

FOUNDATION ENGINEERING

Stella Maris Residential Tower on Plot No. 392044, Dubai Marina

RESIDENTIAL • DIAPHRAGM WALL • I-BEAMS • POST & PLANK WALL • ROTARY BORED PILES • STRUTS • DEWATERING



Client

Scope Investment LLC

Consultant

RMJM Consultants

Main Contractor

NSCC International

Location

Dubai, UAE

Start Date

September 2015

Completion Date

April 2017

Project Details

I-Beam Shoring

Perimeter : 22.5 m
Retained height : 5.0 m
Total weight : 18.48 tons

Diaphragm Wall

Perimeter : 225 m
Retained height : 24.5 m & 23.0 m
Thickness of wall : 1000 mm

Main Piles

76 nos. 1500 mm dia. piles, drilled to a depth of 43 m
35 nos. 1500 mm dia. piles, drilled to a depth of 37 m
Total length drilled : 6,614 LM

Concrete volume : 9,300 m³
Reinforcement steel : 938 tons
Excavation volume : 83,000 m³

Strutting system

3 levels of 1422.4 mm dia. struts (33 nos. strut pipes)
Plunge columns & bracings

The development comprises a residential tower of 5 basement + GF + mezzanine + 4 podium + 49 floors with G+1 townhouses located on the podium roof. The project's plot is directly bordering the water of the Dubai Marina.