

Waterford Sustainable Transport Bridge

CLIENT: Waterford City Council

LOCATION: Waterford, Ireland

YEAR OF COMPLETION: 2023

We were commissioned by Waterford City Council to undertake a full independent check of this new 207m long 5-span active travel bridge over the River Suir in the centre of Waterford. The central span features twin leaf bascules that open to provide a 25m wide navigable channel with unrestricted height.

The deck is an orthotropic steel box which is integral with the reinforced concrete piers. The bascule leaves are supported on mechanical trunnion bearings that allow a vertical pivot movement about a horizontal axis. During movement and whilst the bridge is in the "raised" position, each leaf of the bridge is supported by the trunnion bearings and actuators.

We undertook a full independent check of both the structural and MEICA design working proactively with the designer to resolve our comments to achieve certification.

The original design check was completed in late 2023 however we have been further commissioned to undertake additional checks on some revisions to the pier foundations following appointment of a contractor.

KEY FACTS:

- Twin leaf opening bascule bridge
- Steel orthotropic box girder deck
- Semi-integral construction
- Structural and MEICA independent check

