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Consulting Engineering

Road

Reviewing the available studies and Optimizing the existing studies of the detailed design phase of Qaem Shahr-Sari Intercity Freeway

Date: 2016/2017
Location: Ghaemshahr
Client: Construction and Development of Transportation Infrastructures Company

The primary detailed design of 45-km long Qaem Shahr-Sari Freeway consisting of 6 lanes in two directions which is including 10 bridges, 2 tunnels, 3 main junctions, and 16 underpasses, was reviewed and optimized by RAHYAB BEHINEH. This company was looking for a new variant to reduce the length of the tunnels. also because of the existing problems such as the absence of cut and fill resources near the project, some solutions were introduced such as application of stabilized materials, various types of superstructure and etc. in order to optimize construction cost.

Section One: Project Identification

- Scope of work, project outcomes, and priorities
- Research methodology and choosing the right method and tools
- Collecting and checking the available documents
- Data analyzes and concluding the basis of the project

Section Two: Reviewing the Geometric design of the route

- Examining the route's corridor, plan, longitudinal profile and cross sections of the project's grade lines

Section Three: Reviewing the Special Structure

- Multi span Tajan river bridge
- Bridge design modifications based on the latest standards
- Deducting a total length of 2000 meters from Mahdasht tunnel in order to reduce the cost by changing the route's corridor
- Supplementary design for pavements

Section Four: Procurement methods and materials for the project

- Studying the geotechnical aspects
- Required materials and resources
- Field researches and locating the resources in the proximity to the project