TUNNEL OF MOUTIER, A16
MOUTIER

CLIENT
Tiefbauamt des Kantons Bern, CH-3011 Bern

DESIGNER
Emch + Berger AG, CH-3001 Bern
ATB SA, CH-2740 Moutier

TIME OF COMPLETION
2001 – 2011

CONTRACT SUM
CHF 320 Mio.

EXECUTION OF THE WORK
Groupement Tunnel de Moutier

CONSORTIUM PARTNERS
Marti Tunnel AG, CH-3302 Moosseedorf
Marti AG Bern, CH-3302 Moosseedorf
Marti Travaux Spéciaux Neuchâtel SA, CH-2087 Cornaux
Parietti & Gindrat SA, CH-2900 Porrentruy
Pro Routes SA, CH-2710 Tavannes
Georges Chételat SA, CH-2822 Courroux

LEAD COMPANY – TECHNICAL AND COMMERCIAL LEAD
Marti Tunnel AG, CH-3302 Moosseedorf
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SCOPE OF THE WORKS

National Highway A16, Transjuranne
- 2 double track tunnels in Jura lime / molasse and marl : L = 2 x 1’140 m, A = 108 m²
- Inner lining with waterproofing membrane, concrete lin-ing, service tunnel below road surface
- Portal cut and cover section and service buildings

Junction Moutier South
- Open cut section with various structures, L = 900 m

ACTIVITIES

Basic contract:
- Excavation support of the portal with anchored drill pile walls, shotcrete and rockbolts
- Tunnel heading in the portal area with roadheader, pipe screen support, steel arches and shotcrete
- Drilling of the 2 tunnels using a shielded tunnelboring machine with concrete segments
- All excavation materials from the open sections and from the tunnels are transferred by conveyor belt system through the 2’600 m long Graity exploratory tunnel to the dumping area

Contract modification 2005:
Modification of the project due to geological problems after the TBM has been blocked by several collapses and by water.
- Tunnel excavation in subdivided sections in both tunnels over a total length of 170 m
- Excavation of remaining of the TBM tunnel heading using a roadheader, pipe screen support and steel arches. Only the bench and the invert arch of the southern tunnel are finally excavated by the TBM
- Driving of the second tunnel with conventional methods using roadheaders, steel support and shotcrete
- Installation of a reinforced inner lining

GEOLOGY

- Molasse sandstone
- Marl