

SIKA AT WORK PAHANG - SELANGOR RAW WATER TRANSFER TUNNEL PROJECT, MALAYSIA



BUILDING TRUST

PSRWTP – MALAYSIA, LOT 1-1 WATER TRANSFER TUNNEL

Conveying Raw Water from Pahang State to Selangor State to Meet the Anticipated Future Water Demands of the Kuala Lumpur

PROJECT DESCRIPTION

To transfer raw water from the Sementan river in Pahang state to a proposed water treatment works in Selangor on the outskirts of Kuala Lumpur, a 44.6 km long transfer tunnel had to be constructed through the Titiwangsa hill range.

Three tunnelling methods were used simultaneously to meet the project program requirements and to suit the differing geological conditions and topography over the length of the tunnel:

ТВМ	34.4 km
NATM	9.1 km
Cut & Cover	1.1 km

It is anticipated the transfer tunnel will supply the Selangor, Kuala Lumpur & Putrajaya areas with a total of 1,890 million litres of water per day.

PROJECT REQUIREMENT

Sprayed Concrete		
Early strength	> 5 MPa at 8 hrs	
28 day strength	> 30 MPa	
Energy absorbation	> 1,000 Joules	
	> Sect'10.4 of EFNARC	
Open time	> 2 hrs	

Insitu Lining Concrete

Early strength	> 8 MPa at 12 hrs
28 day strength	> 35 MPa
Open time	> 2 hrs

Invert Segment Precast Concrete

Early strength	> 8 MPa at 8 hrs
28 day strength	> 35 MPa
Open time	> 1 hrs



SIKA SOLUTIONS

Sika is working closely together with the customer from the tendering phase through to completion of the project. The strong relationship with the customer enables Sika to provide the particular on-site and off-site support as requested by the customer to meet their particular technical, commercial and logistical requirements.

SIKA PRODUCTS

Sigunit® L53 MY Sika® ViscoCrete® SC-315

Sika® ViscoCrete®-2055 Sikament® 163 EX

Plastocrete®-R6RetarderSikaGrout®-216Contact grout - invSika® Rock Anchor SN MYRock anchor grout

Shotcrete accelerator Shotcrete superplasticizer, lining concrete, TBM invert segment - precast HRWR (lining concrete) MRWR (insitu concrete) conduit-cut and cover section Retarder Contact grout - invert segment Rock anchor grout



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PROJECT PARTICIPANTS

Owner: Ministry of Energy, Green Technology and Water - Malaysia (KeTTHA) Engineer: TEPSCO (JPN) - SMEC (AUS) - SMHB Contractor: Shimizu- Nishimatsu - UEMB- IJM Joint Venture

Our most current General Sales Conditions shall apply. Please consult the Data Sheet prior to any use and processing.



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