



CENTRAL PLAZA Chaeng Wattana

Object

To improve shear strength of soft clay for basement excavation works using deep soil mixing method, soil-cement column construction.

Project Description

Up to -8.6m deep excavations in soft clay for construction of foundation footings and basement floors of a shopping complex and office tower.

Type of Work

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

Owner

Central Plaza Public Company Limited.

Main Contractor

Ritta Co., Ltd.

Project Schedule

April-May 2007

Construction Method

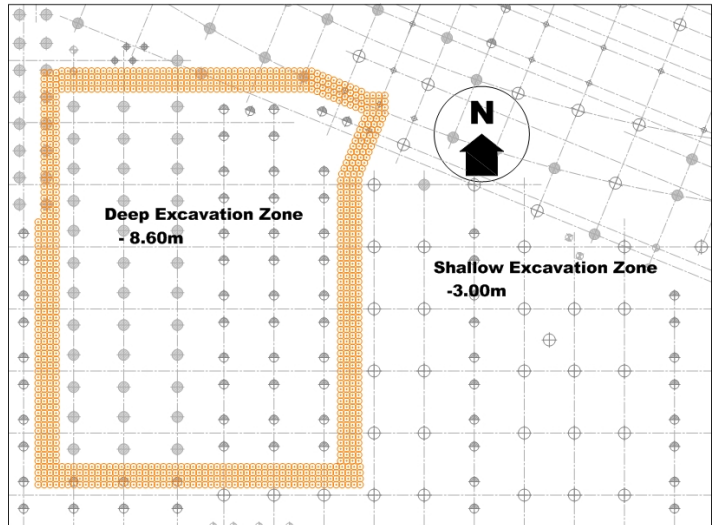
- Mechanical Deep Soil Mixing

Construction Details

Soil-Cement Columns: 874 (ϕ 1.0m \times 12m)

Subsoil Conditions

Soft clay:	0.0-16.5m
Medium clay:	14.8-20.5m
Stiff clay:	16.5-21.5m
Clayey fine sand:	16.2-25.0m



Soil-cement Column Retaining System Layout.



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



Soil retained by soil-cement columns for basement excavation and construction works.

REFERENCES:

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