

**Location:** Liverpool

**Client:** Blaenau Gwent County Borough Council

**Frame Contractor:** Thames Valley Construction

**Main Contractor:** Wilmott Dixon

**Post-tensioning Design:** CCL

**Post-tensioning Installation:** CCL

**Year of Completion:** 2012



CCL was engaged to design, supply and install three levels of suspended post-tensioned beam and slab car park decks for the multi-storey car park constructed as part of the redevelopment of Ebbw Vale. The company was asked to provide a solution which would minimise the size and number of columns, eliminating intermediate columns in parking bays through a 16 m x 17.5 m grid, while at the same time providing a high degree of crack and deflection control.

CCL designed a band beam and flat slab solution with double live end post-tensioning across large area pours, providing minimal slab depths of 160 mm and spanning 7.5 metres.

Coordination between the beams and the gully drains which run along the perimeter of the slabs was ensured by changes to the beam links to accommodate the cast-in gully items.

In total CCL installed 10,000 m<sup>2</sup> of post-tensioned slabs.