

- 1 (b) 50 mm, 2.0 m
(c) average settlements: 13 mm, 25 mm, 37 mm
differential settlements: 8 mm, 16 mm, 19 mm
(d) 20 mm at 7.4 months
- 2 (a) 2.65, 0.200, 0.050; 100 kPa
(b) 40 kPa, 1856 kg/m³
(c) roughly 237 mm
(d) an extra 54 mm
- 3 (a) (i) zero friction; (ii) perfectly rough (iii) vertical, vertical, horizontal
(iv) $Z_f \geq (\pi + 2) c_u/\gamma$
(b) (i) vertical equilibrium
(iii) $Z_f \leq (\pi + 3) (c_u/\gamma) / (1 - c_u/\gamma X)$
- 4 (a) 45.7°, 36.6°
(b) (ii) 19° (iv) 0.44 m, 0.22 m, 0.15 m