RETURN TO FOUNDATION ALLIANCE – PROJECT PHOTOS

FOUNDATION ALLIANCE

Project Title : **RETAINING STRUCTURE TO OFFICE BUILDING FOR UNIVERSAL TERMINAL FACILITIES, JURONG ISLAND**

Owner : **Universal Terminal (S) Pte Ltd**

Architect : **Ong & Ong Architects**

Engineer : **P Teo Consultants Pte Ltd**

Client : **Or Kim Peow Contractors (Pte) Ltd (M/C : Rotary Engineering Ltd)**

Contract Sum : **S$ 1,600,000.00 (excludes S$1,400,000.00 of Steel Tubular Pipe Pile)**

Period : **Sep 2006 to Aug 2007**

Scope of Works :

Admin Building :

44 nos x 600mm x 30m steel tubular pipe piles in contiguous arrangement as retaining wall for building protection against quay wall's tie back movement

Substation 5 & Pipe Corridor 1 :

33 nos x 600mm x 36m steel tubular pile piles
(method of installation : by preboring & vibro hammer)

Berths 8, 9 & 10 and Substation 2

30 nos x 600mm x 40m raked (1 in 10) and 26 nos x 600mm x 40m steel tubular pipe piles
(method of installation : by preboring & rotary in view of sensitive quay wall)

Rock socket upto 8m into sandstone

Sub soil condition :

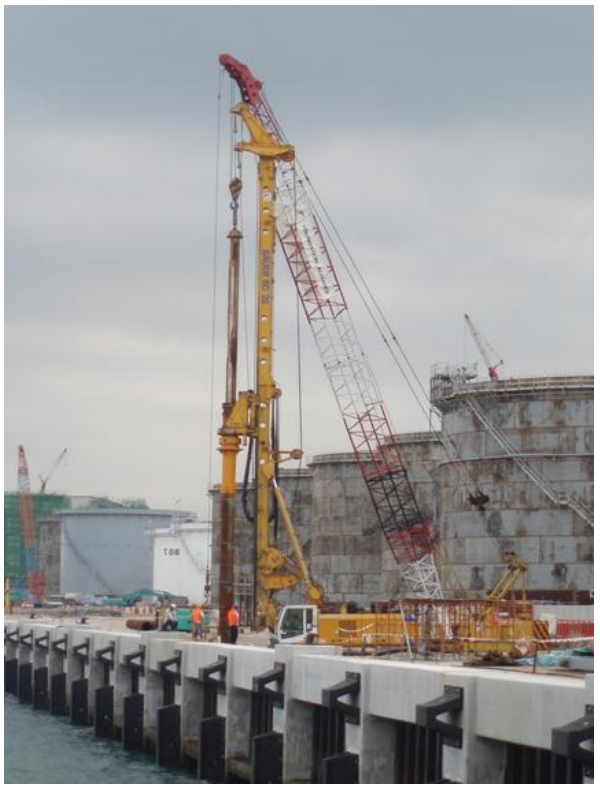
0 to 24/28m	Loose to Medium Dense fill sand (sand fill)
25/40m	Hard Clayey Silt / V Dense Clayey Sand / siltstone
>32/40m	Sandstone

Stabilization fluid : water

Major equipment deployed :
- **Boring Rigs : Bauer BG28 & Soilmec R16**
- **Crawler Crane – 50 & 65ton**
- **Rotary Drive Adaptor for pipe pile installation**
- **Oscillator MGB 1500**
- **ICE 423 Vibro**
- **Excavator**

Tools :
- **Boring Bucket, Auger, Core Barrel, Cleaning Bucket**
- **Temporary collar casing between 6 & 12m**

Installation of steel tubular pipe piles upto 36m by preboring & vibro hammer for Admin Building's protection



Installation of steel tubular pipe piles upto 36.6m by Bauer BG28 rotary drive adaptor & preboring (vibration free) next to new quay wall & farm tanks