

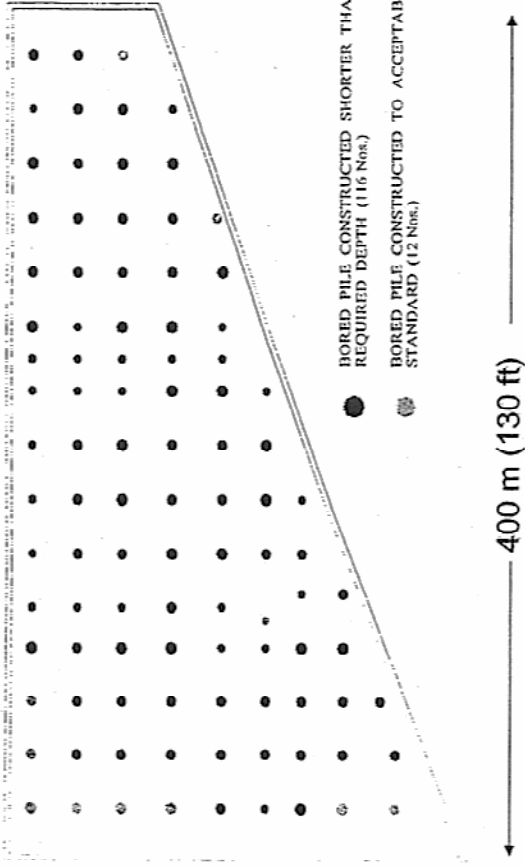
Jean-Ghislain La Fonta

Real-Time Monitoring During Underpinning Works

# Sol Data a case history

Real-time monitoring during underpinning works (micropiles)

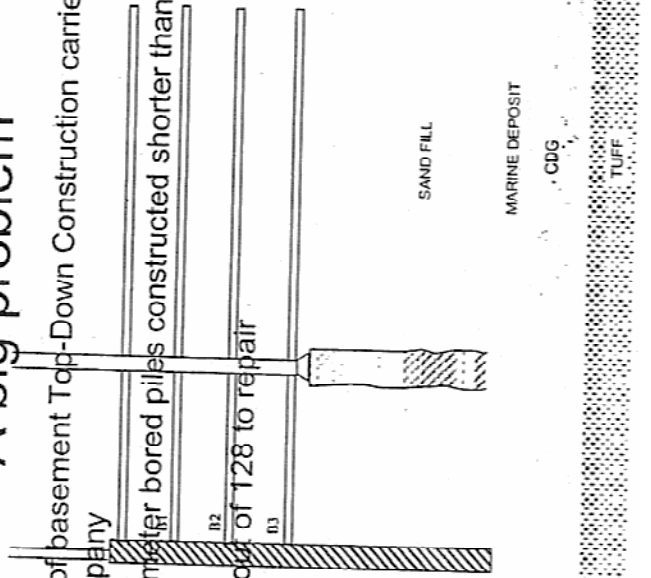
Jean-Ghislain LA FONTA



● BORED PILE CONSTRUCTED SHORTER THAN REQUIRED DEPTH (116 Nos.)  
 ○ BORED PILE CONSTRUCTED TO ACCEPTABLE STANDARD (12 Nos.)

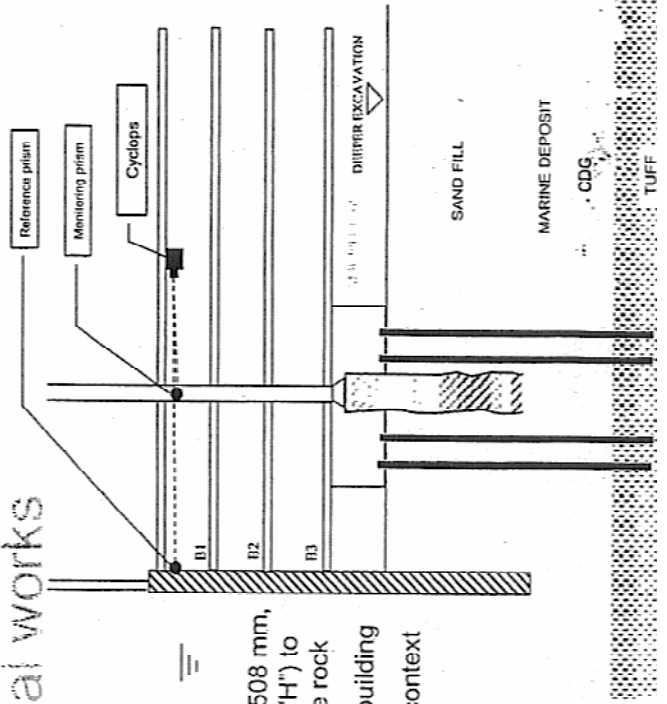
## A big problem

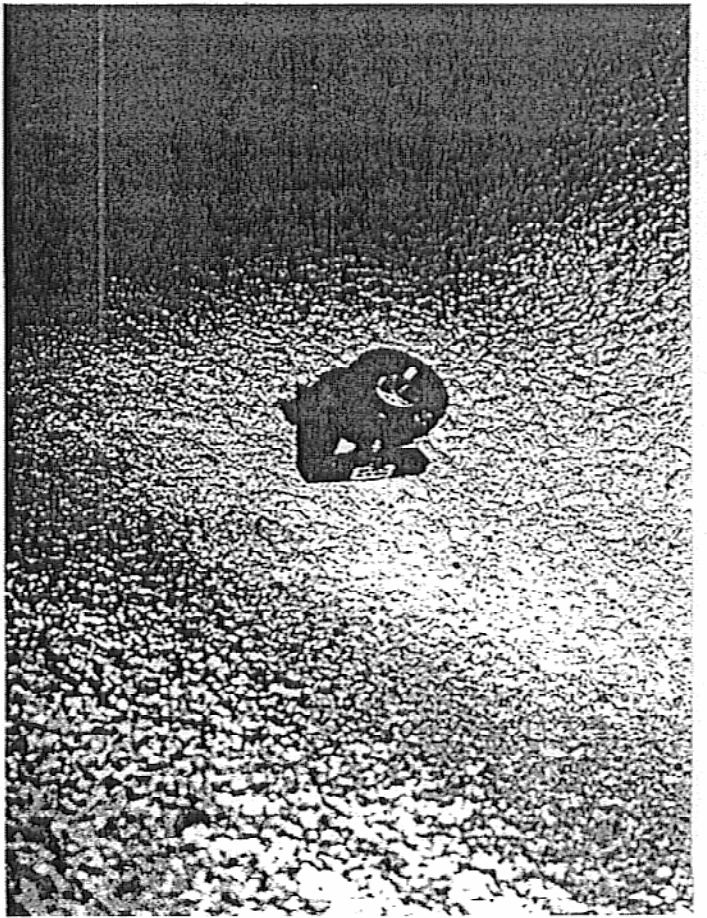
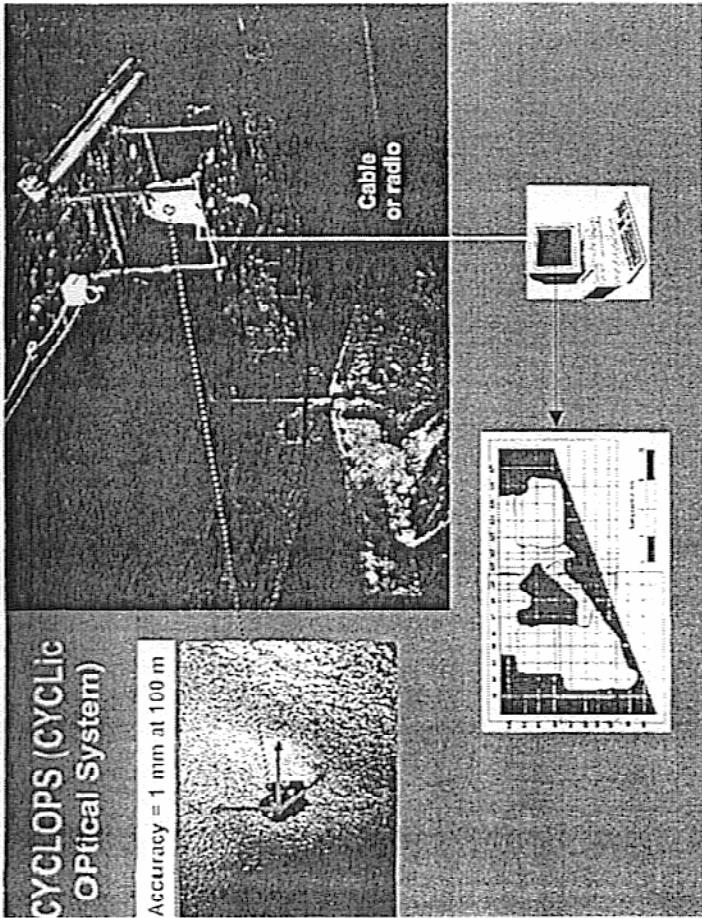
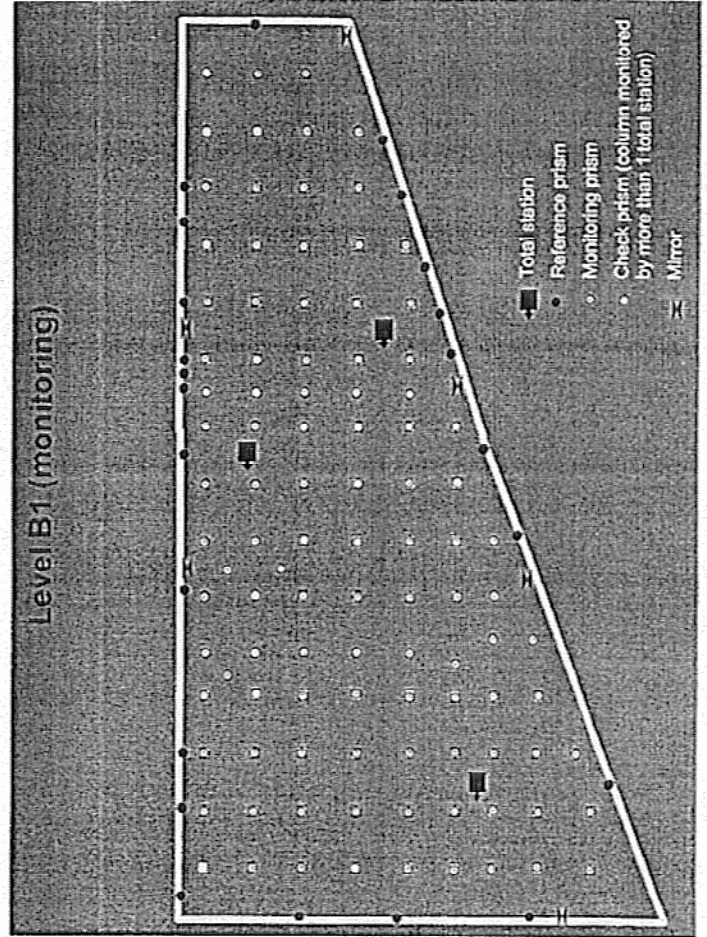
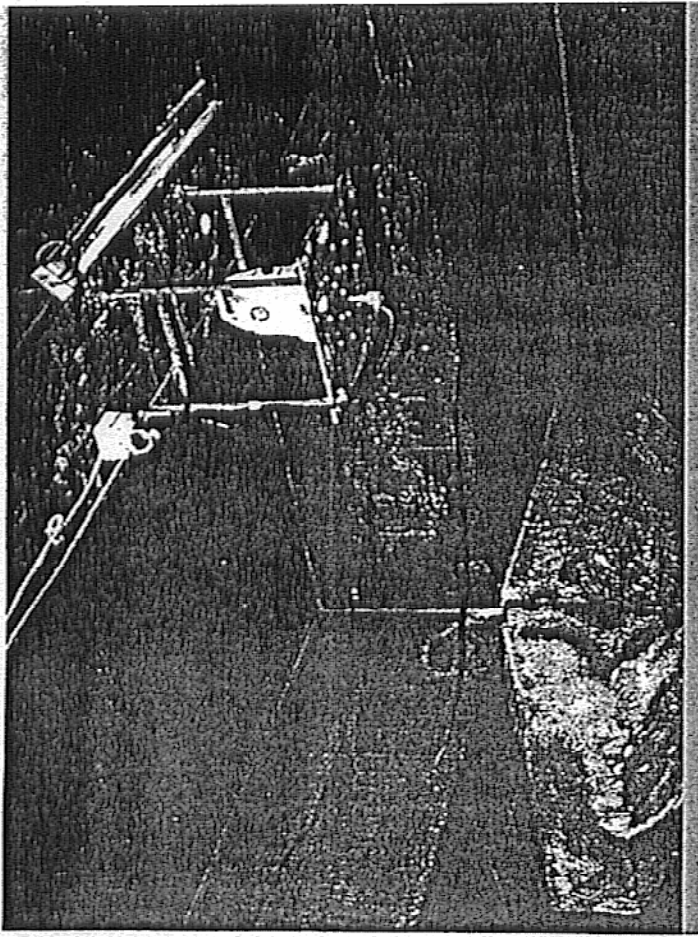
- 3 Levels of basement Top-Down Construction carried out by a local company
- Large diameter bored piles constructed shorter than required depth
- 116 piles out of 128 to repair

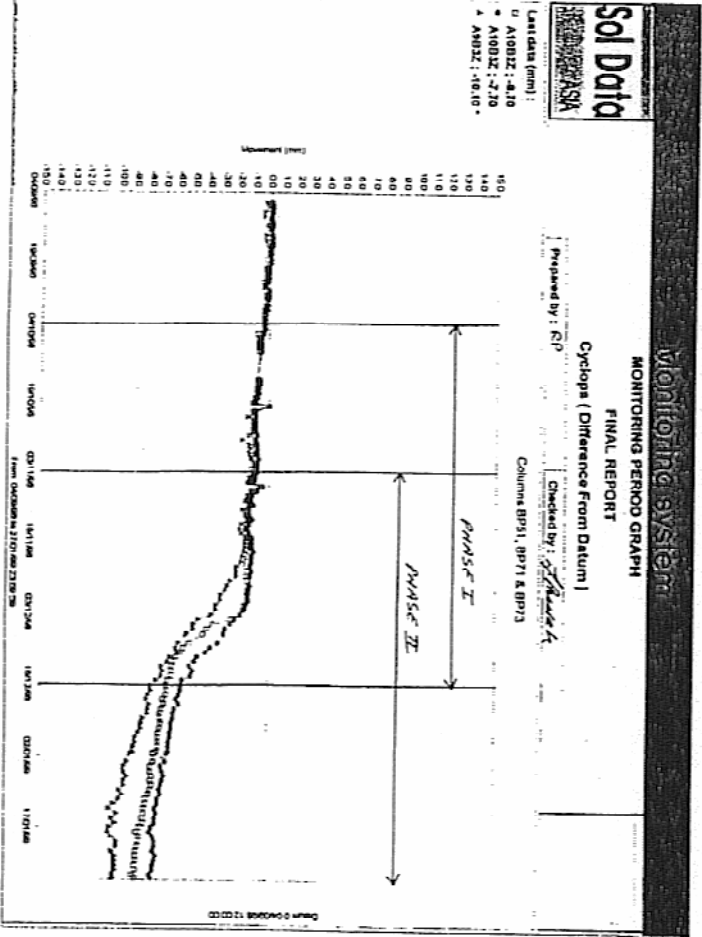
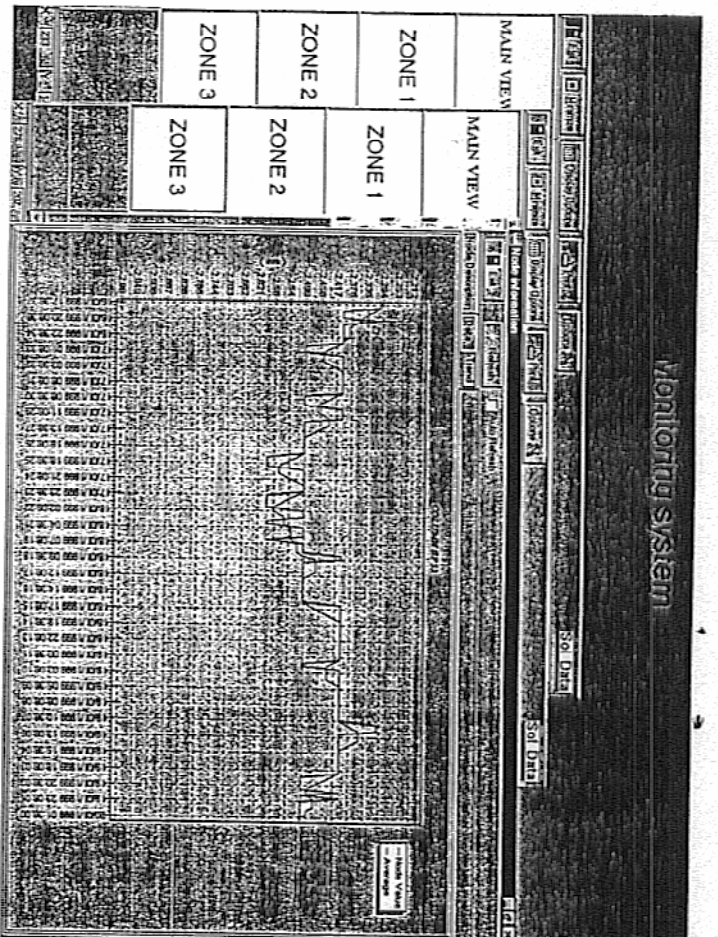
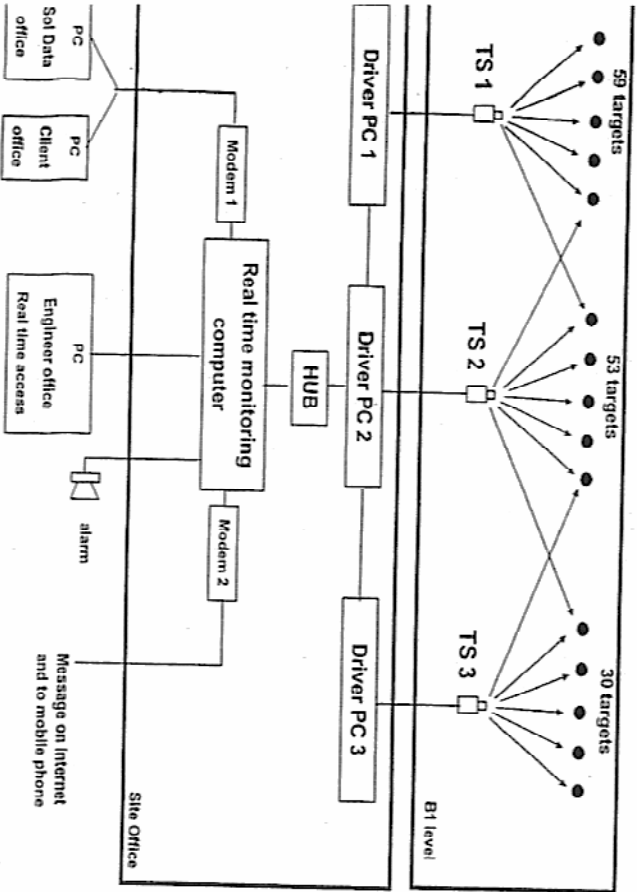
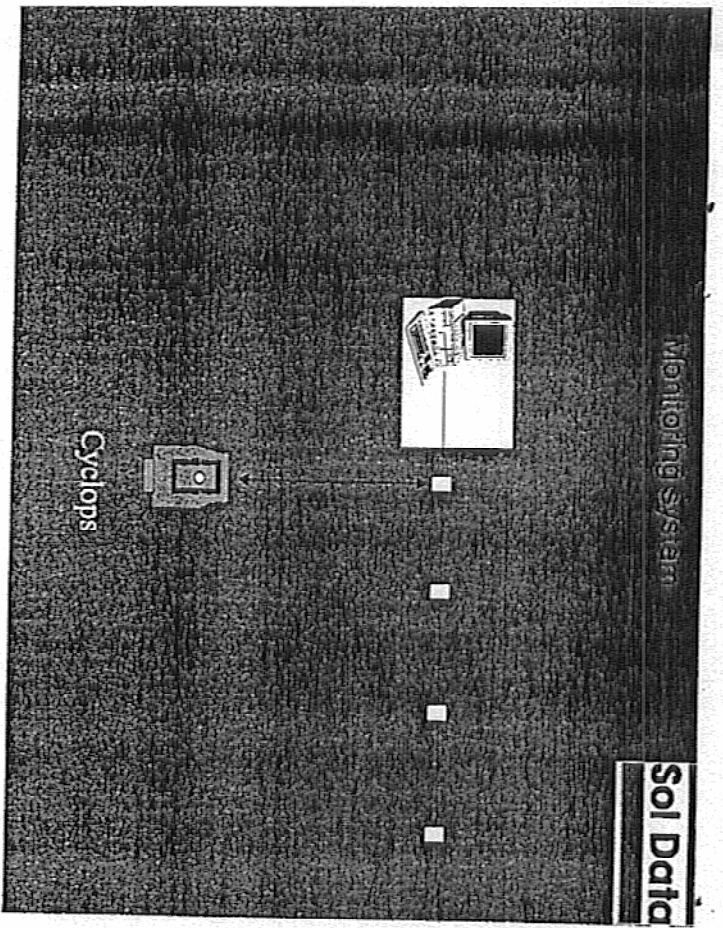


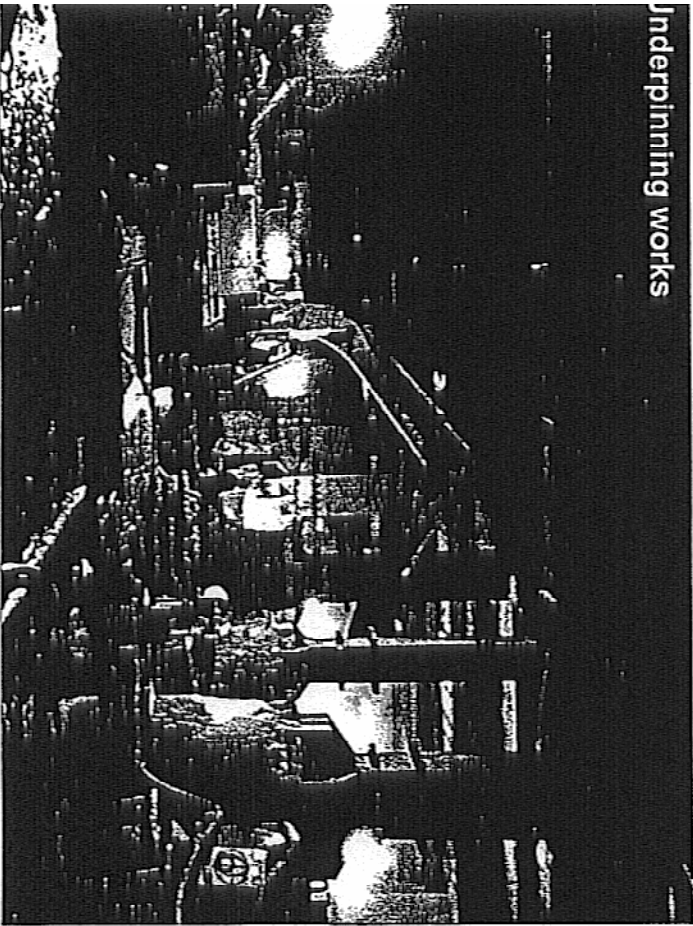
## Remedial works

- 402 new piles (508 mm, reinforced by an "H") to insert 10 m in the rock
- Very sensitive building
- Very sensitive context

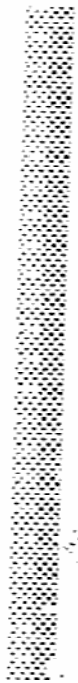
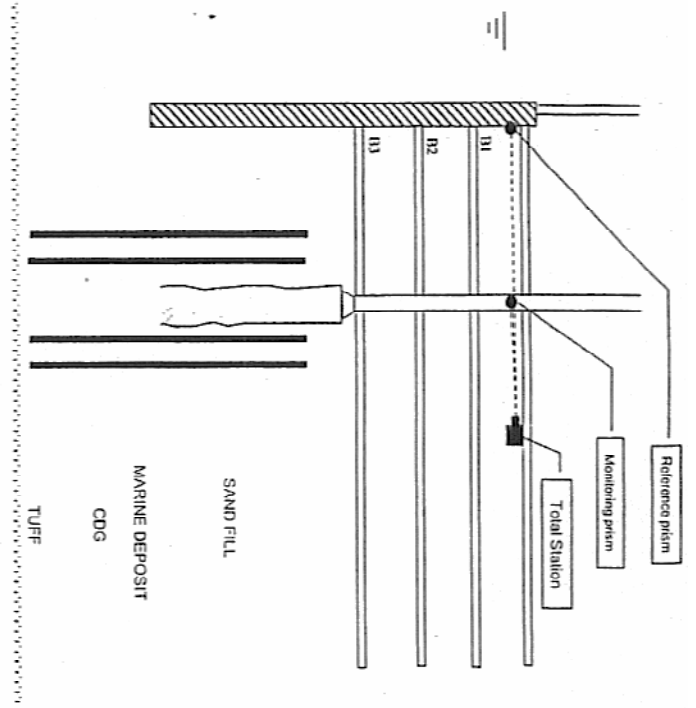






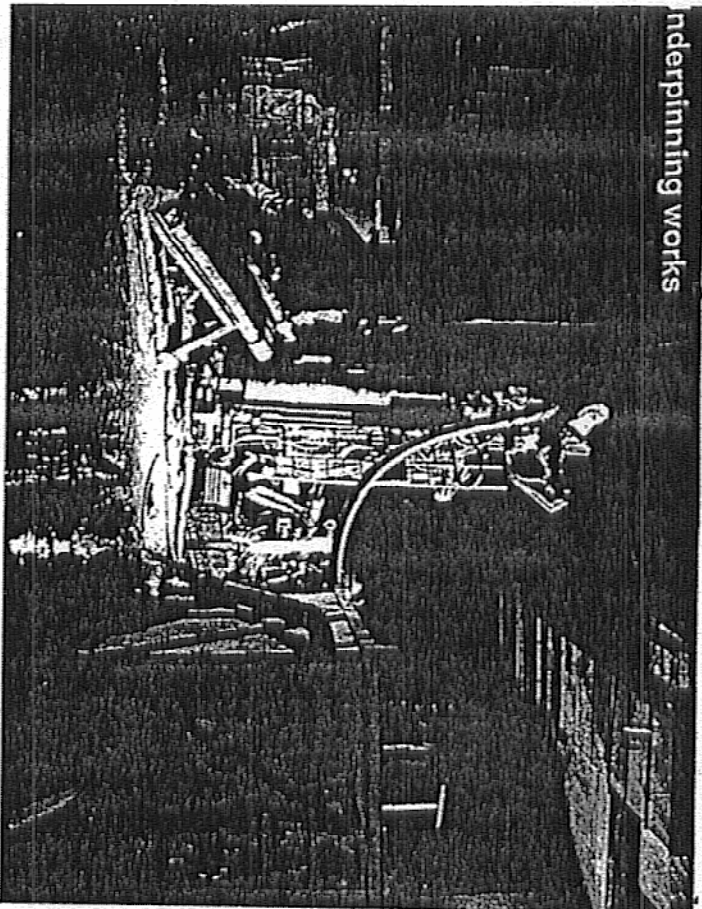


Underpinning works

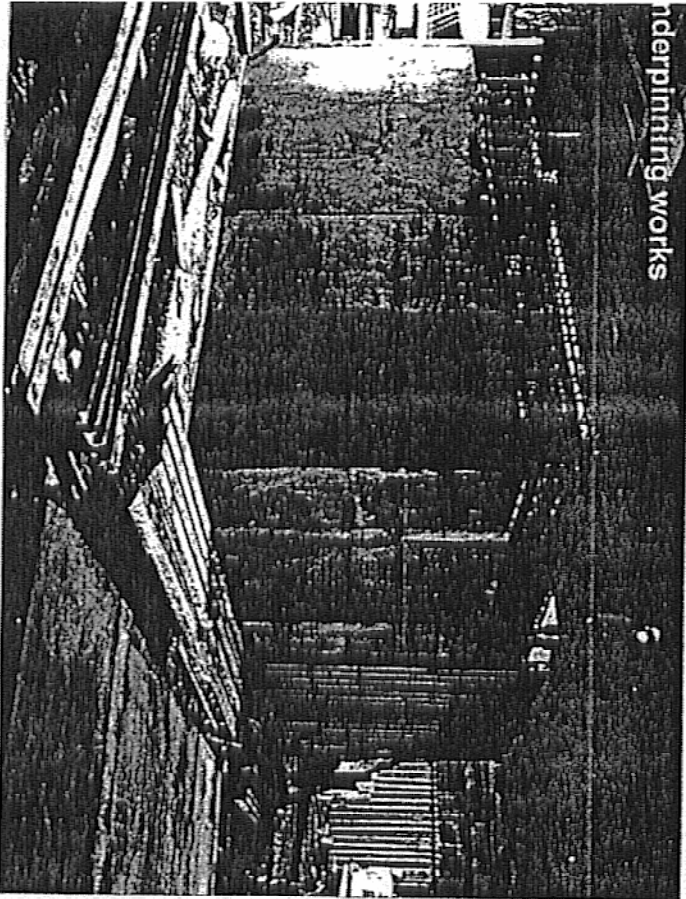



  
 DEEPIER EXCAVATION

Underpinning works



Underpinning works



Sol Data

ASW

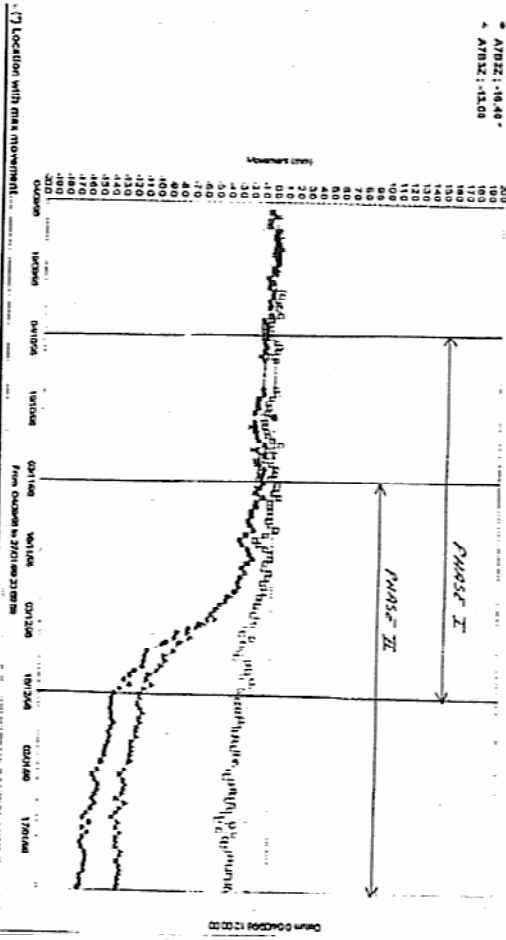
Last data (mml):  
 U AB02Z: -2.45  
 V AB02Z: -18.40  
 W AB02Z: -13.08

Prepared by: RP

Checked by: [Signature]

Column BP40, BP37 & BP38

MONITORING PERIOD GRAPH  
 FINAL REPORT  
 Cycles (Difference From Datum)



Underpinning works

