

## Gürpınar Tunnel, Istanbul – Project Update



Turkish contractor Oztas Co. reports that construction of the Gürpınar Wastewater Tunnel project is now well underway. Excavation commenced in late January 2008, following the assembly and testing of the LOVAT RME136SE Series 19501 Tunnel Boring Machine [TBM] being utilized for this project.

In only six weeks since launching, the 3.45 metre mixed face Earth Pressure Balance TBM has already completed over 450 metres of lined tunnel. Working two eight-hour shifts per day, the TBM is progressing at an average daily rate of 14 meters, with a current daily best production of 16 meters.

The TBM is currently boring the 5,227 meter long tunnel through Gürpınar Formation, consisting of hard to stiff over-consolidated plastic clay with some weak sandstone, siltstone, claystone and tuff. Depth of cover above the tunnel crown varies from 6 metres to 132 metres. The entire tunnel alignment is below the groundwater table, levels vary from 1 metre to 48 metres below ground surface.