





Brisbane, Astraia 6-10 April

Fundamental and Innovative Surveying Techniques in Brisbane's 2032 Olympic Infrastructure Construction – Kangaroo Point Bridge. Improving Livability and Excellance in Sustainability

Ben Moritz
Registered Surveyor (Cad)
Kangaroo Point Bridge Survey Manager
for Land Solution Australia
FIG Working Week, Wednesday, April 9, 2025



















Brisbane, Australia 6-10 April

Design & Construction



























Key Facts

- **Dates:** Started early 2022 & opening late 2024.
- Project Value: Approx \$300 million
- Type: Cable Stay Suspension Bridge
- **Length:** 460m over 8 spans. Longest spanning pedestrian bridge in Australia
- Height: 95m tall mast, with 32 suspension cables
- **Use:** Dedicated cycle and pedestrian bridge
- Clearance: 12.7 metres & 60m wide navigation channel
- **Dining:** Including an above-water restaurant and riverside cafe















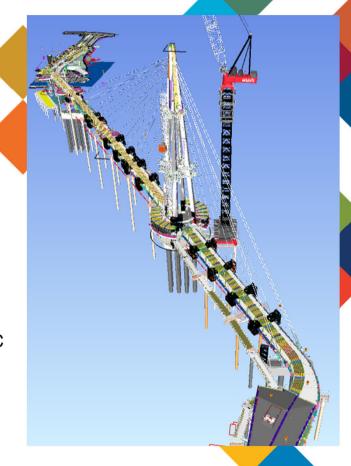






Sustainability & Livability Goals

- **Green design**: Solar panels, cooling vegetation and shade cover
- **Stormwater:** Rain gardens to slow stormwater runoff and extensive use of native plants in landscaping
- **Vision:** A river crossing in this area was first imagined in 1860
- **Climate Change:** Bridge was part of the city's goal of reducing carbon emissions by 30 per cent by 2031. Promoting active transport and reducing vehicle movements.
- **Brisbane 2032:** Enable visitors to more easily explore Brisbane during the Olympic and Paralympic Games
- Sustainability: Project received an 'Excellent' Infrastructure Sustainability Rating using the Infrastructure Sustainability Council (ISC) rating scheme framework





















Bridge Elements























Brisbane, Australia 6-10 April

Project Challenges

- Logistics, complexity of task & timeframes
- **Survey Control**
- Pre-fabrication and Real-Time Installation
- **Foundations**
- **Bridge Mast**
- Dynamic Concrete Deck Modelling
- Cable Stressing and Monitoring















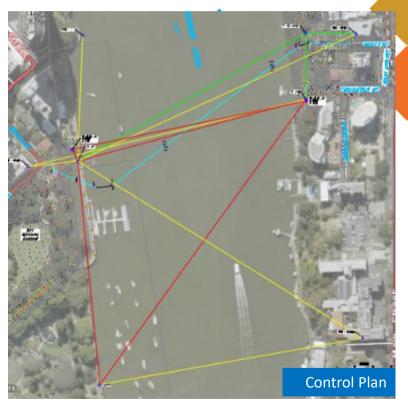


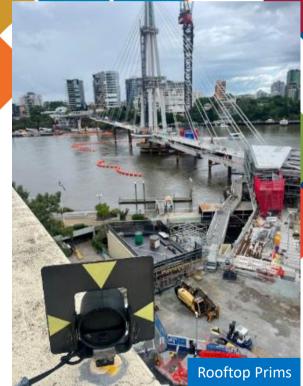




Survey Control





























Brisbane, Australia 6-10 April

Pre-Frabrication















Australian Government





































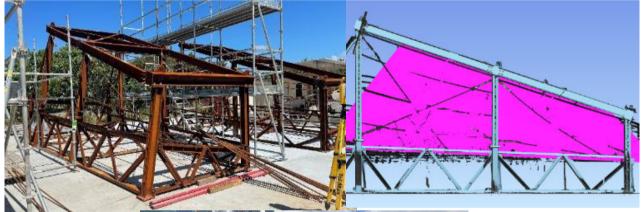






Brisbane, Australia 6-10 April

Foundations

























Mast/Pylon

















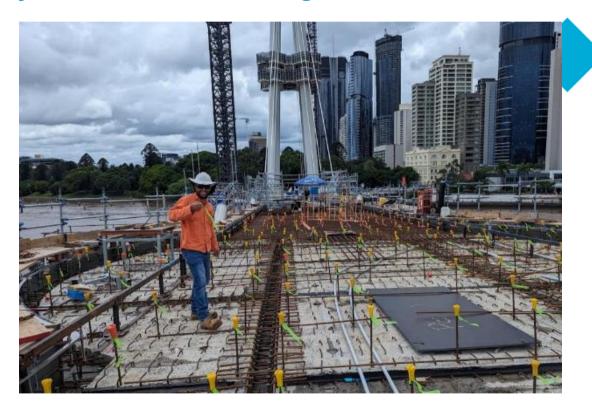








Dynamic Deck Modelling

















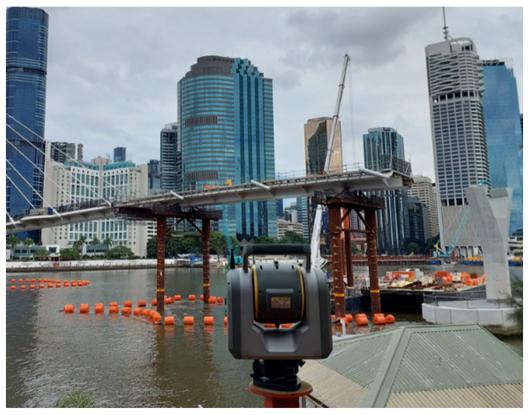






Brisbane, Australia 6-10 April

Cable Stressing



























Brisbane, Australia 6-10 April

In Summary















Australian Government















Brisbane, Australia 6-10 April

In Summary. The most relevant SDGs related to the presentation and theme of

this session





12 RESPONSIBLE CONSUMPTION AND PRODUCTION

3rd relevant SDG

CO



International Federation of Surveyors supports the Sustainable Development Goals

















