

Micropile Practice in the UK

MICROPILING IN THE UK

- * 'Heavy' micropiling

- * Restricted access/ low headroom.

Micropile Practice in the UK

(a) 'HEAVY'

- * Large track-mounted diesel powered drill rigs
- * Mast length 5-7 metres
- * Undertake ground anchors, micropiles, drilling and grouting.
- * 'Civil engineering' sites

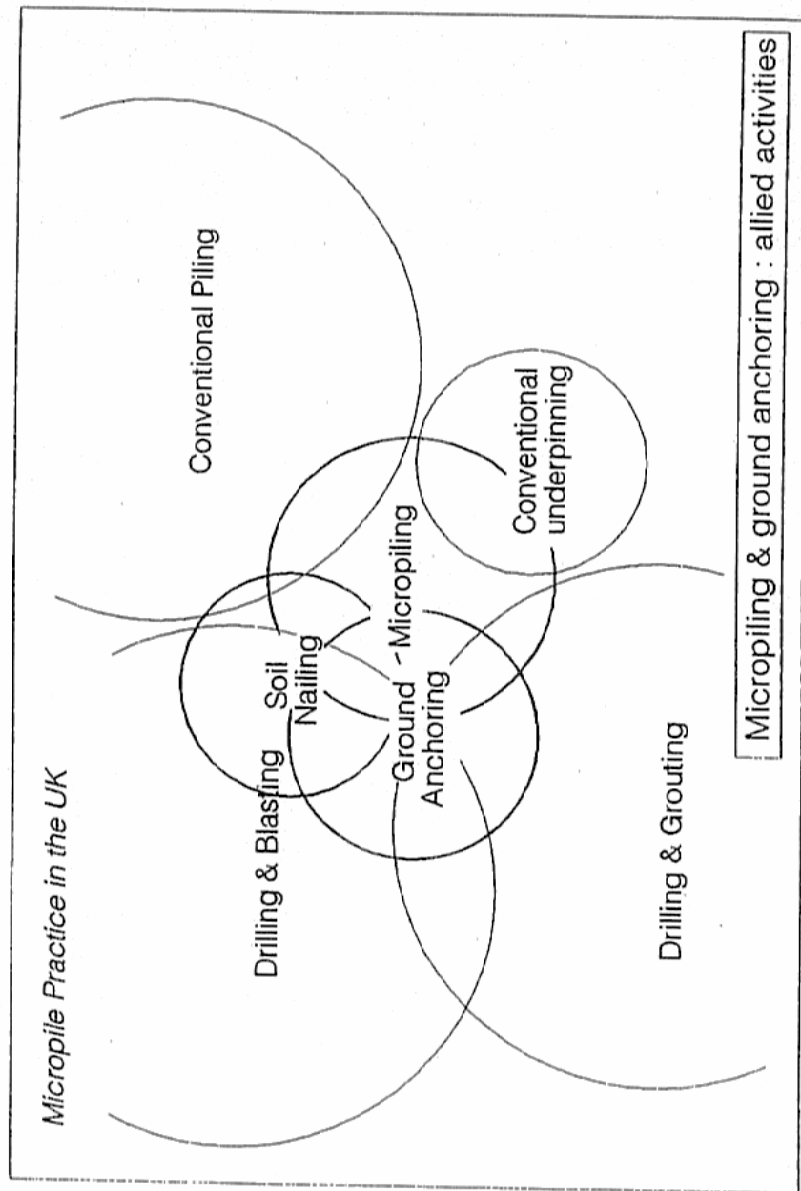
(b) RESTRICTED ACCESS/LOW HEADROOM

- * Cramped/basement sites
- * Low ceilings
- * Overhead obstructions - pipework etc.
- * Doorways/access ways < 1.0 m
- * Mast/drop heights < 2.0 m
- * Electro-hydraulic or compressed air powered rigs
- * Can be tracked, or dismantlable

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MARKET DIVIDED INTO:

- Ground anchoring : 10%
- Soil Nailing : 15%
- Micropiling/underpinning : 60%
- Ancillary geotechnical : 15%



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DESIGN.

Driven mini/micropiles

Designed on 'set' using modified Hiley-type driving formulae.

Bored micropiles.

Designed on ground anchorage practice.

No allowance for end bearing usually.

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TESTING.

Static load testing - axial

Lateral loading

- zero
- piles usually raked in A-frame mode.

Dynamic load testing

- Simbat
- PDA Pile Dynamics
- Statnamic

Integrity Testing

- Low-strain hammer methods
- High aspect ratios
(Length/diameter > 1:30)