

**Project Title : RECONSTRUCTION & EXPANSION OF VEHICULAR BRIDGE AT AYE ACROSS SUNGEI PANDAN**

**Owner : Land Transport Authority**

**Engineer : Harris & Sutherland (Asia) Pte Ltd**

**Main Contractor : Or Kim Peow Contractors (Pte) Ltd**

completed bridge

**Contract Sum : S\$ 768,596.00**

**Period : Feb 2004 to May 2004**



**Scope of Works : 24 nos of 1000mm diameter bored piles in the canal with permanent casing  
20 nos of 1200mm diameter bored piles**

**Bored pile lengths generally between 25 & 33m, socketing app. 2 to 6m into rock  
All bored piles were base grouted**

**Equipment working on the temporary steel platform constructed over the canal**

**Pile load tests : Osterberg Cell & Kentledge methods, PDA and lateral load test**

|                           |  |   |
|---------------------------|--|---|
| <b>Sub soil condition</b> | : 0 to 10m<br>10 to 14/18m<br>14/18 to 20/28m<br>>20/28m | soft marine clay / peaty clay<br>loose to m. dense silty sand<br>hard clayey silt<br>siltstone / mudstone / sandstone |
|---------------------------|--|---|

**Stabilization fluid : polymer**

**Major equipment deployed :**

- Boring Rig Soilmec R15
- 70 ton crawler crane
- ICE 815 vibro hammer
- Excavator
- Polymer plant

**Tools :**

- Auger, bucket, core barrel & chisel
- Casing lengths bet 14 & 18m

