

New MetroRail's tunnel boring machine



Burrowing under our CBD

From October 2005, the TBM will bore under William Street, forming 744 metres of twin bored underground rail tunnel. The bored tunnel will connect the new below ground station at The Esplanade to the underground platforms at William Street.

TBM fast facts:

The first tunnel run will be between October 2005 and early 2006. The TBM is then taken apart and reassembled at The Esplanade site for the second tunnel run in 2006.

- The TBM has been named "The Sandgroper"
- The TBM will travel approximately 10 metres per day.
- The cutter head at the front of the machine rotates at 1 rpm.
- The diameter of the TBM shield is 6.9 metres.
- The TBM can apply 4000 tonnes of thrust force.
- The tunnelling operations will continue 24 hours per day.
- The TBM will cut through soft soil conditions that are a mixture of sand and clay.
- Approximately 100,000 cubic metres of earth will be removed during the TBM process.
- The TBM is being manufactured in Kobe, Japan by Mitsubishi Heavy Industries. It is Mitsubishi's 1649th machine and is being specially made for this project.
- There will be TBM photos on the New MetroRail website for people to view.
- The TBM installs precast concreting rings, manufactured locally by Humes.

To subscribe to electronic updates on the Southern Suburbs Railway or to make other enquiries about City Project Construction please contact Susie Gibbs, Leighton Kumagai Joint Venture, on 08 9424 5589 during office hours or visit the website at www.newmetrorail.wa.gov.au.

