



# PRINSIRI CONDOMINIUM – PATTAYA

## Deep Soil Mixing

### Object

Solidification of silty and sandy soil with in-situ soil-cement mixing for construction of basements and foundations.

### Project Description

Temporary soil retaining walls for excavation up to – 6.5m to construct foundation footings and basements of a condominium.

### Type of Work

Construction of block type soil retaining walls with soil-cement columns.

### Owner

Prinsiri Public Company Limited.

### Main Contractor

Built Right Co., Ltd.

### Project Schedule

January 2008

### Construction Method

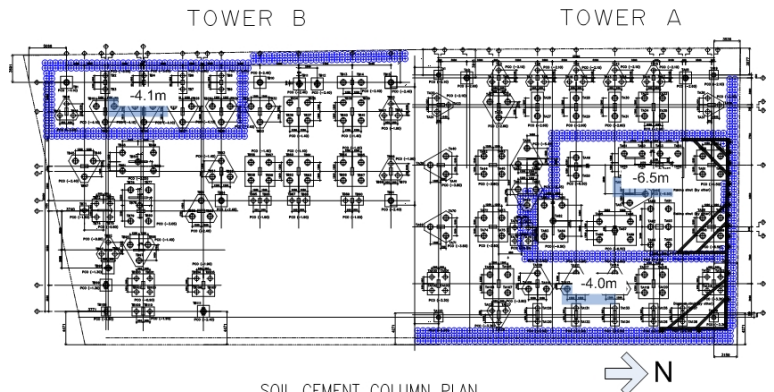
- Mechanical Deep Soil Mixing

### Construction Details

Soil-Cement Columns: 697 ( $\phi$ 0.8m $\times$ 7-10m)  
H Piles: H100 $\times$ 100-17.2kg = 15

### Subsoil Conditions

Fill:	0.0-2.0m
Loose sand:	1.0-4.0m
Medium dense sand:	4.0-6.0m
Dense sand:	6.0-10.0m
Very dense sand:	10.0-18.0m



SOIL CEMENT COLUMN PLAN  
Soil-cement Column Retaining System Layout.



Deep soil mixing (soil-cement column works) in progress.



An excavation to –6.5m retained by soil-cement columns with temporary bracing.

### REFERENCES:

- Thasnanipan, N., Win M. A and Thayanan Boonyarak (2007) "Minimizing Ground Movement by Using Deep Soil Mixing Technique" (in Thai). The 12<sup>th</sup> National Convention on Civil Engineering. Phitsanulok, Thailand. pp 240-246.