



Millau Viaduct
Civil Engineering Structures
1999 - 2005



FRANCE - Aveyron

Client

EIFFAGE TP

Project manager

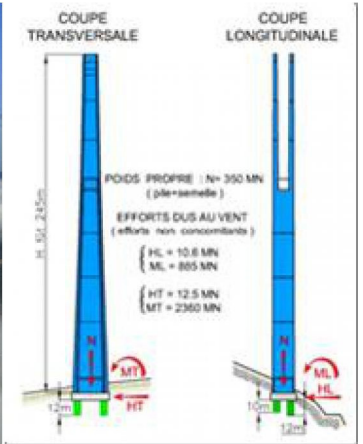
Groupement SETEC –
SNCF

Project owner

Compagnie Eiffage du
Viaduc de Millau

Miscellaneous

2460 m long,
Maximum pier height:
240 m,
Semi-deep foundations



Description of the project

The Millau viaduct is a 2460 m long cable-stayed road bridge (with a metal deck) crossing the Valley of the River Tam. Its high piers (240 m for the highest, itself topped by a 87 m high metal pylon) make this viaduct exceptional.

Regarding the site geology, the foundations are laid on two types of soils:

- o limestone under both abutments and piers P1, P2, P3 and P4 ;
- o marls under the other piers (P5, P6 and P7).

Description of the mission

The semi-deep foundation system, adjusted to local soil conditions, is composed of a square footing with a thickness of 3.5 to 5 m. The footing is bonded to four shaft foundations of 5 m in diameter and 12 m deep (on average).

The abutments C0 and C8 lie on a 1 m thick raft foundation bonded to two lateral footings. It should be noted that due to geotechnical conditions of the site discovered during earthworks, abutment C0 is partially founded on a shaft, a necessary adjustment of the project to ensure the structure stability during the installation of the deck.

After its participation to the call for tender for construction and operation with EIFFAGE, TERRASOL was entrusted by SETEC TPI with a project management assignment, including the on-site follow-up of earthworks and foundations works, and also the checking of the design reports relating to the stability of geotechnical structures.