



Restoring a Key Route After Landslide Damage in Italy's Trento Province

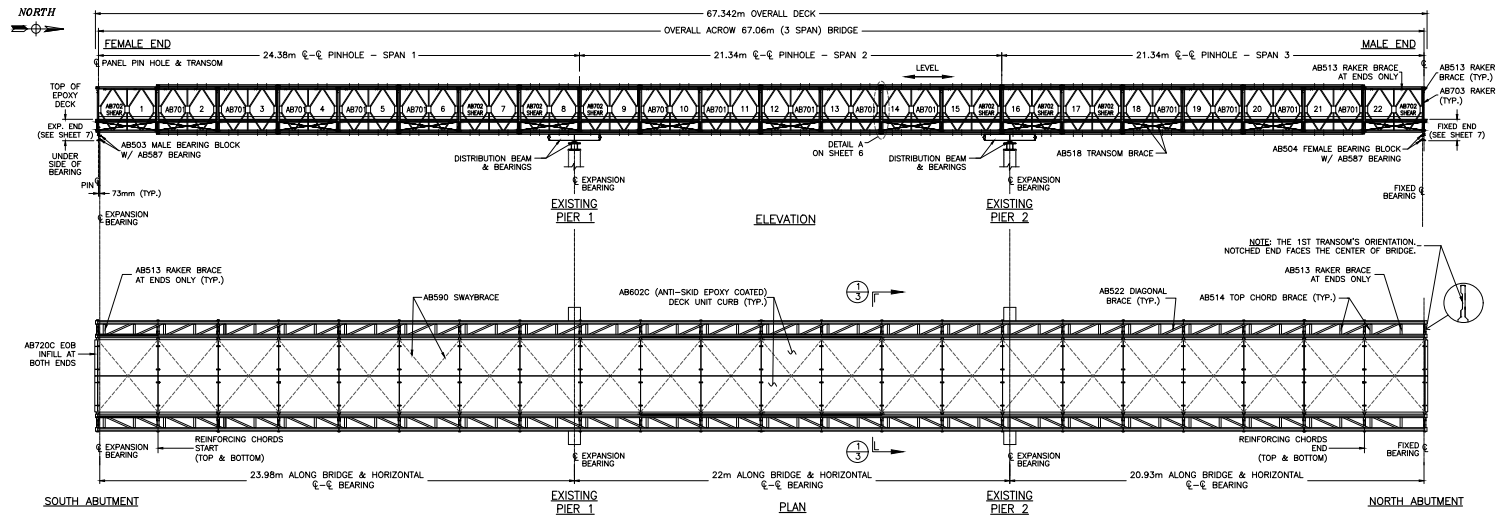
Acrow bridge provides a long-term temporary solution vital to maintaining local, tourist and commercial traffic

In Italy's Trento Province, a slow-moving landslide on one of the steep slopes of the Rio Rinassico Gorge damaged a precast concrete bridge that carried traffic across Strada Provinciale 124 in the village of Vigo di Ton. Although the damaged bridge had to be demolished, keeping a safe, reliable route open was critical to keeping several small communities connected. In addition, the road is vital to the region's economy, which relies on tourism and agriculture.

With no reasonable alternate route available and a limited footprint for assembly and installation, project contractor Carraro Impresa proposed Acrow's modular 700XS® bridge as a long-term temporary detour solution.

After extensive site preparation, including installation of micropiles to stabilize the south slope of the gorge, Acrow's bridge was assembled and installed in just six days by lifting two segments onto the bearings with a 500-tonne crane. The structure has a design load of 44mt and features an epoxy aggregate deck surface. The road opened to traffic less than two months later once the approaches and other ancillary work finished.

Acrow's structure will remain in place until the implementation of a permanent solution - a project that may take a few years. Upon disassembly of the modular bridge, its components will be inventoried by the province for reuse when needed in other locations.



Specifications

Bridge length:

Total length of 67.06m (220') with three continuous spans of 24.38m (80') / 21.34m (70') / 21.34m (70')

Roadway width:

3.67m (12')

Guard rails:

W-shape truss mounted guard rails supplied separately by the Road Authority

Deck surface:

Epoxy aggregate

Bridge erection method:

Segmental lift in

Design load:

44mt

Standard Acrow Bridge finish:

- All major components galvanized to AASHTO M111-ASTM A123
- All bolts are hot-dip galvanized
- All pins are electrogalvanized

Standard Acrow Bridge specification:

- (A) Panel chords, diagonals, verticals, reinforcing chords, rakers to AASHTO M223 GD 65
- (B) Raker braces, transoms, top chord braces, swaybraces, transom braces, diagonal chord braces, decking to AASHTO M223 GD 50
- (C) Panel pins to ASTM A 193 GD B7
- (D) Bolts to AASHTO M164M - A325