terrasol

setec

Transport and infrastructure
Road

Reconstruction of the Chirajara Bridge

Assistance during tender phase and detailed design

2018 - 2019

COLOMBIA

Client

EIFFAGE GENIE CIVIL

Terrasol fees
70 000 €

Highlights

Foundations with shafts 8 m diameter and 32/42 m depth

The Project

Following the collapse of the Chirajara cable-stayed bridge in Colombia on January 25, 2018, a call for tenders was issued for its reconstruction. Terrasol assisted the consortium of contractors led by EIFFAGE GENIE CIVIL on the foundation design of the new structure.

The foundations were particularly decisive since the two piers under construction were each based on a single shaft with a diameter of 8 m and depth of 32/42 m, and it was of interest to reuse them for the new bridge.

Key features

- Detailed analysis of the expertise reports, of the condition of the foundations after the disaster, and of the additional stability analyses produced by the BIEP
- Site visit
- Detailed design of the foundations

Our Services

Following a detailed analysis of the expertise reports (focusing on a structural explanation of the collapse), of the condition of the foundations after the disaster, of the additional stability analyses produced by the BIEP, and a site visit, we were able to conclude that the existing foundations were fit to be reused, especially considering that the new project generates lower sollicitations on the foundations than the initial design.

In any case, some vigilance points have to be carefully monitored during works, particularly regarding slope stability, given that the slopes were heavily damaged during the accident and the demolition works.

The consortium EIFFAGE GENIE CIVIL / PUENTES Y TORONES, to which the contract was awarded, has renewed its trust in TERRASOL, entrusting us with the geotechnical studies and the follow-up during the works phase, in collaboration with our colleagues of SETEC GÓMEZ CAJIAO, while SETEC TPI is in charge of the structural studies.

terrasol
Immeuble central seine
42 - 52 quai de la rapee
75583 Paris cedex 12 France
Tél +33 1 82 51 52 00
Fax +33 1 82 51 52 99
info@terrasol.com