

PARNELL HOUSE

LONDON SW1

In July 2015 Clifford Devlin won a competitive tender to provide the enabling works for the £35m redevelopment of Parnell House in Central London.

The eight-storey commercial building, located on Wilton Road directly opposite Victoria Underground station, is being remodelled to deliver additional office floor area, and the construction of an additional three floors for 14 residential apartments.

The works involved the removal of the building's roof structures & plant, atrium roof glazing, removal of external cladding, internal cladding to atria and the demolition of the 7th floor slab to enable the structure to be extended upwards.

The project was notable for the safe removal of a post-tensioned concrete slab at 7th floor level.

Orthodox demolition techniques cannot be used to deconstruct in-situ post-tensioned concrete as there is a risk of uncontrolled release of the energy contained in the tensioned tendons.

The company's engineering team developed a back-propping scheme to support the 7th floor slab and a method to release the retained energy in the tendons by carefully heating the wedges that hold the cable strands that are stressing the material.

Once the tension had been released the slab was carefully deconstructed using Brokk remote controlled demolition equipment.

Discipline: Demolition

Duration: 6 months

Completed: Jan 2016

Value: £1.1m

Client: Royal London Asset Management

Principal Contractor: Kier

