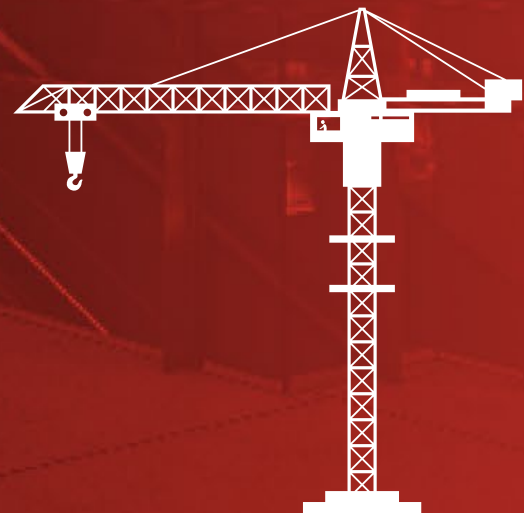


OUR REFERENCES IN
CIVIL ENGINEERING

**BESSO UNDERPASS:
LUGANO STATION UNDERPASS**



Lugano





Client

Swiss Federal Railways SBB



Company

In consortium, CSC 36% lead contractor
With MMCostruzioni SA for technical
management (DT) and Implen SA for works
management (DC)



Person in charge

Works Management (DL): Roberto Iemmoli,
Pini Swiss – Anastasi – Taddei
For SBB: Mr. Christian Jenzer



Work duration

01.2022 – 12.2025



Designers

Swiss Federal Railways SBB



Type of contract

Construction contract



Contract amount

CHF 17,030,062.60 (excluding VAT)

Description of works

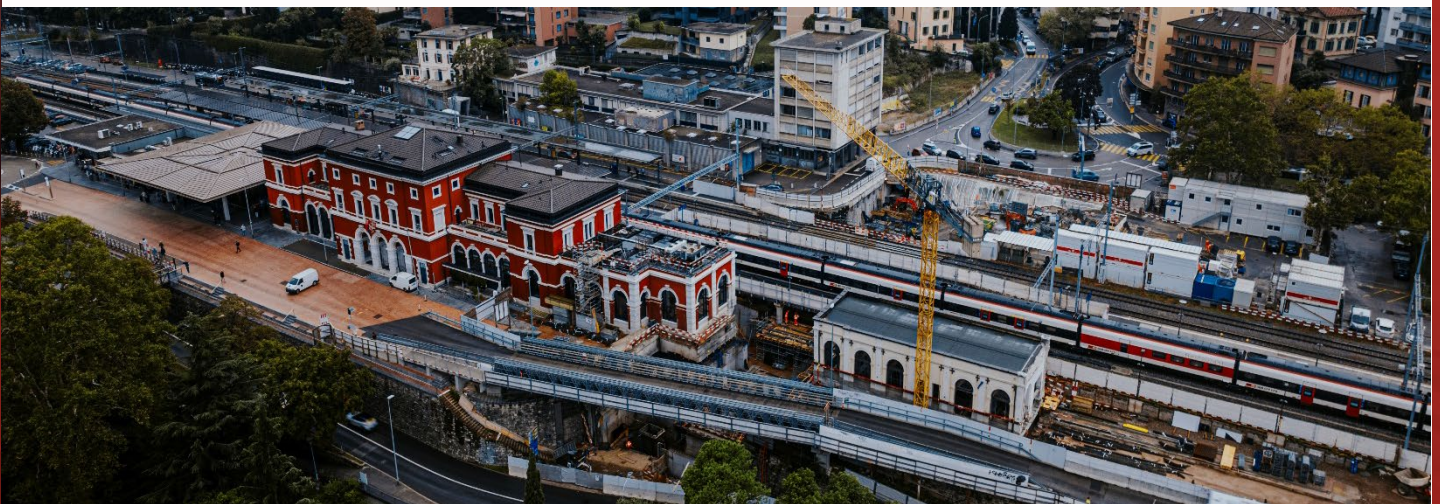
The new Besso pedestrian underpass is planned as part of the StazLu Module 3 project. It generally maintains the function and purpose of the existing structure while improving its capacity, access to the city and the SBB station, as well as to the new bus terminal with P+R parking and the future tram-train connection. The project also includes the creation of a restaurant and commercial premises inside the new underpass. Preparatory works for the underpass affected several areas of the station, including the construction of the temporary bridge necessary for TPL bus traffic, carried out by CSC SA.



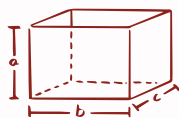
Project features

This contract provides for:

- The construction of 4 temporary bridges at the location of the 4 tracks in the station, to ensure the regular passage of trains during the construction of the underpass.
- The relocation of a historic building with subsequent repositioning at its final location.
- The construction of soil retaining structures using micropiles and steel structures required for excavation works.
- Narrow-section excavations with shoring.
- The construction of reinforced concrete structures with type 4.4 formwork, according to the specific plans of the architectural designer.
- The underpass passing beneath the footprint of Via Maraini – Lugano, without any total interruption of road traffic.
- Staircases and access points on the east and west sides of the station, namely from Via Besso and the Bertaccio Park.

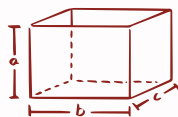


Main quantities



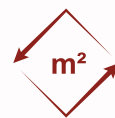
Excavations in loose soil:
25,120 m³

PE-HD/LD lining pipes:
5,550 m



Concrete: 6,140 m³

Mixed demolition materials
(loose): 17,200 t



Formwork: 14,200 m²

Micropiles: 12,440 m