the UK, to help mainstream high-quality green infrastructure in development, is a shared understanding of 'what good looks like' throughout the whole lifecycle of green infrastructure – from the policy framework to early-stage design, and through to implementation, and beyond to long-term management and maintenance.

The BwN Standards Framework provides that shared understanding and is updated periodically to keep pace with changes in legislation, policy and the latest good industry practice. Building with Nature is the first evidence-based benchmark for high-quality green infrastructure in the UK.

Adopting BwN Standards will help developers and planners deliver climate-responsive designs and policies, as well as tangible long-term benefits including wildlife enhancements, improved health and wellbeing, and sustainable water management.

Who can use the BwN Standards?

The BwN Standards Framework can be used to assess development and policy across the UK. It is designed to be applicable to a wide range of types of and scales of development and policy areas, from small infill projects to major urban extensions and new settlements.

The BwN Award has been granted to residential, mixed use, commercial and public sector projects in a variety of settings including high density urban areas, rural settlements, urban fringe greenfield sites and areas identified for regeneration or retrofit green infrastructure projects.

Even small projects can make a positive contribution and by incorporating high-quality green infrastructure can successfully deliver on a range of environmental and other policy requirements whilst at the same time creating great development for people, wildlife, and the environment.

How to Use the BwN Standards

The new Standards, BwN 2.0, are free to use and can be applied at any stage of the planning and development process. They can be used for development projects in the design, construction, or post-construction phase, and for retrofit green infrastructure projects. The Standards are most effective when introduced early in the planning and design process. In order to secure the range of benefits associated with high quality green infrastructure, it is essential that it is integrated into project development as early as possible.

Introduction

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To help secure high-quality green infrastructure in development, Building with Nature have also developed an accreditation system which is explained in more detail below.

The following summarises the overarching principles for green infrastructure that should be applied when using the BwN Standards:

- **A Holistic Approach:** taken together, the 12 Standards define what high-quality green infrastructure looks like and provide a set of holistic design principles to guide and assess the quality of development. The individual Standards should not be read in isolation, but instead treated as a framework of interdependent drivers of quality at each stage of the planning and development process.

- **Multifunctional and Contextual:** to secure the multiple benefits for people, wildlife, and the wider environment that a green infrastructure approach is capable of, BwN requires a strongly context-driven and multifunctional approach to all aspects of the green infrastructure design and delivery.

- **Community Engagement:** the contextual analysis will need to demonstrate an understanding of the needs and strengths of local communities and future users. This is often best achieved through meaningful community engagement, and the use of co-design and participatory design approaches are encouraged. Following good practice in community engagement will help to ensure that designs are appropriate, responsive to local needs and strengths, build on community assets and, where appropriate, support community ownership and stewardship.

- **Site Potential:** sites will be expected to deliver high-quality green infrastructure commensurate with the site's potential, rather than for example, using a standard percentage approach.

- **Proportionality:** it is recognised that smaller and/or high-density urban projects will be more constrained in terms of the green infrastructure they can deliver on site. However, all sites, regardless of size and location, can incorporate features which benefit people and wildlife and improve the local environment. Larger sites will be expected to deliver more green infrastructure, in proportion to the site's potential. However, the focus of Building with Nature is on *quality* of green infrastructure, not *quantity*.

- **Long-term outcomes:** a key focus of the BwN approach is to encourage developers and policy makers to think long term, to design green infrastructure features that deliver benefits now, and into the future.

Note that in the Standards wording and explanatory text, both policy and development are referred to as "the project". Also note that the BwN definition of green infrastructure includes "blue" infrastructure.

Introduction

The BwN Standards Refresh (2021)

The BwN Standards have been updated with the help of the BwN Standards Board, comprised of green infrastructure experts and representatives from industry, government, professional bodies, and other key stakeholders across the UK. The original Standards, BwN 1.0, launched in 2018 after a period of extensive consultation with industry and planners, customer requirements testing, and testing on live planning applications. The new Standards, BwN 2.0, are being launched in 2021 after a further period of market testing and application on a range of Accreditations and reflect the results of an extensive consultation with the BwN Standards Board, and academic and industry partners, as well as feedback from our Approved Assessor network of green infrastructure practitioners across the UK.

Following the Standards Refresh, the BwN Standards 2.0 continue to raise the baseline for industry and policy but are now simpler and easier to use. BwN Standards 2.0 respond to:

- the changing priorities for development, particularly in relation to the climate and ecological emergencies, and the need for improved long-term management and maintenance of green infrastructure.

- the increasing recognition by industry that bringing accessible high-quality green infrastructure closer to where people live is essential to meeting their aspirations for sustainable, long-term business growth.

What status do the original BwN Standards (BwN 1.0) now have?

The original 23 BwN Standards, BwN 1.0, still provide an evidence-based definition of high-quality green infrastructure. However, the new 12 Standards, BwN 2.0, update and refresh these original Standards and reflect current legislation, policy, and good industry practice. We therefore strongly recommend that those currently using BwN 1.0 prepare to make a transition to using BwN 2.0 when designing new development and drawing up new policies.

Projects registering for BwN Accreditation from 1st February 2022 will be required to use BwN 2.0. Projects registered before this date can be assessed *either* against BwN 1.0 *or* BwN 2.0.

What is the BwN Accreditation System?

Developers and policy makers who wish to have an external verification that their project is an example of high-quality green infrastructure and can demonstrate compliance with the BwN Standards can pursue BwN Accreditation. BwN offer a two-stage accreditation system: Assessment and Audit. Assessment is carried out by a BwN Approved Assessor, and the Audit is carried out by a member of the BwN Audit team. Where it can be demonstrated that a Project is compliant with all 12 Standards, BwN will grant the project a BwN Award. There are two awards for physical development: Design Award and Full Award, and we have a Policy Award for strategic policy documentation. For further details on the BwN Accreditation system and a list of BwN Approved Assessors around the UK, see the Building with Nature website (**www.buildingwithnature.org.uk**). The Assessor will guide you through the BwN Accreditation process.

CORE Standards

The CORE Standards should be applied across all three themes – Wellbeing, Water and Wildlife. There are 6 CORE Standards and together they distinguish green infrastructure from a more conventional approach to the design and delivery of open and green space. The project should deliver a multifunctional and connected network of green infrastructure features, which respond to the climate emergency and local context. The project needs to demonstrate a commitment to enhancing the local environment, creating a distinctive sense of place, and securing effective long-term management and maintenance of green infrastructure features.

CORE Standards

The Green Infrastructure:

Standard 1 Optimises Multifunctionality and Connectivity

Optimises multifunctionality and connectivity within the boundary of the project and links with existing and planned for green infrastructure in the surrounding area.

Explanatory Note: This standard identifies that multifunctionality and connectivity need to be considered for all elements of green infrastructure e.g., the delivery of effective active travel routes or ecological enhancements. Opportunities for multifunctionality should be optimised on the project to achieve the maximum potential benefits for people, wildlife, and the wider environment.

Standard 2 Positively responds to the Climate Emergency

Is designed to be climate resilient by incorporating mitigation and adaptations that respond to the impacts of climate change. The green infrastructure is designed to promote low carbon behaviours and contributes to achieving zero carbon development by optimising carbon sequestration and demonstrating low carbon approaches to design, construction, and long-term maintenance.

Explanatory Note: Incorporating high-quality green infrastructure is critical if new development is to effectively address the challenges of the climate emergency. The green infrastructure itself needs to be designed to cope with, for example, flood and drought and to be sustainable in the longer term. The project's natural environment, as for the built environment, now also needs to contribute to the project's ambition to be climate positive, by, for example, reducing the carbon footprint through sequestration and the procurement of low carbon materials required for the construction of the green infrastructure.

CORE Standards

The Green Infrastructure:

Standard 3 Maximises Environmental Net Gains

Is designed to actively mitigate any unavoidable harmful environmental impacts of development on soil and air quality and to minimise light and noise pollution. In addition, it delivers environmental net gains, including improving air and water quality and wherever possible includes quiet spaces for people and wildlife.

Explanatory Note: Green infrastructure can be designed not only to help mitigate any unavoidable residual harms to the environment resulting from development, but also to enhance the environment for people and wildlife. For example, green infrastructure features can be designed to reduce the negative impacts of noise from road traffic which will aid individual wellbeing, social cohesion, and encourage and support wildlife. Local priorities (see Standard 4) may have been identified for environmental net gain and these will need to be reflected in the project design.

Standard 4 Champions a Context Driven Approach

Positively responds to the local context, including the physical environment, such as landscape and urban character and social, economic, and environmental priorities, including the evidenced needs and strengths of existing and future local communities.

Explanatory Note: For green infrastructure to enhance the local area and be effective and sustainable in the long-term, it needs to be strongly context driven. In BwN terms, the context includes planning and other strategic policies, for example those relating to landscape or urban character, health and wellbeing, ecological networks, target species and sustainable transport initiatives, as well as priorities identified through community consultation and engagement.

CORE Standards

The Green Infrastructure:

Standard 5 Creates Distinctive Places

Is integral to the project and is designed to reinforce local distinctiveness and/or create a distinctive sense of place.

Explanatory Note: Ensuring that high-quality green infrastructure is integral to the project is essential to creating a distinctive sense of place. Distinctiveness of an area should be reinforced through the design of the built environment, but also critically through the design of green infrastructure. The quality of the spaces around, and relationship with, the buildings is as important as the building themselves. Where there are few distinctive qualities in an area to work from, new development can play an important role in creating newly distinctive places for future communities.

Standard 6 Secures Effective Place-keeping

Is subject to management arrangements that demonstrate a commitment to effectively implement, establish and maintain features at all stages of the development process. This should include details of funding, governance, maintenance, monitoring, remediation and, where appropriate, community involvement and stewardship.

Explanatory Note: Effective implementation, management, maintenance, and monitoring of green infrastructure is critical if we want to secure the functions and benefits it is valued for. To achieve the planned condition and functionality of individual green infrastructure features in the long-term, the requirements of implementation, and management and maintenance, must be incorporated into design thinking as early as possible in the development process. How the green infrastructure will be implemented and then looked after post-construction should inform the design. In multi-phase developments, the management arrangements are key to ensuring that high-quality green infrastructure is effectively implemented through all phases. Some level of detail and commitment around the preferred model, mechanism, and funding arrangement, even at the outline planning stage, is essential to secure effective planning for green infrastructure. In BwN terms 'appropriate community involvement' would be where there are effectively resourced long-term management arrangements in place which are supported by the community. 'Community stewardship' is encouraged but must be effectively designed and resourced as part of a wider commitment to long-term management.

WELLBEING Standards

The project should deliver green infrastructure that meets the needs of local people in an inclusive way and is accessible all year round. It should help to reduce health inequalities, build a sense of community and belonging, and encourage active stewardship.

WELLBEING Standards

The Green Infrastructure:

Standard 7 Brings Nature Closer to People

Is close to where people live, work, learn, play and/or visit, and is designed to optimise use and enjoyment for everyone across the year, to maximise health and wellbeing outcomes and to promote active living for existing and future communities.

Explanatory Note: BwN Standards are all about bringing people closer to nature and making the natural environment a great place to be in. This Standard is about making sure that the green infrastructure features are accessible to everyone. In BwN terms, 'accessible' means to be able to physically enter the space and/or enjoy it through audio, visual or other senses.

Standard 8 Supports Equitable and Inclusive Places

Is designed to encourage and enable everyone, including those from vulnerable or excluded groups, to use and enjoy it, to help reduce health inequalities and to build a shared sense of community and belonging.

Explanatory Note: In addition to making sure people can easily access the green infrastructure within the project, green infrastructure features need to be designed to be inclusive. Positive engagement with key stakeholders in the community will help to ensure that green infrastructure provision effectively responds to local needs and strengths.

WATER Standards

The project should manage water in ways that minimise risk and impacts associated with flood, drought, improve water quality, and create or enhance features that add benefits for people, wildlife, and the wider environment.

WATER Standards

The Green Infrastructure:

Standard 9 Delivers Climate Resilient Water Management

Is integral to sustainable drainage using above ground features to manage flood risk, maintain the natural water cycle and improve water quality within the boundary of the project and at a catchment scale. The green infrastructure is designed to be drought resistant and wherever possible, includes measures for the retention and reuse of rainwater.

Explanatory Note: This standard aims to highlight the opportunities that green infrastructure can offer in terms of above ground sustainable water management to respond to the challenges of climate change, including flood and drought. Sustainable drainage incorporated into the green infrastructure offers opportunities for maintaining and improving water quality. The green infrastructure needs to be climate resilient, and wherever possible some surface water should be captured for reuse to help with the sustainable management and long-term maintenance of green infrastructure features.

Standard 10 Brings Water Closer to People

Is designed to integrate water, including areas of standing water, flowing water, seasonal and ephemeral features, to bring additional amenity and wildlife benefits.

Explanatory Note: As outlined in Standard 1, sustainable water management which is integrated within the green infrastructure offers opportunities to secure other benefits for people, wildlife, and the wider environment. Pre-existing natural and semi-natural water features can also be either re-instated or enhanced, and/or new sustainable drainage features can be created to deliver wildlife habitat, opportunities for play and outdoor recreation and other amenity benefits.

WILDLIFE Standards

The project should help reverse the long-term decline in biodiversity by being sensitive to the local ecological context and providing space for wildlife to flourish. It should link habitats within the project and out into the wider landscape to help the restoration and creation of wider ecological networks.

WILDLIFE Standards

The Green Infrastructure:

Standard 11 Delivers Wildlife Enhancement

Optimises long term and climate resilient net benefits for nature, by retaining and enhancing existing ecological assets and creating locally relevant new habitats within the boundary of the project. Wildlife measures are secured at all stages of implementation and where applicable, across multiple phases of development.

Explanatory Note: This standard emphasises the requirement to follow the Mitigation Hierarchy and create Net Positive benefits for wildlife. The standard reiterates the need to protect any existing ecological assets as a necessary first step in the development process. Protecting existing, and creating new, high-quality green infrastructure in development provides a significant opportunity to enhance existing, and create new, habitat for wildlife. In turn, green infrastructure can support the conservation status of target species and habitats identified as priorities for the local area. Arrangements that secure effective implementation of these enhancements at all stages and phases of development are essential if desired outcomes for high-quality green infrastructure are to be realised. This standard also highlights the importance of a demonstrable commitment to management (*both* long-term *and* adaptive), maintenance, monitoring and remediation (*see* Standard 6) to effectively support biodiversity and ecosystem health and resilience, which is critical to reverse the long-term decline in biodiversity and tackle the Ecological Emergency.

Standard 12 Underpins Nature's Recovery

Creates effective links with existing and planned for ecological features and networks beyond the boundary of the project to support the creation and restoration of resilient ecological networks in the wider landscape.

Explanatory Note: Appropriately designed green infrastructure can create significant opportunities to improve the connectivity of existing and planned for habitats. This standard aims to create effective and resilient ecological enhancements within the boundary of the project, but also to support existing and planned for ecological networks and features beyond the boundary, by creating linkages, corridors and 'stepping stones'. In addition to creating effective links, this standard supports ecological connectivity through improving the condition and resilience of habitats retained, created, or enhanced, through the project.

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