

Grand Paris Express - Ligne 15 - Gare du Pont de Sèvre Boulogne-Billancourt, FRANCE



General view

General contractor

SOLETANCHE-BACHY France

Customer/Owner

SOCIETE DU GRAND PARIS

Engineer

SOLETANCHE-BACHY France

Freyssinet subsidiary

Freyssinet Products Company (Saint Eusebe)

Others subsidiaries

Freyssinet France - GPCM

Works period

Start date: July 2019

End date: September 2019



Drilling works

PROJECT DESCRIPTION

The Grand Paris Express project, which aims to improve the movement of people throughout the Ile de France, includes numerous metro or tram lines. On line 15 of the metro, a new station has been created near the Pont de Sèvres, on the banks of the Seine. This classic station, 120 meters long by 22 meters wide, is located on the site of a former industrial wasteland, which required the purge of the land over a thickness of 5 meters. Due to the presence of a sensitive building in the vicinity of the work, temporary support was required to ensure overall stability. This temporary support, which had 3 faces, was not self-stable given the poor quality of the ground in place, and the road dealership located just above, did not accept to leave steel tendons in the ground as tunnel excavation were planned. The initial solution therefore excluded the use of ground anchors and provided for the establishment of struts which were to be based on a boom built along the Seine river. However, this solution posed problems in design of the boom and in the method statement of the excavation works.

When Freyssinet introduced its new cuttable GFRP pre-stressed ground anchor, the departmental council and the company immediately saw the technical and economic value of the solution, and adopted it.

Freyssinet CGA ground anchors were installed in July 2019 by SOLETANCHE-BACHY France, then tested and stressed by freyssinet France GPCM teams. A particular follow-up of operations has shown that the implementation of this ground anchors is very similar to that of traditional steel ground anchors: same drilling technic, same sealing technic, same equipment and testing and stressing procedures.

This first project carried out in Europe is a great success which portends a bright future for this innovative technology.



Freyssinet CGA with tube à manchettes

FREYSSINET MISSION

Prefabrication and supply of 91 Freyssinet CGA2 ground anchors

Preliminary tests

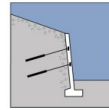
Conformity tests

Stressing and acceptance tests





FREYSSINET



New Structures

Temporary B

Buildings

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KEY SUCCESS FACTORS

Alternative offer, Minimised disruptions, Client loyalty

