## **Transportation Infrastructure**

Highway Design between Istanbul - Kocaeli



Client General Directorate of Highways

Work Period 22.06.2011 - 25.10.2016

Services provided Geodesy services

Highway design

Design of engineering structures Feasibility and research studies

Traffic design

Preparation of final report

## **Technical Details**

64 km long route between Istanbul-Kocaeli consists of 28 level junction design. The project covers the following design disciplines:

- <u>Geodesy works:</u> Determination of check-points and approval of the Client, Assign of check-points and related measurings, calculations. Calculations for coordinate transformation and submittal of supervision reports to the Client, Land survey and to form digital geodesic model.
- <u>Highway design:</u> Design of geometrical components and preparation of the report, Hydraulic and hydra-geological surveys, Cross-section drawings, determination of retaining walls, cut-fill and bruckner calculations, Determination of intersections and connection ways, drawings of plan-profile and details, Drainage design and related drawings, Preparation of final report and quantity survey, Submittal of Final Design for the approval of the Client
- <u>Engineering Structures:</u> Preparation of preliminary and final design for bridges, flying-overs, underpasses, culverts, etc.
- Feasibility and research studies: Geological survey and report, Hydrageological survey and report, Engineering geology survey and report, Geological-geotechnical research programme and applications, Geological-geotechnical survey and design report, Geotechnical design report, Superstructures survey and design report
- <u>Traffic design:</u> Traffic design report and quantity survey, submittal to the Client
- Final Report: Preparation of final report and submittal to the Client

