



B = 20' P = 2 TSF

SQUARE FOOTING

GIVEN

FOOTING SIZE = 20' x 20'

UNIT PRESSURE P = 2 TSF

FIND

PROFILE OF STRESS INCREASE
BENEATH CENTER OF FOOTING
DUE TO APPLIED LOAD

z (FT)	$\frac{z}{B}$	σ_z TSF
10	0.5	0.70 X 2 = 1.4
20	1	0.38 X 2 = 0.76
30	1.5	0.19 X 2 = 0.38
40	2.0	0.12 X 2 = 0.24
50	2.5	0.07 X 2 = 0.14
60	3.0	0.05 X 2 = 0.10

FIGURE 3
Stress Contours and Their Application