



Construction of Roche Diagnostics head office in Meylan

Diagnostic and design of reinforcement solution
2014 - 2016



FRANCE - Meylan

Client

LEON GROSSE

Lead Designer

Tractebel

Highlights

Useful area of 11,000 m²

2 basement levels



The Project

The French subsidiary for Diagnostics activities of the Roche pharmaceutical group is building its new head office in Meylan, near Grenoble. The building will have a useful area of 11,000 m² on four storeys over two basement levels.

Lead contractor LÉON GROSSE contacted TERRASOL early in 2015 following major displacements of the peripheral sheet piling observed during the first excavation operations.

Key features

- Definition and follow-up of additional soil testing,
- Definition of the geotechnical and hydrogeological model,
- Design of the reinforcement solution,
- Follow-up of the displacements during works.

Our Services

The very particular geological and hydrogeological context (bedded and saturated silty clays) necessitated the definition and follow-up of additional soil testing (core drillings, triaxial tests, interstitial water pressure cells, etc). TERRASOL then analysed and summarised all the acquired data and defined a reliable geotechnical and hydrogeological model.

Six finite-element calculation profiles (Plaxis 2D) under undrained and drained conditions enabled us, in close collaboration with LÉON GROSSE, TRACTEBEL (Project Manager) and EG-SOL (responsible for the works follow-up), to design and check the reinforcement necessary for the continuation of the excavation, while controlling the displacements of adjacent structures. Tangent piles reinforcing the abutment of some walls, combined with very dense bracing, were designed and installed. The excavation bottomed out in late-2015 with horizontal displacements conforming to the model predictions.

TERRASOL is currently continuing to monitor the displacements during the phases of struts removal and backfilling.

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