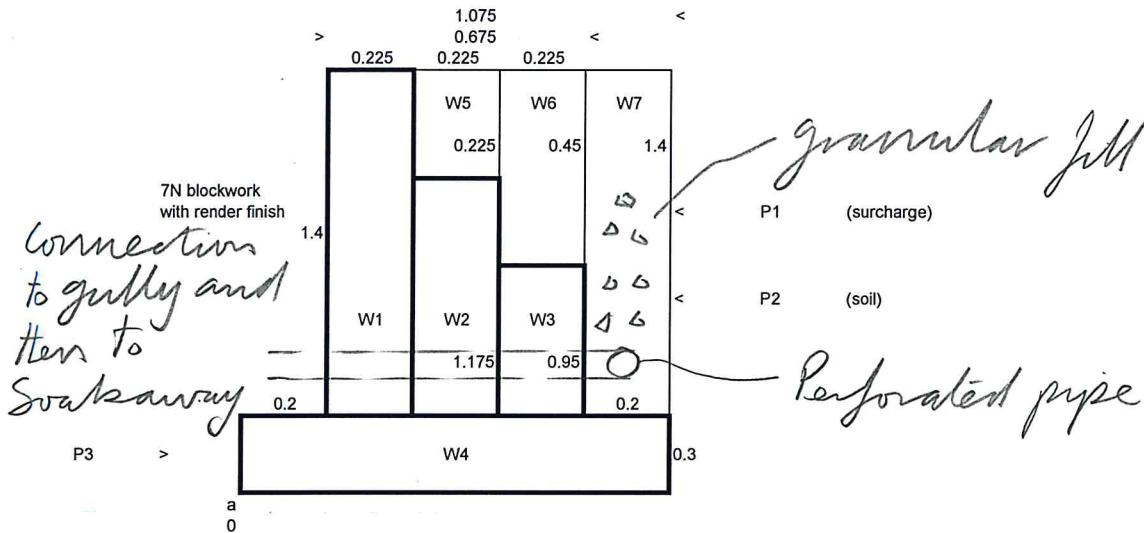




Soil density 18 KN/m³
Internal friction 40 Degrees
Surcharge 10 KN/m²
Ka 0.22
Kp 4.60

Coefficient of friction - Tan 35 X .75 0.53

	Width	Ht	Density	Wt(KN)	La	Mt(KNm)
W1	0.225	1.4	20	6.3	0.3125	1.97
W2	0.225	1.175	20	5.29	0.5375	2.84
W3	0.225	0.95	20	4.275	0.7625	3.26
W4	1.075	0.3	24	7.74	0.5375	4.16
W5	0.225	0.225	18	0.91	0.5375	0.49
W6	0.225	0.45	18	1.8225	0.7625	1.39
W7	0.2	1.4	18	<u>5.04</u>	0.975	<u>4.91</u>
				31.37625		19.02
P1	0.22	10	1.7		3.74	
P2	<u>0.22</u> 2	18	1.7	1.7	<u>5.7222</u> 9.46 KN	0.85 3.18
						<u>3.24</u> 6.42 KNm
Friction resistance	31.37625	0.53			16.63	
P3	<u>4.60</u> 2	18	0.3	0.3	<u>3.73</u> 20.36	

F O S overturning $\frac{19.02}{6.42}$ 2.96 OK
F O S sliding $\frac{20.36}{9.46}$ 2.15 OK

Bearing pressure

E 19.02 less 6.42 div 31.37625 0.402 m
Ec/I 0.538 less 0.402 0.136 m
BP $\frac{31.37625}{1.075}$ 29.19
Plus or minus $\frac{6}{1.075} \frac{31.37625}{1.075}$ 0.136 22.13
BP 51.32 or 7.06 KN/m² OK

John Payne
B Sc C Eng MICE