

FOUNDATION ENGINEERING

Etihad Museum (Union Museum) Phase 2

Jumeirah, Dubai

MUSEUMS • CONTINUOUS FLIGHT AUGER (CFA) PILES • ROTARY BORED PILES • SECANT PILED WALLS



Client

Dubai Roads & Transport Authority (RTA)

Consultant

Halcrow – A CH2M Hill Company

Main Contractor

NSCC International

Location

Dubai, UAE

Start Date

September 2014

Completion Date

April 2015

Project Details

Secant Piled Wall

Perimeter : 795 LM
Retained height : 4.97 m - 14 m
Pile details : 900 mm dia. @ 750 mm c/c,
9.2 m - 16 m long

Ground Anchors : 718 nos.
Shotcreting : 8,250 m²
Excavation volume : 172,400 m³
Structural steel : Top I-beams = 31.97 tons

Main Piles

900 mm dia. piles : 82 nos., 16.35 m - 25.28 m long
1050 mm dia. piles : 119 nos., 16.35 m - 19.33 m long
1200 mm dia. piles : 160 nos., 16.35 m - 23.33 m long

Concrete volume : 20,120 m³
Reinforcement steel : 1,499 MT

Rerouting works : Electrical power lines including high and low voltage cables & equipment, telecom, irrigation, potable water and sewer lines, plus surface water drainage.

Other works include : Construction of 205 m long two-lane access road of 7 m width, dewatering works and pile testing (sonic, dynamic & static).