

FOUNDATION ENGINEERING

Doha Metro Green Line - Al Rayyan/C-Ring (The White Palace) Station

TRANSPORT-RAIL • CONTIGUOUS PILED WALL • SOLDIER PILES • GROUND ANCHORS • SHOTCRETING • WEEP HOLES



Client

Qatar Railways Company

Consultant

DB International GmbH

Main Contractor

Porr-SBG-HBK Joint Venture

Location

Doha, Qatar

Start Date

April 2014

Expected Completion Date

April 2016

Project Details

The Al Rayyan/C-Ring Station is the largest station along the Green Line and also serves as an interchange for the Blue Line crossing. The enabling works awarded to NSCC for this site makes up approximately 28% of the entire works required for the Green Line.

Contiguous Piled Wall / Soldier Piles

Perimeter (Type 1)	: 32 m
No. of piles	: 16 nos.
Retained depth	: 7.65 m
Pile details	: 800 mm dia. @ 2000 mm c/c, 12m - 15m long
Perimeter (Type 2)	: 720 m
No. of piles	: 360 nos.
Retained depth	: 17 m - 27 m
Pile details	: 1000 mm dia. @ 2000 mm c/c, 20m - 35m long
Perimeter (Type 3)	: 224 m
No. of piles	: 112 nos.
Retained depth	: 44 m
Pile details	: 1000 mm dia. @ 2000 mm c/c, 52m long
Ground Anchors	: 2,455 nos.
Concrete volume	: 15,505 m ³
Reinforcement steel	: 2,093 tons
Shotcreting works	: 9,400 m ²
Weep holes, 3" dia.	: 733 nos.
Protective netting	: 6,045 m ²