Residential



Riverside Quarter, Wandsworth

CLIENT: Frasers Property UK

CONTRACT VALUE: £38.5 million

DURATION: 103 weeks, Completion due February 2013

ARCHITECT: Carey Jones

CONTRACT: Single Stage, Design and Build STRUCTURAL ENGINEER: Robert Bird Group

Galliford Try was appointed for this prestigious residential project following a successful earlier project at Vincent Square, for the same developer. The residential scheme on the banks of the River Thames comprises 121 apartments over 2 buildings - one 9-storey and the other 12-storeys high. 18 affordable units within the 2 blocks will mean 139 homes will be delivered in total.

Construction methodology is reinforced concrete frame, with post-tensioned slabs. In excess of 500 piles will be installed - a mixture of secant and bearing on a site that spans 120m by 60m. Cladding is curtain-walling, rainscreen, aluminium and sto-render with punched windows. There are winter gardens to the North Elevation upper level apartments and the buildings have Calzip roofs.

A two-storey basement (100x x 50m wide) will provide the residential car parking.

Ground conditions have been challenging, as the site was a former oil depot and hydro-carbons and heavy metals have required specialist treatment and disposal.

The development incorporates a single community heating network with Combined Heat and Power (CHP). A ground source heat pump system will be connected to a number of open loop boreholes with associated well head pumps providing ground water to internal heat pump units and associated heat exchangers.

The ground source heat pump system incorporates an Aquifer Thermal Energy Storage, during the warm season; water from the cold well is passed through a heat exchanger providing direct cooling water to the building.

The heat stored in the 'warm energy' store is used for heating during the winter.

The use of both Combined Heat and Power and Ground Source Aquifer Thermal Energy Storage will contribute to much higher efficiencies in the operation of the building services systems and reductions in CO2 emissions.

