Norddalsfjord Bridge

Contract Period
1984-1987

Completion
1987

Construction cost
NOK 24.6 mill (USD 3.6 mill)

Services rendered
- Site surveying
- Preliminary Design and Cost Estimates
- Complete tender design
- Complete detailed design

Client
Norwegian Public Roads Administration

Norddalsfjord bridge is located in the western part of Norway. The bridge superstructure is cast-in-situ, post-tensioned concrete box girders. The main span is 230,5 m long, the total length 404.4 m and the bridge was constructed by free cantilever method. This was the longest main span for this type of bridge in Europe when it was built.

The counterweight structures for the side spans were built on land and filled with rock ballast in order to counterbalance the main span.

The main foundations are located on solid rock at -10m. The superstructure is supported by twin wall piers. During construction temporary walls were added to increase the torsional strength of the piers. When the temporary walls were removed, the cantilevers were rotated to establish proper alignment prior to closing.