

Rosie Hackett Bridge (also Marlborough Street Bridge), Dublin

Engineering and civic excellence combined

€6m

/ Project value

September 2011

/ The build commenced

May 2014

/ The build was completed

Deliberately understated, yet elegant, the multi-award winning Rosie Hackett Bridge is a sophisticated example of engineering, and civic, excellence that has provided a strategic transport connection between the north and south sides of Dublin City. Named in honour of the Irish Women Workers' Union's founding member, Rosie Hackett, the contemporary 47m long, €6million in-situ concrete bridge, which spans the River Liffey, facilitates the seamless mobility of hundreds of buses, Luas trams, taxis, cyclists and pedestrians each day.

The Brief

Emphasising the need for the Bridge to be considerate to its surroundings in respect to aesthetics, setting, historic context, conservation, architecture and urban design the brief also anticipated the transformative structure acting as a catalyst for the creation of a new Dublin City Centre hub of commercial, and social, activity running from Abbey Street to Pearse Street.



“The elegance and simplicity of this hard-working bridge mark it out as a significant recent example of understated civic excellence”

commented the jury of the Irish Concrete Society Awards

“The Rosie Hackett Bridge caters exclusively for multiple forms of sustainable transport. It will play a central role in improving bus performance along the city quays and provide an alternative route to O’Connell Bridge for cyclists and pedestrians crossing the Liffey”

Oisín Quinn
Dublin’s Lord Mayor

The Challenges

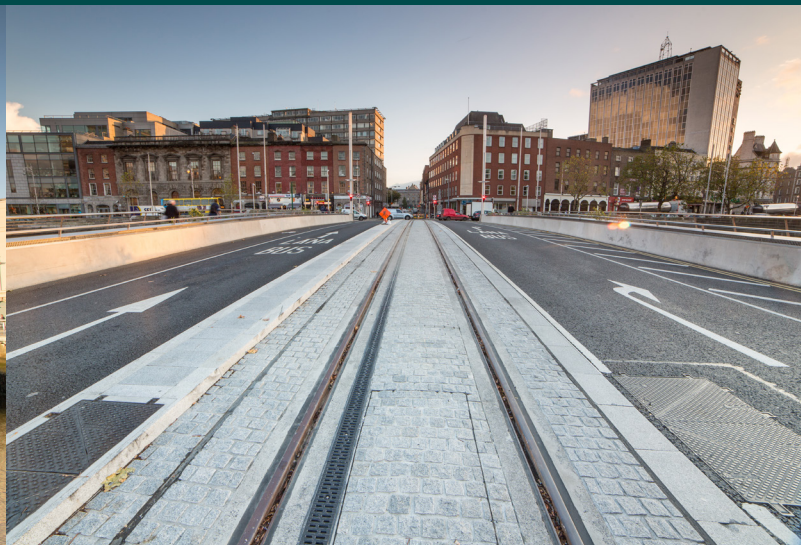
Establishing the benchmark for structural concrete’s capabilities, and eclipsing previously renowned engineering feats in Ireland, the complex construction of the Rosie Hackett Bridge encountered the confines of a busy city centre environment and its associated limited working area footprint. Nevertheless, through the effective management of plant equipment, and deliveries, our team, demonstrating its capacity to tackle the most complex of challenges, placed 600m³ of high strength concrete on to the Bridge’s main deck – the first time this had ever been achieved.

GRAHAM’s added value solution

Celebrated for its graceful design, engineering excellence and advanced concrete technology, this industry-recognised project provides modern, cross-functional connectivity within Dublin City Centre through the construction of a new southbound BXD Luas Line crossing, two bus lanes, a single cycle track and two pedestrian footpaths. Delivered within a robust 33-month programme, the structure spans 47 metres, is 26 metres wide and has a span to depth ratio of approximately 1 to 100 at mid-span. Notable for its curved profile in elevation, and in section, with a post tensioned deck, it also includes marine piling with temporary cofferdams and propping systems. Traffic management and the execution of public realm tasks, to integrate the Luas crossing into the existing infrastructure, were also integral elements of our award-winning work, which has served to leave a lasting legacy for this vibrant portion of cosmopolitan Dublin.

Outputs & Benefits

- / **Award Winning:** Winner of the Infrastructure Category and Overall Concrete Society Awards: Irish Concrete Society Awards, Best Presentation Award: Engineers Ireland Excellence Awards, Best Engineering Project of the Year: Engineers Ireland Excellence Awards
- / **Design Innovation:** Placed 600m³ of high strength concrete to the main deck – first time ever achieved
- / **Overcoming Challenges:** Developed a cofferdam solution, allowing abutment foundations to be constructed, despite poor ground conditions
- / **Safety First:** 219,000 RIDDOR free ‘man-hours’



For more information on how we’re delivering lasting impact:

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