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## Projects Set to Benefit Through Pioneering and Collaborative Strategic Ecology Framework

Communication and engagement lies at the very heart of the development of every BREEAM scheme. Working with CIEEM and others, BREEAM have taken a pioneering approach to the strategic development of its assessment of ecology and its links to other issues covered by BREEAM. This work resulted in the publication of a BREEAM Strategic Ecology Framework (SEF) in Spring 2016 which is now being implemented through the current updates that BRE are carrying out for its UK schemes. These are due to be released from 2018.



#### What is BREEAM?

BREEAM is the world's leading sustainability assessment method for masterplanning projects, infrastructure



and buildings. It addresses a number of lifecycle stages such as New Construction, Refurbishment and In-Use. Globally there are more than 556,600 BREEAM certified developments, and almost 2,260,100 buildings registered for assessment since it was first launched in 1990.

BREEAM inspires developers and creators to excel, innovate and make effective use of resources. The focus on sustainable value and efficiency makes BREEAM certified developments attractive property investments and generates sustainable environments that enhance the well-being of the people who live and work in them.

#### How BREEAM works

The BREEAM assessment process evaluates the procurement, design, construction and operation of a development against targets that are based on performance benchmarks. Assessments are carried out by independent, licensed assessors, and developments rated and certified on a scale of Pass, Good, Very Good, Excellent and Outstanding.

BREEAM measures sustainable value in a series of categories, ranging from energy to ecology. Each of these categories addresses the most influential factors, including low impact design and carbon emissions reduction; design durability and resilience; adaption to climate change; and ecological value and biodiversity protection. Within every category, developments score points – called credits – for achieving targets, and their final total determines their rating.

The work in developing an overall framework has involved collective input in a collaborative way from a wide range of stakeholders, including ecologists, landscape architects, policy-makers, architects and contractors.

#### A Strategic Approach to Ecology Assessment

The BRE team behind BREEAM have developed an overall framework to encourage best practice consideration of ecological impacts and enhance the ecological benefits arising from development or management of existing assets. As a result the treatment of ecology in UK BREEAM schemes has been

extensively reviewed in order to develop the Strategic Ecology Framework (SEF) so that it maximizes the opportunities to evaluate and improve the ecological performance of buildings and infrastructure assets. The key aims of the SEF are to help project teams to:

- understand the existing ecology of a site to identify the best approach;
- identify, protect and enhance key ecological features;
- remove or limit existing features that are negatively affecting the site's ecology;
- · mitigate unavoidable impacts and compensate against residual impacts; and

 enhance the ecological value of the site and surrounding areas by encouraging other ecological features.

#### Consensus of Knowledge

The SEF was developed with input and support from CIEEM and a range of other stakeholders including landscape architects and managers as well as client organisations.

Sally Hayns, Chief Executive Officer of CIEEM, said: "Inter-disciplinary collaboration is vitally important if we are to develop tools and techniques that add value to the development process. The publication of the SEF marked a step forward in the approach. The challenge now is for those delivering the framework to work together to design methods of implementation that are meaningful and effective. We welcome the partnership approach."

Before drafting the SEF, the BREEAM team extensively consulted with a wide range of stakeholders, including ecologists, landscape architects/managers, policymakers, specifiers, contractors, BREEAM assessors and client organisations. More than 150 responses to an online survey were received and carefully considered in preparing the SEF's draft scope, which was then refined by stakeholder focus groups before being sent to the BREEAM assessor network for comment.

Ben Kimpton, a Principal Ecologist with The Ecology Consultancy, which has been working with BRE since 2007 as part of the task groups set up to advise on biodiversity, said: "The launch of the SEF provides a significant shift in how future BREEAM methodologies will be updated. The development of the framework has been correctly designed in consultation with a broad range of stakeholders in both the landscape and ecology sectors. As a result, it promotes more collaborative work within design teams and takes account of current approaches on how to deliver high quality environmental and sustainable features in a robust yet pragmatic way. The construction industry and our clients are set to benefit from these changes."

### How the BREEAM Strategic Ecology Framework Works

Whilst the SEF does not itself present ecological assessment criteria for use within BREEAM schemes, it provides a framework of common objectives and actions to guide and align their development.

All BREEAM schemes are regularly reviewed and updated to ensure that they remain in line with current knowledge, evolving solutions, revised legislation and feedback from users, so ensuring that they continue to drive higher sustainability standards. The SEF will now form a part of this process. It will guide the development of balanced ecology-related assessment criteria which better account for current real-world practicalities and the functionality of the building/asset or other development being assessed. The SEF will form part of the new updates of all key BREEAM schemes. Over the coming few years these are expected to include BREEAM UK Communities, BREEAM UK New Construction (Non-Domestic), Home Quality Mark (new-build domestic), BREEAM UK Refurbishment (Domestic and Non-Domestic), BREEAM In-Use and BREEAM Infrastructure/CEEQUAL.

The SEF has been designed to deliver assessment criteria which encourage project teams and clients to consider ecology issues throughout a project's design, construction and operational life cycle stages. Some aspects of the SEF will not be appropriate to all life cycle stages but relevance will be considered as each scheme is updated. To download the SEF and review the external consultation feedback response please visit: http://www.breeam.com/resources

#### **Process of Implementation**

Following publication of the SEF last year, the process of implementing this in the form of scheme criteria is now underway. BRE, working with the CIEEM and the Landscape Institute, formed a group of ecologists and landscape architects to advise on the development of a methodology for implementing the SEF which could be used across all BREEAM schemes. These individuals span all of the BREEAM schemes including those in development and comprise industry practitioners with extensive experience of ecology/landscape work on projects that

are BREEAM assessed. The work will be carried out in three stages as follows:

- Stage 1: SEF Advisory Group set up and working group meeting
- Stage 2: SEF Implementation focus on ecology links to wider sustainability activities
- Stage 3: SEF implementation practical application considerations and wider stakeholder involvement

A workshop was held in December 2016 as part of Stage 1 with key stakeholders reviewing and agreeing key areas to pursue as part of the implementation of the SEF. This will support the development of a viable, relevant methodology and set of scheme development guidance to drive the SEF's implementation across the BREEAM family of schemes. A strong driver of this work is to promote alignment across schemes.

Stage 2 – centered on Task 2 of the SEF (Strategic outcome identification and preliminary selection) – focuses on working with the stakeholders to identify opportunities for integrating ecology with wider sustainability activities and benefits. This might be through closer alignment with industry practices and procedures or the promotion of multifunctional approaches to maximise cross benefits and minimise conflicts in a range of areas and activities including landscape design, green infrastructure, air and water quality and noise mitigation measures flood risk management, climate change mitigation, life cycle costing and service life planning and more.

Commenting on Stage 3 of the SEF implementation process. Alan Yates. Technical Director Sustainability at BRE Global, said: "A lot has changed since the current approach to assessing ecology in BREEAM was developed in 1998 and current work on ecosystems services and natural capital will keep these changes happening over the next few years. It is good to see a high degree of consensus forming on the best way for BREEAM to drive improvements in this important area through the recognition of environmental social and economic benefits that ecological protection and enhancements can bring. BREEAM is responding to these changes and will continue to monitor and engage with the ecological sector to ensure that we are all driving enhancements in the same direction."

#### Professional Updates



It is vital that we aspire to a built environment that is optimal in terms of ecology, and not only in terms of technology and costs. Of course not all projects can be ecological high fliers, but all can take steps to protect and enhance the ecological value of our natural and urban environment. This might be through the preservation of natural/semi-natural areas, maintaining and enhancing ponds and watercourses, promotion of bee and other insect-friendly planting or in the design of buildings and infrastructure assets themselves.

Protecting and improving the ecology can contribute greatly to the environmental quality of our increasingly urbanised world and – as a growing body of evidence shows – improve the health, well-being and even productivity of users. The new and comprehensive Strategic Ecology Framework developed by BREEAM and the assessment criteria that flow from this will be key to both promoting and rewarding this in projects in the UK, bringing a wide range of benefits and value to those involved in the development and operation of buildings and infrastructure.

Further information on BREEAM's new Strategic Ecology Framework can be found at: www.breeam.com/sef

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