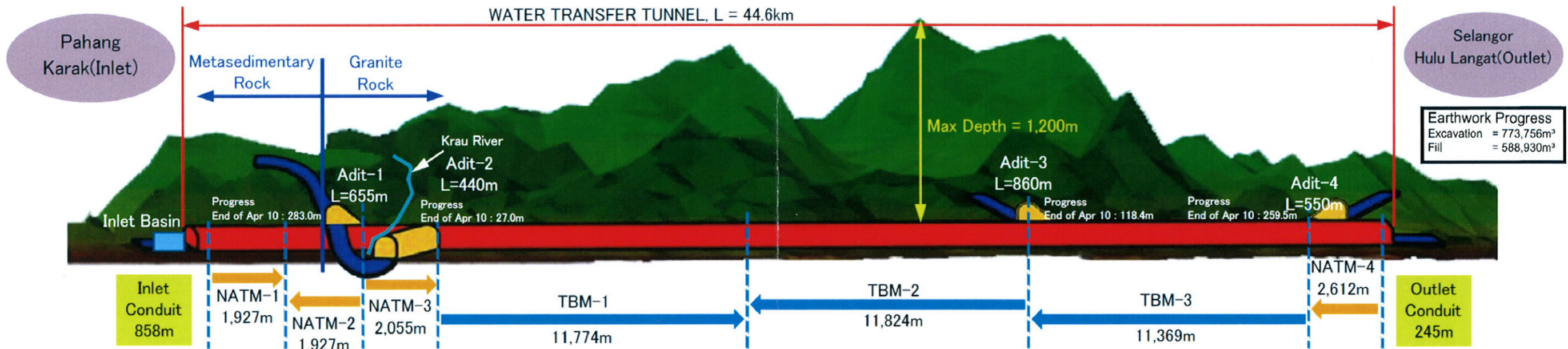




Pahang – Selangor Raw Water Transfer Project

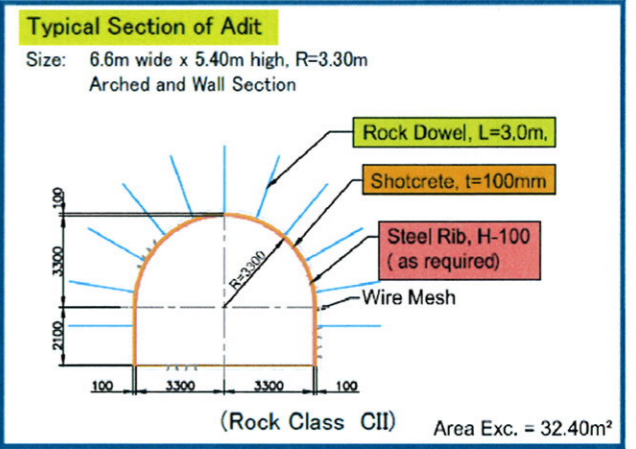
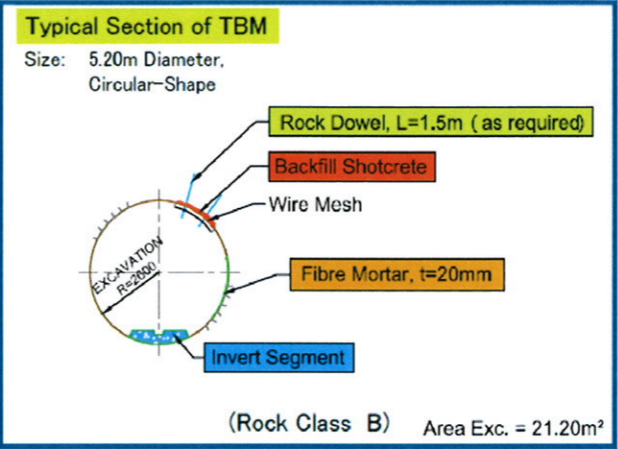
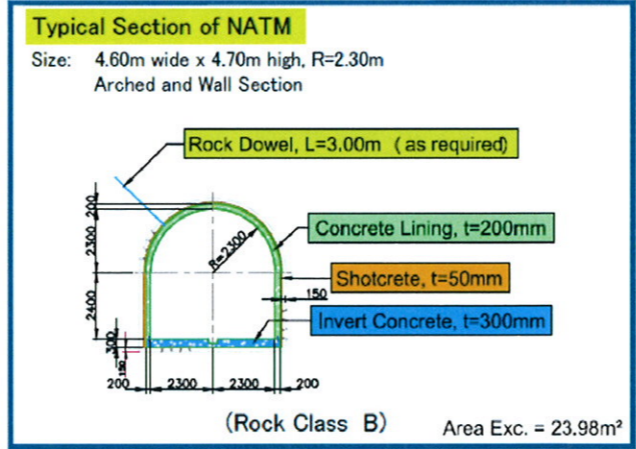
Lot 1-1 Water Transfer Tunnel and Related Works

Shimizu - Nishimatsu - UEMB - IJM
JOINT VENTURE



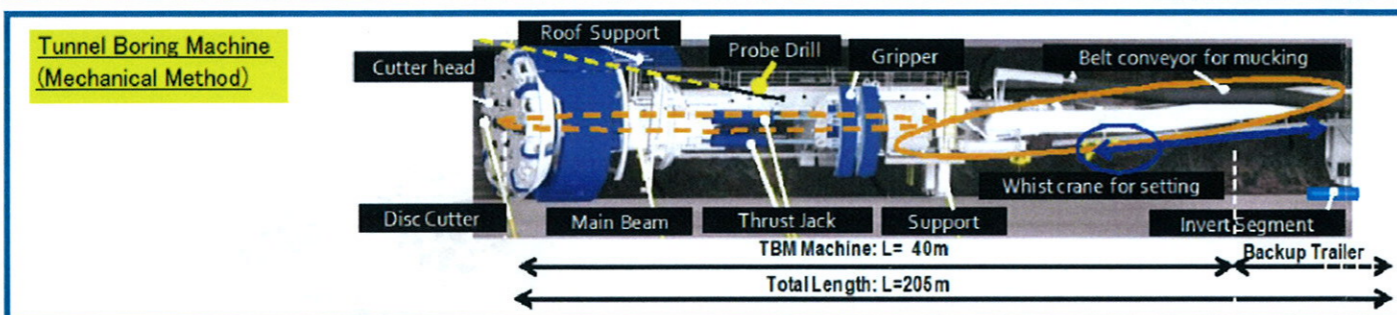
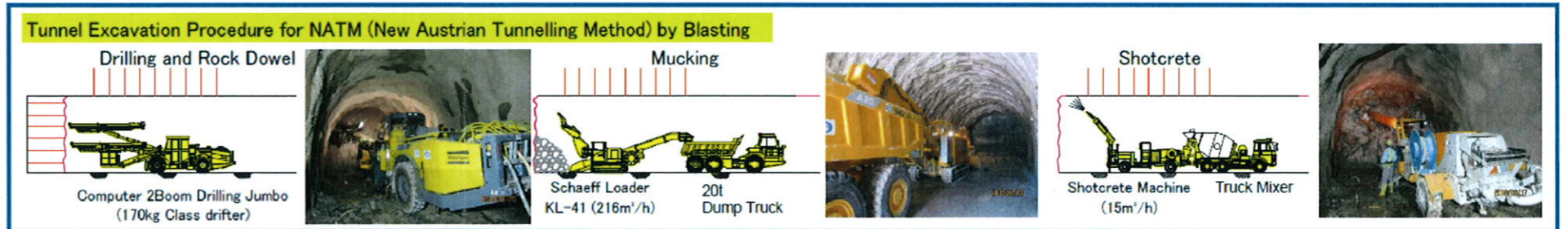
The Objective of the Project

Malaysia has experienced high economic growth from 1980's onwards which has resulted in high demands for water for commercial and industrial development centres. The Selangor/Kuala Lumpur region is the most important focus of high water demand. The water demand in this region is expected to grow at a high rate. The objective of the Project is to construct a tunnel to convey raw water from Pahang State to ensure that there is sufficient water available from Selangor State, Kuala Lumpur and Negeri Sembilan State. Design Discharge of Water Transfer Tunnel is 27.6m³/sec.



Project Detail

Employer: Ministry of Energy, Green Technology and Water, Malaysia (KeTTHA)
 Engineer: TEPSCO(JPN) – SMEC(AUS) – SMHB
 Contractor: Shimizu – Nishimatsu – UEMB – IJM Joint Venture
 Duration: 1st June 2009 – 30th May 2014 (1,825 days)



Diameter	5,2m	Max. Cutter Load	312kN (19inch)
Type	Open type TBM	Torque (Maximum)	3,504kN·m (at 6 rpm)
Max. Stroke	1.8m	Cutterhead Rotation Speed	0 ~ 12 rpm
Cutting Power	7x315kW = 2,205kW	TBM Machine	Length=40m, Weight=250ton
Max.Thrust Force	14,000kN	Machine (Include Backup Trailer)	Length=205m, Weight=420ton
Numbers of Cutter Discs	19inch 27 nos, 17inch 8 nos	Belt Conveyor	895 m³/h (914mm Width)