

# Caversham Road – BREEAM update. S2 Estates.

## 1. Introduction.

This note has been produced to summarise the increased BREEAM credits expected from the BRUKL calculation completed as part of the planning application for the retail element of the proposed mixed-use development located on Caversham Road in Reading.

At the time of the initial pre-assessment, the BRE had not yet released its alternative calculation methodology for the Ene 01: Reduction of energy use and carbon emissions credit. This meant that all electric schemes would have their carbon emissions penalised by using the Part L 2013 carbon emission values and achieving BREEAM credits under Ene 01 was extremely difficult. In response to the decarbonisation of the national grid an alternative calculation using more up to date emission factors was provided by the BRE for credit calculations.

This document summarises the increase in overall credits due to this calculation.

## 2. Updated results.

The BRUKL provided in REP-2324398-05-JP-20220311-Energy Strategy-Rev01 has been uploaded to BREEAM projects and Figure 1 demonstrates that 3 credits can be achieved based on the proposed design.

| Energy performance - Building score                          |             |   |
|--------------------------------------------------------------|-------------|---|
| Methodology used                                             | Alternative |   |
| Heating and cooling demand energy performance ratio (EPRdem) | 0.178       |   |
| Primary consumption energy performance ratio (EPRpc)         | 0.102       |   |
| Total BREEAM credits achieved                                | 3.0         |   |
| CO <sub>2</sub> -eq energy performance ratio (EPRco2-eq)     | 0.102       |   |
| Overall building energy performance ratio (EPRnc)            | 0.382       |   |
| % improvement BER/TER                                        | 20.2        | % |
| <div>Calculate score Clear</div>                             |             |   |

Figure 1: BREEAM Projects Ene 01 extract (06/01/2023).

In line with the credit weighting calculated in the initial BREEAM PA included in DOC-2324517-5A-SK-20220318-Approach to sustainability-REV00, 3 credits equate to an increase in score of approximately 2.2%.

## 3. Conclusion.

The BREEAM PA produced for site identifies a potential route to achieve BREEAM Very Good with a score of 55.8%. When the Ene 01 credits are included, this increases the target score to 58% representing a 3% buffer over the minimum required score for BREEAM Very Good.

The route to achieve Very Good is variable, as design progresses further BREEAM credit may become available that could be targeted to increase the buffer score.