

**Project Title : TECH SEMICONDUCTOR EXPANSION, PHASE 2  
AT WOODLANDS INDUSTRIAL PARK D**

**Owner : Tech Semiconductor**

**Architect : RSP Architects Planner & Engineers (Pte) Ltd**

**Engineer : RSP Architects Planner & Engineers (Pte) Ltd**

**Main Contractor : Ando Singapore Pte Ltd**

**Contract Sum : S\$ 712,660.00**

**Period : Jul 2007 to Aug 2007**

**Scope of Works : 10 nos 600mm diameter bored piles  
12 nos 1000mm diameter bored piles  
20 nos 1200mm diameter bored piles**

**Pile lengths between 4m & 19m with base grouting**  
- Rock socket into granite bedrock between 0.6m & 2.5m.  
- Granite boulders of up to 1m

<b>Sub soil condition : 0 to 1/2m</b>	<b>Backfill (clayey silt with hardcore &amp; granite rock pieces)</b>
<b>1/2 to 4/18m</b>	<b>Silty Clay / Clayey Silt with granite boulders</b>
<b>&gt; 4/18m</b>	<b>Granite Bedrock</b>

**Stabilization fluid : polymer**

**Major equipment deployed :**

- Boring Rigs Bauer BG28 & Soilmecc R618
- Crawler Crane – 50ton
- Excavator
- Polymer plant (tanks, mixer, pumps, etc)
- ICE 423 vibro
- Casing lengths bet 3m & 18m
- Base grouting pump

**Tools :**

- Boring Bucket, Auger, Core Barrel, Roller Bit Core Barrel, Chisel & Cleaning Bucket

**Pile Load Tests :**

- Kentledge
- PDAs

granite boulder cored by  
rock roller bit core barrel

