

## JET GROUTING

Jet grouting is a soil improvement technique that employs high-speed fluid jets to erode a soil. The resulting cavity is then filled with grout to form a composite soil/grout material that enhances the overall properties of the soil.

Ground modification/improvement of a soil by jet grouting plays an important role in the fields of foundation stability, particularly in the treatment of load bearing soils under new and existing buildings. Jet grouting should be considered in any situation where the control of underground fluids or excavation of unstable soils is required.

Jet Grouting installs fluid grouts, (air and water if necessary) at high internally controlled pressures, varying from 30 to 50 mpa (4,300 to 7,200 psi) and relies on high nozzle velocities to achieve the required diameters. As such it has proven popular for both ground improvement and in particular underpinning of existing footings on poor ground conditions.

### Advantages

Can be installed in nearly all soil types

Very quick and precise construction

Designable strength and permeability

No harmful vibrations

Ideal for underpinning

Ideal for ground improvement

### Specifications

Jet Grouting Diameters range from 600mm to 2500mm (dependant upon ground conditions).



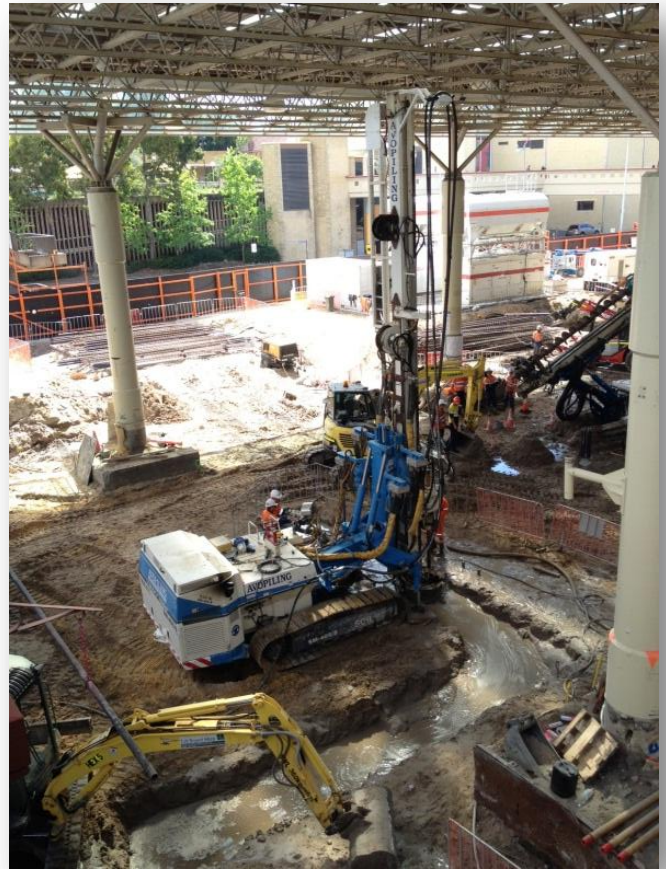
# PROJECT

## Perth City Link, WA

PROJECT OUTLINE: Perth City Link, formerly known as the Northbridge Link, is a collaborative project funded by three tiers of Government and led by EPRA and the Public Transport Authority (PTA). The PTA's \$609 million (\$360 million Rail and \$249 million Bus stage) transport infrastructure work at and around Perth Station is the catalyst to bring Perth City Link's vision to life.

### AVOPILING SCOPE OF WORKS:

- Construction of rectangular cutter soil mixing columns above the existing New Metro Rail Tunnels on the area of 750 m<sup>2</sup> and depth of 7.5 m
- Construction of contiguous wall consist of 600mm dia CFA piles in Child care Centre
- Construction of Bored piles in Barrack Street
- Jet Grouting - 128No 700mm dia 10.5m deep and 4No 1200mm dia 10.5m deep



**Avopiling (NSW) Pty Ltd**

Unit 3, 72-74 Lower Gibbes St, Chatswood, NSW, 2067  
(02) 8467 1300

**Avopiling (QLD) Pty Ltd**

4 Commerce Court Clontarf, QLD, 4019  
(07) 3897 1000

**Avopiling (WA) Pty Ltd**

Unit 1, 63 Knutsford Ave Rivervale, WA, 6103  
(08) 9277 3928