

Project management support for second tube of Gotthard Road Tunnel



The Swiss Federal Roads Office (FEDRO) is planning to complete a second tunnel tube at the site of the Gotthard Road Tunnel. Working together in an engineering consortium, EBP is providing support to FEDRO in all matters of project development and execution.

Current situation

The existing tube of the Gotthard Road Tunnel is scheduled to undergo extensive renovation. The purpose of the renovation work, which is to be completed by the year 2035 at the latest, is to address structural concerns and secure continued compliance with safety regulations. Owing to the extensive nature of the renovation work, it will be necessary to decommission the tunnel for the duration of the project. Given the need to close the tunnel, the Swiss Federal Council passed a resolution on June 27, 2012 in favor of building a second tunnel tube of comparable capacity before beginning with the renovation work on the existing tunnel tube. The resolution also made provision for the drafting of a project plan. This plan was later approved by public referendum on February 28, 2016, effectively clearing the way for the drafting of a second project-execution plan for use in the context of public-disclosure procedures.

Project description

The second tunnel tube is to be cut through the Saint-Gotthard Massif at a distance of 70 meters from and parallel to the existing tube. This means that the existing safety tunnel will be

Client

Swiss Federal Roads Office (FEDRO)

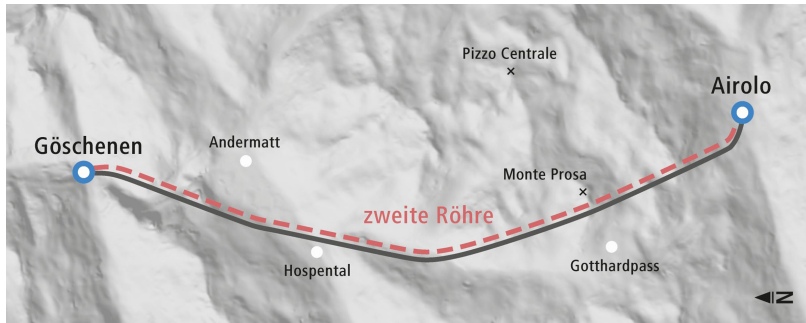
Facts

Period	2013 - 2019
Project Country	Switzerland
Investment costs	Around CHF 2 billion
Tunnel length	Around 17 km
Project employees	15

Contact persons

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located between the new and the existing tunnel tubes. As in the case of the first tunnel, transverse access tunnels to the safety tunnel will be cut from the new tube at regular intervals of 250 meters.



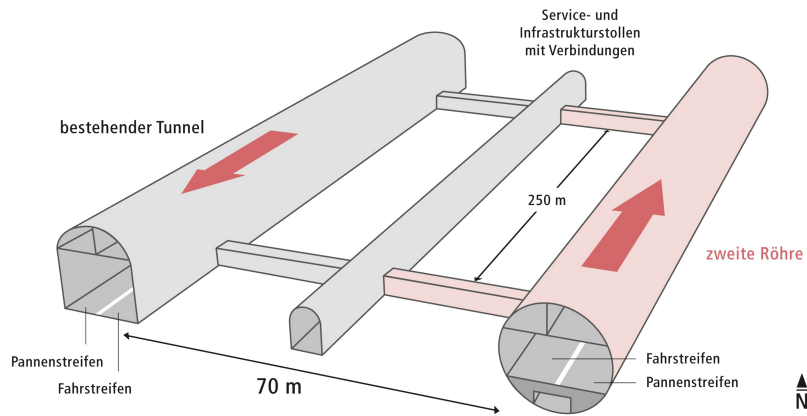
Scope of EBP's assignment

General tasks: EBP will provide project-management support to FEDRO in the context of the project's development and execution, in particular when it comes to all processes that are necessary for the success of the project. These include the management of statutory public-disclosure procedures for the general project plan in the cantons of Uri and Ticino and their respective municipalities; the submission of project documents to the relevant federal agencies; the securing of project approval from the Federal Council; the handling of all relevant public hearings; the management of land-acquisition procedures, including negotiations with third parties (e.g. in case of third-party objections); and the handling of all procedures relating to the plan's approval.

Technical management: EBP will advise and support FEDRO when it comes to the project's technical management and accompanying services, such as information and communication. EBP is also to share responsibility for securing and monitoring the necessary project standards and quality.

Project documentation: EBP will draft and regularly update the project manual, work out the relevant cost-structure specifications and provide the relevant technical manuals, instructions and guidelines.

Project controlling and quality management: management of quality assurance procedures relating to project documentation, including the environmental impact assessment; establishment and monitoring of scheduling, cost and service specifications.



Challenges

Optimization: the tunnel position, tunnel cross section, tunnel systems, construction standards, costs and other factors are to be optimized in an iterative process. This includes a consideration of forward compatibility with the existing tunnel and future comprehensive concepts (e.g. relating to ventilation systems and tunnel operation).

Environmental sustainability: all environmental factors are to be addressed in the context of an environmental impact assessment and subsequent report (levels 2 and 3) so as to limit the project's environmental impact to a minimum. The project has also been optimized in close consultation with environmental-protection organizations.

Construction logistics and materials management: portions of the excavated material are to be used for the new tube's construction, for a land-restoration project on the shore of Lake Urn and for the construction of a gallery on the federal highway in Airolo. The material is to be transported via conveyance systems and train.