

CV4452 Highway Engineering

1b(i) 2.08x10⁷ESAL

140 mm asphalt layer (top layer)

390 mm base layer (second layer with $M_R = 900$ MPa)

160 mm sub-base layer (third layer with $M_R = 350$ MPa)

1b(ii)

1c ESWL= 60.5 kN

2c(i) 927.6mm

2c(ii) Max load transfer: 29.75 kN

Load exerted on dowel "B" = 6.35 kN

4a 66.092 dB

4b(ii) W = 3.15 m

5a(i) L_m = 23.32m, S_m = 5.83%

5a(ii) 1.9 minutes

5a(iii) d = 5.65 mm