## **Transportation Infrastructure**

Design Services for Yenişehir-Osmaneli Highspeed Railway Line



Client

General Directorate of State Railways

**Work Period** 

16.12.2011 - 02.07.2013

Services

1st stage: Data collection, assessment and corridor determination (preparation of available designs assessment report, preparation of the preliminary report concerning corridor research, preparation of available maps assessment report)

2nd stage: Route survey (preparation of the application dossier for environmental impact assessment, preparation of the preliminary report concerning the results of route survey and info about the selected route)

3rd stage: Preliminary and application design (preliminary site survey, preparation of preliminary design drawings and relevant calculations, preparation of environmental impact assessment report, final site survey, preparation of application design drawings and relevant calculations, preparation of procurement documents)

4th stage: Preparation of technical specs for construction works

## **Technical Details**

The project consists of site survey and design services approximately for 50 km section between Yenisehir and Osmaneli provinces within "Bandırma-Bursa-Ayazma-Osmaneli Double Track Highspeed Railway Line". The design speed is 250 km/h, the axle pressure is 22,5t (for engineering structures: 25t), maximum longitudinal grade is 0,16%, maximum curve radius is 3500 m for the project. The project includes considerable number of engineering structures such as tunnels, viaducts and bridges due to geodesic conditions. Total length of designed high speed railway line is 30,56 km including 11 tunnels (total length: 16080,70 m, max length: 8874,60 m in TBM method, other tunnels in NATM method), 9 viaducts (total length: 4484,51 m, max length: 987 m), 4 bridges (total length: 272 m, max length: 116 m), 2 underpasses (total length: 44 m), 1 overpass (length: 31,5x2 m) and 16 culverts.

