

Mabey provides a quick solution for an extra route out of town

Bridging Case Study



La Plata bridge, Colombia



Customer: Norte Ingenieros | Solution: Mabey Compact 200™

The Challenge

The town of La Plata, an important commercial hub in the Huila province of Colombia, has rapidly expanded over recent years. A highly-trafficked single road out of La Plata to the next town, Purace, was rapidly becoming inadequate. More worryingly, local children had to either walk a long way round to get to the town school or risk their lives by crossing a pipeline over the fast-flowing La Plata river. A concrete bridge, planned to ease the problem, had never been built, owing to lack of finances and other logistical reasons.

The Solution

After soil testing and analysis, plus a detailed study of the proposed site plan, it was decided that the best solution was to build a modular bridge. The bridge needed to span 52 metres and provide 52 ton operating load. A comprehensive assessment was carried out by Norte Ingenieros. The site of the new bridge was chosen, taking into account the river span and the optimum point for connecting to the route between the two towns.

A loan agreement, between the Town Council and the National Institute of Roads (INVIAS) resolved one important issue. Once the agreement was in place and having looked at all the Mabey technical documentation supplied to INVIAS, Norte Ingenieros specified a Mabey Compact 200™ system instead of other modular bridges, owing to its higher quality, loading performance and accuracy of bridge connections.

The specified bridge was a 51.81m long span, reinforced double double configuration (DDHR2H), mounted onto reinforced concrete abutments. The abutments were supported on two piles on each river bank, each one cast in-situ 1.20m in diameter by 8m in depth. A local workforce was employed to build the bridge. The whole project was completed in August 2018.

The Result

The construction of a new road and bridge has meant a significant reduction in traffic leaving La Plata as it has provided the town with another exit.

The detailed work of Norte Ingenieros prior to construction, combined with the ease of building the Mabey Compact 200™ bridge enabled a fast project delivery – less than 15 days, which also meant that any extra traffic through La Plata, during the construction phase, was kept to a minimum.

The La Plata bridge project has met an important social and economical need and integrated the surrounding communities with the town via a quick access. At the same time many of the children who attend the town school have also benefited.



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