

## NOMENCLATURE

C	=	Cohesive intercept: Component of soil shear strength which is independent of the force pushing the particles together.
E	=	Modulus of elasticity (psi)
GW	=	Ground water surface
I	=	Moment of inertial (in <sup>4</sup> )
K <sub>a</sub>	=	Lateral earth pressure coefficient for active pressure condition
K <sub>o</sub>	=	Lateral earth pressure coefficient for at-rest condition
K <sub>p</sub>	=	Lateral earth pressure coefficient for passive pressure condition
K <sub>w</sub>	=	Equivalent fluid soil pressure (pcf)
K <sub>ph</sub>	=	Horizontal component of lateral earth pressure coefficient for passive pressure condition
K <sub>pv</sub>	=	Vertical component of lateral earth pressure coefficient for passive pressure condition
N	=	Standard penetration resistance
N <sub>c</sub>	=	Bearing capacity factor
N <sub>0</sub>	=	Stability number
Q	=	Level surcharge loading (pcf)
qu	=	Unconfined compressive strength (psf)
S	=	Section Modules (in <sup>3</sup> )
Sb	=	Bond Strength (psf) frictional force between soil and tieback anchor
SF	=	Safety Factor
SU	=	Undrained shear strength
α - Alpha	=	Angle from vertical to center of surcharge strip
β - Beta	=	Angle of soil slope
γ - Gamma	=	Unit Weight of soil (pcf)
δ - Delta	=	Wall friction angle
ε - Epsilon	=	Linear strain
θ - Theta	=	Angle of repose
μ - Mu	=	Angle of tieback with horizontal
ρ - Rho	=	Degree of flexibility of an anchored bulkhead (Rowe's Moment Reduction theory)
σ - Sigma	=	Normal stress
Σ - Sigma	=	Sum
τ - Tau	=	Soil shear stress
υ - Upsilon	=	Poisson's ratio
φ - Phi	=	Angle of internal friction of soil
ψ - Psi	=	Failure wedge or slip angle
ω - Omega	=	Angle of the wall with respect to vertical
FHWA	=	Federal Highway Administration
AREA	=	American Railway Engineering Association
AREMA	=	American Railway Engineering and Maintenance-of-Way Association
Cal-OSHA	=	California Occupational Safety and Health Administration