

Global study for the redevelopment of de Brouckère metro station

Built in the 1970s, Brouckère metro station no longer meets modern standards, particularly in terms of capacity, comfort, fire safety and user control.

The mission therefore includes the complete renovation of the station in conjunction with the public spaces on the surface, together with supervision of the works.

In order to increase traffic flow within the station, the project includes the installation of new escalators and staircases. This involves piercing the concrete slab of the station's mezzanine. The slab will have to be reinforced at these points to act as a brace between the station retaining walls and the foundations of the Centre Monnaie.

The station area will also be significantly expanded through the acquisition of additional premises in the basement of the Centre Monnaie. Two different structures will therefore have to be combined in the station. The project includes the reinforcement of these structures to adapt them to their new usage.

The extension of the station calls for a new secant pile wall between the station wall to be demolished and the basement walls of the Anspach Centre.

This new wall has to retain the ground located beneath the raft of the building with seven above-ground levels plus basements.

Lastly, the cover slab is pierced and integrated with the pavements in the rue de l'Évêque to create roof lights to bring natural light into the station. These have to withstand the loading from pedestrian traffic on the glass structures.

The renovation of the metro station is part of the Ticket to Kyoto project, a collaboration between five European public transport companies with the aim of reducing CO2 emissions through the way in which infrastructure is both constructed and used.

Owner: Bruxelles Mobilité - Direction of infrastructure for public transportation (D.I.T.P.).

Architect: SumProject.

Situation: rue de l'Évêque in Brussels (BE).

Preliminary draft: 2010.

Planning permit application documents: 2014.

Submission of the tender documents: 2015.

Estimate cost of works: 5 760 000 euros excl. vat which 3 060 000 euros for structural works.

Complete mission of structural studies.

