APPENDIX 1

RIDGE

PLATINUM JUBILEE BUSINESS PARK, RINGWOOD
BREEAM REVIEW REPORT

MARCH 2024

PLATINUM JUBILEE BUSINESS PARK, RINGWOOD
BREEAM PRE-ASSESSMENT REPORT

March 2024

Prepared for
New Forest District Council

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VERSION CONTROL

Project Name Platinum Jubilee Business Park, Ringwood

Project No. 5024802

VERSION	DATE	DESCRIPTION	CREATED BY	REVIEWED BY
1.0	15/03/2024	First Issue	AF	SS

CONTENTS

1. INTRODUCTION

Ridge and Partners LLP have been appointed by Andrew Morton of New Forest District Council (NFDC) to undertake a review of the BREEAM assessment for the Jubilee Business Park project, also known as Crow Arch Lane.

From discussions with Andrew and Chris Webb of Currie and Brown, it is understood that BREEAM became a planning requirement on the scheme mid-way through construction when a condition for BREEAM Very Good was set. Prior to this there had been an aspiration to achieve BREEAM certification however this had not been embedded into the project documentation as confirmed by a review of the tender pack.

This report has been written by Abby Foster (previously Bartlett), a qualified Building Research Establishment Environmental Assessment Method (BREEAM) assessor; BRE Reg. SHD-AB41

2. BREEAM PROCESS

2.1. Overview

BREEAM is a performance-based assessment method and certification scheme for new buildings. The primary aim of the BREEAM process is to mitigate the life cycle impacts of new buildings on the environment in a robust and cost-effective manner. This is achieved through integration and use of the scheme by clients and their project teams at key stages in the design and procurement process. This enables the client, through the BREEAM Assessor and the BRE Global certification process, to measure, evaluate and reflect the performance of their building against best practice in an independent and robust manner. This performance is quantified by a number of individual measures and associated criteria stretching across a range of environmental issues which is ultimately expressed as a single certified BREEAM rating.

Figure 1 - BREEAM Categories

The potential BREEAM ratings for a building are as shown below:

Table 1 – BREEAM Rating Benchmarks

RATING	PERCENTAGE SCORE	EQUIVALENT PERFORMANCE
Outstanding	≥ 85	Less than 1% of UK new non-domestic buildings
Excellent	≥ 70	Top 10% of UK new non-domestic buildings
Very Good	≥ 55	Top 25% of UK new non-domestic buildings
Good	≥ 45	Top 50% of UK new non-domestic buildings
Pass	≥ 30	Top 75% of UK new non-domestic buildings
Unclassified	<30	Failed to meet minimum BREEAM criteria

2.2. Assessment Timeline

Figure 2 below provides a comparison of the RIBA outline plan of work with the BREEAM assessment stages.

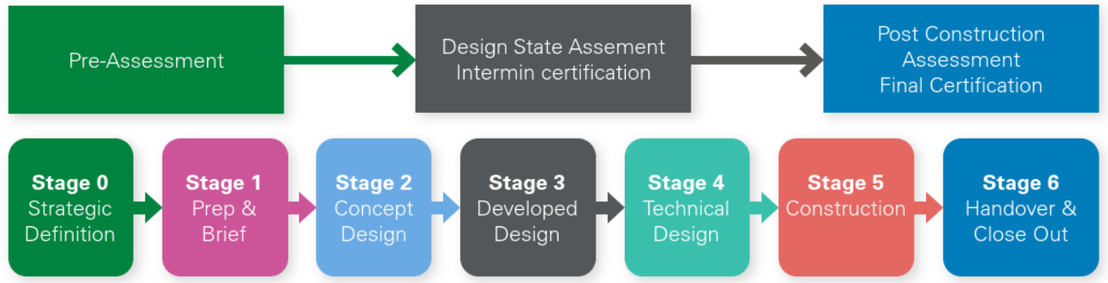

Figure 2 - BREEAM assessment and certification stages and the RIBA Outline plan of works

2.3. Scoring

The BREEAM assessment is made up of a total of 10 separate categories as summarised in *Figure 1* on the previous page, each containing a variety of different environmental issues. Although some of the issues are mandatory for specific scores, as summarised in the next section, the majority are tradable i.e. the team can choose to target them or not depending on their suitability and achievability for the assessed building.

Each of the categories carries an associated weighting which is applied to credits achieved in that category to calculate the total score for the assessed building. The weightings vary depending on the type of building being assessed and whether certain elements are included or excluded from the scheme. For example, if a lift or escalator are not part of the proposals then Ene 06 – Energy Efficient Transportation Systems will be filtered out of the assessment and the weightings updated accordingly, similarly shell and core developments will have certain criteria filtered out as they are beyond the scope of the development.

As a summary, the fully fitted scheme weightings are typically as follows:

Table 2 – Scheme weightings

ENVIRONMENTAL CATEGORY	WEIGHTING
Management	11%
Health & Wellbeing	14%
Energy	16%
Transport	10%
Water	7%
Materials	15%
Waste	6%
Land Use & Ecology	13%
Pollution	8%
Innovation (additional)	10%

Therefore, when design teams are considering tradable credits, it is important to remember that the loss of a single credit in the energy or health and wellbeing category is likely to have a different impact on the overall score than the loss of a water or waste credit.

2.4. Mandatory Requirements

Whilst most BREEAM credits are tradable and can be targeted in various configurations to achieve the required overall score, there are minimum requirements set to achieve certain BREEAM ratings. Table 3 below highlights the mandatory requirements for all of the different BREEAM ratings.

Table 3 – BREEAM New Construction v6.1 Mandatory Requirements

BREEAM ISSUE	PASS	GOOD	VERY GOOD	EXCELLENT	OUTSTANDING
Man 03: Responsible construction practices	None	None	None	One credit (Responsible Construction Management)	Two credits (Responsible Construction Management)
Man 04: Commissioning and handover	None	None	One credit (Commissioning test schedule and responsibilities)	One credit (Commissioning test schedule and responsibilities)	One credit (Commissioning test schedule and responsibilities)
Man 04: Commissioning and handover	None	None	Criterion 11 (Building User Guide)	Criterion 11 (Building User Guide)	Criterion 11 (Building User Guide)
Man 5: Aftercare	None	None	None	One credit (Commissioning implementation)	One credit (Commissioning implementation)
Ene 01: Reduction of energy use and carbon emissions	None	None	None	Four credits (Energy performance or Prediction of operational energy consumption*)	Six credits (Energy performance) and Four credits (Prediction of operational energy consumption*)
Ene 02: Energy monitoring	None	None	One credit (First sub-metering credit)	One credit (First sub-metering credit)	One credit (First sub-metering credit)
Wat 01: Water consumption	None	One credit	One credit	One credit	Two credits
Wat 02: Water monitoring	None	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only
Mat 03: Responsible sourcing of materials	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only	Criterion 1 only
Wst 01: Construction waste management	None	None	None	None	One credit
Wst 03: Operational waste	None	None	None	One credit	One credit

2.5. Early-Stage Actions

It is recommended that the client and design team review all available credits as early as possible in the project, as they can become difficult or indeed impossible to achieve if considered later in the design stages of the development as it is generally easier to incorporate changes into the design before it has developed too far.

The BRE recognise this within the BREEAM New Construction version 6.1 methodology and as such there are various time bound issues that can be targeted which are summarised in Table 4 below;

Table 4 – Early RIBA stages summary

RIBA STAGE	CREDIT REFERENCE	NOTES
Stage 1	Tra 02 Sustainable Transport Options	During preparation of Project Brief the design team consult with local authority about local cycling network and publicly available pedestrian routes
	Mat 03 Responsible Sourcing of Construction Products	Company/Site Wide Sustainable Procurement Plan to be in place before Concept Design
	Mat 06 Material Efficiency	Set targets and report on opportunities and methods to optimise the use of materials
	Le 02 Ecological Risks & Opportunities	For Route 2 - Suitably Qualified Ecologist (SQE) appointed prior to completion of Preparation & Brief stage to undertake survey of site and evaluate its current ecological baseline.
Stage 2	Man 01 Project brief and design	Project delivery stakeholders to meet and discuss all relevant items prior to completion of Concept Design
		Design team to consult with all interested parties prior to completion of Concept Design – these discussions should influence the Initial Project Brief and Concept Design
		A BREEAM AP is appointed at Concept Design stage to work with the design team to facilitate the BREEAM assessment. This is a separate role to BREEAM assessor but can be carried out by the same person if they are suitably qualified.
	Man 02 Life cycle cost and service life planning	Elemental Life Cycle Cost (LCC) analysis to be completed at this stage
	Hea 06 Safety and Security	Suitably Qualified Security Specialist to conduct an evidence-based Security Needs Assessment of the site prior to the end of Concept Stage.
	Ene 04 Low carbon design	Passive design and free cooling options to be analysed at Concept Stage to identify opportunities for implementing measures.
		An accredited energy assessor to complete an LZC feasibility study and specify technologies for implementation
	Mat 01 Environmental Impact	Team to demonstrate environmental performance of the building at Concept Design by carrying out LCA on 2-4 different superstructure options and submit results to BRE before end of Concept Design. Covers superstructure, substructure, hard landscaping and building services.
	Wst 01 Construction Waste Management	Where relevant a pre-demolition audit must be undertaken at Concept Design by a competent person.
	Wst 05 Adaption to climate change	Climate Change Adaptation Strategy Appraisal to be produced providing recommendations or solutions to mitigate possible future impacts.
	Wst 06 Functional adaptability	Building specific Functional Adaptation Strategy Study to be developed by the end of Concept Stage to include recommendations or solutions for the design to incorporate.
	Le 02 Ecological Risks & Opportunities	Project team liaise and collaborate with representative stakeholders to consider ecological outcome for site.
	Le 03 Managing Negative Impacts on Ecology	Roles and responsibilities to be clearly defined and implemented to support successful delivery of project outcomes to influence Concept Design or Design Brief

3. BREEAM REVIEW

The Platinum Jubliee Business Park scheme has been completed and handed over for some time now with practical completion achieved on 27 April 2023, unfortunately the BREEAM certification has not yet been confirmed.

To explore the reasons behind this, Abby Foster, accredited BREEAM assessor, met with Andrew Morton of NFDC and Chris Webb of Currie and Brown on two separate occasions;

- Friday 9th February 2024
- Tuesday 5th March 2024

Following the initial meeting, Chris Webb provided a link that contained project documentation. This was reviewed with regards to specific reference to BREEAM and also a high-level consideration of whether BREEAM related targets were included. Please note that where BREEAM criteria is referenced e.g. Wat 02, this does not mean that the documentation provided confirmed compliance, simply that it aligns with the type of documentation that would usually be expected to be seen. It is beyond the scope of this exercise to confirm compliance with BREEAM criteria.

Hoare Lea Engineering Services Specification – Volume 1

- No direct reference to BREEAM

Hoare Lea "Y" Section MEP Services Reference Specification - Volume 2

- BREEAM 2014 credit Man 05 to be achieved (p203)
- Y71 (p274) confirms all meters to be provided with Modbus pulsed outputs (Ene 02)
- Y25 (p93) confirms pules output water meter to be provided (Wat 02)

Hoare Lea Performance Specification - Volume 3

- BREEAM Very Good to be achieved (p4)
- Water utility meter to have pulsed output for monitoring and alarming for BREEAM (Wat 02) (p5)
- Leak detection (Wat 02) (p6)
- External lighting (Hea 01, Ene 03, Pol 05) (p8)
- PV panels (Ene 04)

Hoare Lea Supporting Docs - Volume 4

- SRE BREEAM Pre Assessment appended dated 28/10/2020 – proposed score of 62.78% for offices and 63% for industrial
- SRE Thermal Comfort Analysis appended dated 05/11/2020 (Hea 04)

AKS Ward Civil & Structural Employers Requirements

- Confirms Flood Risk Assessment completed by RPS in Nov (Pol 03)
- Proposed approach is that surface water drains to soakaways which should allow Pol 03 credits to be maximised if this was undertaken although robust evidence would be required to confirm this if claimed

Boyle & Summers - Architectural Specification and drawings

- No direct reference to BREEAM
- No reference to common responsible sourcing schemes e.g. FSC or BES 6001, although specific products are referenced that we know do have some accreditation e.g. Kingspan Kooltherm, so this could be reviewed further
- Welfare block provided which includes shower facility – may help towards Tra 03 credits
- Cycle hoops provided – Tra 03 overlap

Currie & Brown Pre-Construction Information

- No reference to BREEAM

Tender Pack (2no. separate docs)

- No reference to BREEAM only reference to Sustainability was in the Prelims as follows;

SEVENTH RECITAL and Schedule 2 - SUPPLEMENTAL PROVISIONS
- Named Sub-Contractors: Paragraph 1 does not apply.
- Valuation of Changes - Contractor's estimates: Paragraph 2applies.
- Loss and expense - Contractor's estimates: Paragraph 3 applies.
- Acceleration Quotation: Paragraph 4 applies.
- Collaborative working: Paragraph 5 applies.
- Health and safety: Paragraph 6 apply.
- Cost savings and value improvements: Paragraph 7 applies.
- Sustainable development and environmental considerations: Paragraph 8 apply.
- Performance indicators and monitoring: Paragraph 9 applies.
- Notification and negotiation of disputes: Paragraph 10 applies.
- Where paragraph 10 applies, the respective nominees of the Parties are:

Amiri Appendix C3 Basis of Tender

- States that they have included for the measures incorporated into the issued architectural and services specification, no allowance has been made for any other measures that may be required (p6)

BREEAM/Sustainability Measures: We have included the measures incorporated within the issued architectural and services specifications, no allowance has been made for any other measures that may be required. We understand that this aspect of the project is aspirational, therefore please note the provisional sum we have included at this stage for any related testing, reporting or other associated services that may be required.

4. CONCLUSION

Following discussions with Andrew Morton of NFDC and Chris Webb of Currie and Brown, and a detailed review of project documentation, the primary reason that BREEAM has not been achieved to date appears to be related to the timing around it being set as a formal requirement.

Although an early BREEAM Pre Assessment was undertaken outlining a potential route to the targeted score, it is understood that BREEAM was not set as a specific planning condition for the scheme until part way through the construction process. This is very unusual and in direct conflict with the intent of the BREEAM process which is focused on embedding sustainability into projects from the outset, as demonstrated by the 17no. targets that require action prior to the completion of RIBA Stage 2, outlined in section 2.5 of this report. If early stage credits are not actioned, it is much more challenging for a project to achieve BREEAM certification.

On a practical level, once the scheme is halfway through construction it is far too late for any of the design related requirements to be incorporated as the design itself has already been completed and coordinated between the various disciplines. Perhaps even more significantly, it is also too late for the majority of construction related requirements to be achieved as these typically would have to be in place from the start of the construction process, for example collation of energy, water and transportation data for the construction site.

It is worth highlighting that BREEAM aims to push projects above and beyond best practice therefore it stands to reason that unless the relevant items are specifically targeted, they are highly unlikely to be achieved. A detailed review of the project documentation confirms this. While there are some relevant references as outlined in section 3, in isolation these would not be sufficient to achieve certification.

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