



## Oraki Main Sewer Hobson Diversion (OMSHD) - Project Update

**C**ontractor McConnell-Dowell is pleased to report construction is progressing well on the Oraki Main Sewer Hobson Diversion (OMSHD) tunnel project. Having arrived on site in Auckland, New Zealand on May 7<sup>th</sup>. The LOVAT RME170SE Series 23700 EPB TBM has already completed over 75% of the planned 2,900 meter long tunnel drive.



Working four 12 hour shifts and two eights on a Friday to give a 112 hour working week with maintenance on Saturdays. The TBM is averaging 114 meters of bored and lined tunnel per week, and weekly production highs of 157 meters. Ground conditions along the tunnel alignment have consisted primarily of clay-rich weak sandstone and siltstone, with occasional occurrences of both old and recent alluvium and some volcanics. Depth of cover above the tunnel crown is 70 meters.

The 4.3 meter, Mixed Face TBM has a 900 kW Variable Frequency Drive (VFD) system powering the Cutterhead with a maximum speed of 6.4 rpm and maximum torque output of 2,460 kN.m. Designed to work in EPB pressures of up to three bar, the TBM is currently equipped with LOVAT type Ripper Teeth soft ground cutting tools, which are interchangeable with LOVAT 15.5" Disc Cutters.



The TBM has currently mined through the Auckland Trunk Railway, and are into the last 750m of the drive.

