LIST OF SYMBOLS

B : Width of Footing

Br' : Increased Width of Loading due to load spreading

α : Load Spreading Angle

B' : Width of reinforcement

Le : Effective Length of Reinforcement

Cu : Undrained Cohesion of Clay

Nc : Bearing Capacity Factor for Cohesion

H : Depth of Sand Layer

(H/B)cr : Critical H/B ratio

(B'/B)cr : Critical B'/B ratio

BCR : Bearing Capacity Ratio

Qu : Ultimate Load of Footing

q : Uniform Surcharge intensity

qu : Ultimate Bearing Capacity

qc : Bearing Capacity of Clay alone

qd : Contribution to B.C. from Stress distribution through the upper sand layer
qs : Contribution to B.C. due to Shear layer Effect
qm : Contribution to B.C. due to Membrane action
\( \gamma_s \) : Unit Weight of Sand
\( \beta_s \) : Angle of friction for sand
\( \beta_r \) : Angle of friction between sand and reinforcement
Kp : Coefficient of passive Earth pressure
LDR : Linear Density Ratio
So : Central Deflection of Geotextile
T_R : Tension in Reinforcement
\( T_f \) : Shear Stress along Vertical Plane
n : Number of Reinforcement Layers
\( \psi \) : Angle made by tangent to the failure surface at D and E
Z : Vertical Spacing between Reinforcement