

# PROJECT 84 FGO 9002, UM SUQAIM

## Soil Improvement

### Um Suqaim, Dubai, UAE

Owner: H.H Shikha Fatima Bint Mubarak Bin Ghanim Alkatbi  
 Engineer: *National Engineering Bureau*  
 Main Contractor: Target / Freyssinet- Menard Soltraitement  
 Completion Date: July 2009

#### PROJECT DESCRIPTION

The Project is an extension of VIP existing Villas' Compound where the existing soil conditions were not suitable to carry the design load

Soil Improvement solution for the soft soil conditions was proposed at the location of the mentioned project

Controlled Modulus Columns "CMC" was selected as the most favorable technique due to the proximity of the surrounding building to the plot limit and its sensitivity to vibration and settlement.

Due to a previous cooperation and long term cooperation plans with Freyssinet- Menard Soltraitement, the project is subcontracted to SOILTEC for execution of the CMC works under management of Menard



#### SCOPE OF WORKS

Area of Soil Improvement:	1300 m <sup>2</sup>
Depth of Soil Improved:	8 m
CMC Quantity:	2200 lm
Number of CMC:	322 Nb
Project Duration:	1.0 month



#### QUALITY CONTROL

CMC is located precisely as per the design drawings. Depth, applied torque, pressure, and concrete volume delivered have been automatically recorded for each CMC executed and full assurance of quality

Several Full Scale Load Tests have been carried out on single CMC as well as completed improved areas selected by the engineer

Obtained Settlement Values confirmed the adequacy of the applied improvement works to receive the design loads

