## **Transportation Infrastructure**

Peripheral Highway Design between Alanya-Gazipasa



Client Antalya Metropolitan Municipality

Work Period 08.06.2016 - ongoing

Services provided Geodesy services

Highway design

Design of engineering structures

Tunnel design

Feasibility and research studies

Traffic design Project info file

Preparation of final report

## **Technical Details**

16 km long route between Alanya-Gazipasa consists of 3 double tube tunnels (Tunnel-1 L=3600 m, Tunnel-2 L=1890 m, Tunnel-3 L=1790 m), 3 viaducts (Demirtaş Viaduct L=711,50 m, Hocalar Viaduct L=234 m, Pamukluk Viaduct L=447 m), 3 bridges (K1 Interchange Bridge L=165 m, K2 Interchange Bridge L=65 m, Güzdere Asarkoyagı Bridge L=179 m), 2 overpasses (L=40, L=60), 5 Interchanges (grade-seperated), 1 Interchange (at grade junction), 3 underpass (10.00x5.50).

- <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
- Engineering Structures: Preparation of preliminary and final design for bridges, flying-overs, underpasses, culverts, etc.
- <u>Tunnel Design:</u> Preliminary design, Geometric design of the highway tunnel, Final design
- 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
- Project info file: Decision for the necessity of Environmental Impact Assessment
- Final Report: Preparation of final report and submittal to the Client

