BuroHappold Engineering collaborated with Explorations Architecture on the design for a 380 metre span suspension bridge crossing the River Liffey in Dublin, Ireland. Creating the first significant suspension bridge in Ireland and pioneering development in medium-span railroad suspension bridges, the iconic structure was designed to minimise visual obstruction and reflect the shape of the Liffey Valley.

Sited in an area of outstanding natural beauty, the design team delivered a low-rise slender suspended bridge which is subtle yet expressive. By allowing the suspension cable to cross the deck in elevation and provide support from below, we were able to afford bridge users uninterrupted views of the valley.

Carrying light rail and pedestrian traffic, the central portion of the span consists of a steel suspension belvedere supporting the deck, while a pedestrian footway follows the cable profile. The towers consist of inclined concrete A-frames minimising the bending and maximising structural efficiency.

The elegant outline of this bridge will form a symbol for the Dublin light rail system, without compromising its natural setting.

METRO WEST RIVER LIFFEY BRIDGE
DUBLIN, IRELAND

CLIENT
Railway Procurement Agency

ARCHITECT
Explorations Architecture

PROJECT VALUE
£50m

DURATION
2009 - 2011

SERVICES PROVIDED BY BUROHAPPOLD
Bridge engineering and civil structures, inclusive design