Multiconsult



Railway tunnel Lysaker - Sandvika

Double tracking the "Bærum tunnel"



The tunnel has a cross-sectional area of approximately 110 m². In addition to the tunnel, the project includes two overground zones: Lysaker west and Sandvika east. The tunnel was excavated from three access tunnels as well as the two ends. The new double track will supplement the existing double track on the Drammen Line.

The tunnel goes through an area of densely built detached houses in Bærum, and as the ground is prone to settlement it has been necessary to seal the tunnel very thoroughly. A comprehensive monitoring programme has been established to prevent settlement damage.

Escape route requirements mean that in addition to the access tunnels acting as escape routes, there is an extra escape tunnel, and two escape rooms with shafts leading up to ground level.

Site work started in April 2007, and tunnelling was completed in 2010. The new double track was opened in August 2011.

SCOPE OF WORK

We worked very closely with the Norwegian National Rail Administration.

The project lasted for over 7 years, and with the many disciplines involved, approximately 170 members of staff contributed.

OUR SERVICES

- Detailed development plan and detailed design
- Tender documentation
- Geotechnical investigations
- Engineering geological investigations
- Structural surveying
- Site inspections during construction phase

DISCIPLINES

- Tracks/substructures
- Geological engineering
- Geotechnical engineering
- Structural engineering
- Construction engineering
- Environmental engineering
- Landscape architecture
- Airborne and structure-borne noise
- Water supply and wastewater engineering
- Fire ventilation



Overground zone Sandvika east | Photo: Multiconsult