Object
A deep circular shaft constructed with cast in-situ diaphragm wall to launch a 4.62m diameter tunnel boring machine (TBM) for construction of the underground water transmission tunnel.

Project Description
A 10m. inside diameter shaft formed with diaphragm wall panels of 1.0m in thickness. The toe level of diaphragm wall is 31.0m below the existing ground level to allow a maximum excavation depth of 25.0m inside the shaft. The top level of base slab is 23.8m below the ground.

Type of Work
Diaphragm Wall Works.

Owner
Metropolitan Waterworks Authority.

Main Contractor
Asiatec Development Corporation Ltd. (member of TN Joint Venture).

Project Schedule
November—December 2002

Construction Details
Diaphragm Wall: 1,193.5sq.m. (1.0m thick, 31.0m deep)
Steel Fabrication: ton
Concrete Casting: 1,003cu.m.

Subsoil Conditions.7m
Soft clay: 0.0-12.0m
Medium clay: 12.0-15.7m
Stiff clay: 15.7-20.5m
Dense sand: 20.5-28.1m
Hard clay: 28.1-29.7m
Dense sand: 29.7m -

REFERENCES: