

Green Build Hub – Ward Williams Associates



Project Profile

Project: Green Build Hub

Client: Cornwall Sustainable Buildings Trust

Value: £1.4 Million

Dates: October 2014 – July 2015

Contract Type: NEC3 – ECC Option A

Procurement route: Two Stage

Project Overview

The ERDF funded Green Build Hub (GBH) is the brainchild of Cornwall Sustainable Buildings Trust (CSBT) and was designed, procured and built as an exemplar sustainable building. GBH is a 'living laboratory' where eco-building products will be installed, tested and monitored in a real-life setting.

The success of this project is evidenced through the delivery in budget, on programme, virtually snag free, BREEAM 'Outstanding', a VAMP score of 898, air test results of 2.38m³/(hr.m²) and a Considerate Constructors Scheme score of 42 out of 50.



The project was intended to be 'more than a building' demonstrating numerous exemplar and innovative sustainable and standard construction processes including: BIM, BREEAM, VAMP, Value/Risk/Sustainability Workshops, Lean Construction, NEC Contracts, Two-Stage Procurement, Sustainable Construction Technologies, Renewable Energy Technologies, Apprenticeship Schemes, In-Situ Monitoring, Interchangeable SIPS Panels, Full Accessibility and DC Energy Office Installation. These processes are recorded and are to be published as exemplars for future generations.

The collaboration and team working ethos throughout the project ensured project success and delivery of all of the CSBT's aspirations.

Best Practice

BIM: Contractor Gilbert and Goode, committed to delivering BIM within their design and build process. As a result the project was delivered at Level 2 BIM, approaching Level 3 BIM. The Architects, PBWC, and Services Engineers, Hoare Lea, are proficient at BIM and led the process and delivered a number of training sessions for over 100 participants. The rest of the team were BIM novices, therefore, PBWC and Hoare Lea carefully assisted, educated and guided the team throughout.

BREEAM: The original ERDF submission had a BREEAM deliverable of 'Outstanding', however, the independent assessors declared that the project budget was not sufficient setting the requirement as 'Excellent'. The team still aspired to BREEAM 'Outstanding' and using innovative procurement processes achieved this within budget and to programme. A key aim within the process was to educate in the delivery of BREEAM and demonstrate that high levels of sustainable construction can be achieved with careful planning, design and procurement and not at significant cost. There have been numerous training workshops, including one with a project in France where a BREEAM assessment was undertaken on their project and a HQE assessment of the GBH. Other tools and processes are dealt with later in this submission.



Added Value

Apprenticeships: Each company within the project team had dedicated 'apprentices' who were mentored during the project:

- CSBT – Colin Russell joined as an apprentice carpenter and undertook the NEC Project Supervisor role following training. He supervised a team of apprentices for the timber frame construction;
- WWA – Marc Symons undertook the NEC Project Management role whilst progressing his degree, managed by Phil Crossley;
- WWA – Amy Hurst undertook the BREEAM Assessor role under the BREEAM Accredited Professional.
- Gilbert and Goode – Callum Yeowell was the Site Project Manager understudy to Brendon Cocking during his placement year and is forecast to achieve a 1st from Plymouth University. He is the CITB Constructing Excellence Ambassador for Youth in Construction
- PBWC – Jacob Down was Project Architect understudy to Rachel Gaunt and led the BIM process and training.
- Hoare Lea – Jason Tetlow and Sam Hickenbottom were apprentices for electrical and for mechanical services supporting Simon French.
- Eden – Kevin Applegath acted as the stakeholder for Eden under the supervision of Caron Johnson.

The project meetings, workshops and training events were attended by the trainee and mentor to ensure the project was correctly delivered and that the trainee team learnt the full process through procurement and construction to handover.

