Bridge over Gígjukvísl, south Iceland

The old bridge was demolished in an eruption in Grimsvotn in 1996

The length of the bridge is 300 m and the superstructure is all reinforced concrete. The bridge is supported by 7 pillars and the span between the pillars is 50 m. Piers at each end are 18 m long and they are supported by steel beams with a decking of cast in place concrete.

Each pillar is founded on 36 concrete piles 20 meter long with a cross section of 27x27 cm.The Road Administration took care of the pile driving.

The total quantity of concrete for the project was 4460 m³ of which approximately 60% were used for the bridge superstructure. The first phase of concreting was the center part of the bridge which is 130 m long and 1150 m³ of concrete were poured. At the time it was said to be the largest continuous concrete pour that had been performed in Iceland, and it took 40 hours to complete. The second and third phase each were 85 m long, and about 800 m³ of concrete were poured for each phase.

Main quantities:

Forms: 600 m²	Landfill for road: 153,000 m³
Reinforcement steel: 214 ton	Road base: 10,100 m³
Prestressed steel: 81.5 ton	Fill for breakwaters: 107,000 m³
Concrete: 4,460 m³	Rock from quarries: 51,400 m³
Structural steel: 26 ton	Road surfacing: 12,000 m³

Customer
State Road Administration

Project start
November 1997

Site Manager
Gudmundur Helgi Gunnarsson

Project end
August 1998

Project supervision
Efla Engineering