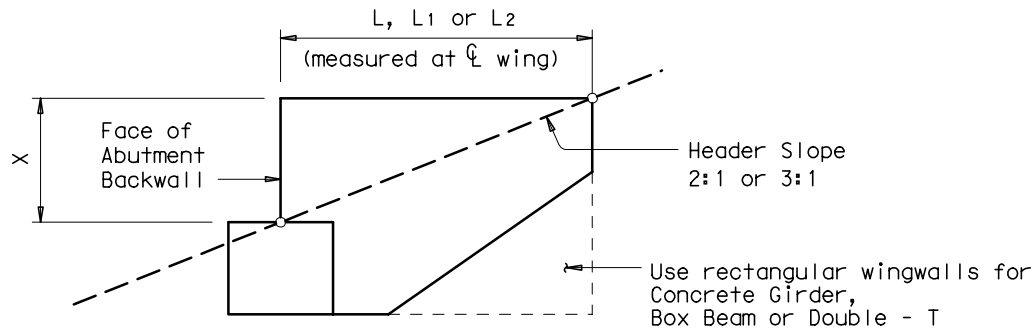
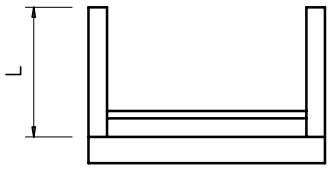
Calculations shown apply to both cantilevered and founded wingwalls.

Skew S° = Skew Angle

X = Slab + Haunch + Beam + Bearing Pad + Brg Buildup

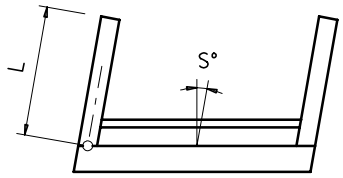
L, L_1 or L_2 = Length of Wingwall
(normally rounded up to the nearest 1′-0")





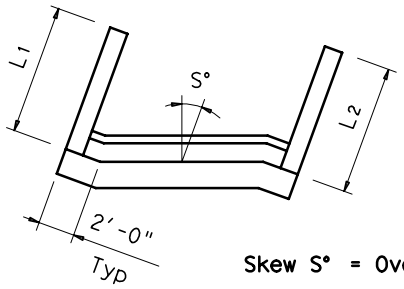
2:1 Header Slope
L = 2 X
3:1 Header Slope
L = 3 X

Skew S° = 0°



2:1 Header Slope
L = (2 X) ÷ Cos S°
3:1 Header Slope
L = (3 X) ÷ Cos S°

Skew S° = 0° Through 15°



2:1 Header Slope
L_1 = [(2 X) - { 2.0′ (Sin S°) }] ÷ Cos S°
L_2 = [(2 X) + { 2.0′ (Sin S°) }] ÷ Cos S°
3:1 Header Slope
L_1 = [(3 X) - { 2.0′ (Sin S°) }] ÷ Cos S°
L_2 = [(3 X) + { 2.0′ (Sin S°) }] ÷ Cos S°

Skew S° = Over 15°

Fig. 3-5