Balfour Beatty for The Crown Estate: St James's Market

Project Details

St James's Market is at the centre of cultural London. The redevelopment project comprises two buildings sandwiched between the bustling Regent Street and Haymarket. Two existing properties were demolished to basement level, except for the retained listed façade on Regent Street, to make space for 38,000sqm of new high-end office and retail and 3,500m2 of new public realm.

KLH Sustainability bid for the project with Balfour Beatty, pitching a winning sustainability philosophy of 'Closing the Loop'. The philosophy endeavours to promote

- Procurement and use of products sourced from land leased from The Crown Estate,
- Increased recycled content and reduced waste in construction; and
- Employment, business, education and community projects within the local London Boroughs.

Since 2014, KLH Sustainability has been working alongside Balfour Beatty to deliver this challenging project.

Client
The Crown Estate

Architect
MAKE

Engineer
AECOM

Contractor
Balfour Beatty

Year
2014-2016

Process

Both buildings were evaluated prior to demolition to identify potential materials for salvage. KLH Sustainability's community contacts helped to inform this process. Identified materials were carefully removed, stored and delivered to local community projects.

KLH Sustainability supported the design team in the evaluation and selection of key building products and materials. A major supply chain evaluation exercise was undertaken to establish opportunities for the procurement of products from land managed or leased from The Crown Estate.

KLH Sustainability engaged with supplier and sub-contractors post contract award to ensure a good level of engagement with the project sustainability requirements and to collate comprehensive data for client reports. Regular site visits supplemented the technical support meetings to ensure exemplar environmental performance on site. KLH Sustainability also developed strong working relationships with the local council and other regulatory authorities to ensure work progresses in manner that minimises disruption to the local community and the environment.

The final element of work in delivering a sustainable building was through the development and delivery of an extended 'soft-landings' period to ensure the building performs as predicted.

Outcomes

Reduction in Potable Water Consumption

Potable water consumption has been reduced by over 48% through the selection of water efficient fixtures and the installation of a greywater recycling system.

Sustainable Materials

Extensive use of stone and timber from The Crown Estate local land assets including:

- Limestone façade from Albion Stone
- Internal FSC hardwood panelling from the Windsor Estate
- Concrete with marine dredged minerals

In addition all timber, concrete, steel and plasterboard have been obtained from certified responsible sources.

The embodied carbon of the project has been reduced by approximately 10%, representing a saving of 867 tonnes of CO2. This has largely been achieved through the selection of construction products with an increased recycled content and developing low carbon concrete mixes.

Biodiversity

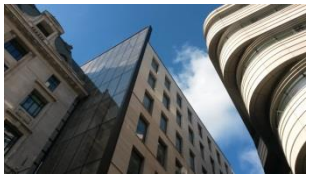
728m^2 of biodiverse roof has been installed across the two buildings. Species have been selected to support a green roof top corridor connecting St James's Park in the south to Regents Park in the north. Log and stone piles will be incorporated to further benefit inner city biodiversity.

Reduction in Operational Energy

Improved fabric efficiency, a gas-fired Combined Heating and Power (CHP) plant and roof-mounted photovoltaic (PV) panels deliver operational energy efficiency within the buildings

Relationship with local schools

KLH Sustainability has supported events including site visits, open doors day or school lectures. The events have engaged over 300 students in the project.



View from the pedestrian area

Regent Street retained Facade

Green roof and PV panels