

## Design and realization of major bridges by the GVH Group

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## Abstract

Since 1987, the GVH Group has successfully built approximately thirty bridges and viaducts in Switzerland, located along the country's national highways and within its towns and cities. This paper presents the main criteria used during the phases designing and building these structures.

Keywords: design criteria, bridges, viaducts, design, realization

## 1 Introduction

Structures are usually conceived using certain objective criteria, such as geometrical constraints for crossings, required bridge clearance and geological and geotechnical conditions.

Nevertheless, other more subjective elements, namely esthetics, elegance and the integration of

the structure into its environment, are also key during the design phase.

Last but not least, the procedure for awarding engineering contracts, which always places a particular emphasis on financial criteria, can also prove decisive in the final design of the structure.



Fig. 1. The CFF "Noir Bois" viaduct, currently in use