Transportation Infrastructure

Fatsa Province Peripheral Highway Design



Client General Directorate of Highways

Work Period 17.08.2017 - 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

22 km long route consists of 5 interchanges, 5 tunnels (10623m) and 3 bridges. 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
- 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
- Traffic design: 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

