Single Wall - Slope Stability Ratios

The following figures and graphs provide a guide to the relationship between walls and slopes and the L to H ratio required to satisfy basic global stability requirements for simple $\phi$ only soil strength criteria. Slopes 2H:1V and greater require special attention to soil design parameters.

**Assumptions of Stability Analysis**
- No significant surcharge, $\gamma = 120$ pcf, SF> 1.3 min, Bishop.
- Vertical reinforcement spacing ~ 2’.
- Lowest reinforcement ~ 1’ from bottom
- LTDS of Reinforcement $> 1,300$ plf min. - upper 10 ft.
- $> 2,000$ plf min - next 10 ft., etc.

**Min. Embedment for Toe Slope**
- Level
- 4H:1V 1.0’ + 10% H
- 3H:1V 1.3’ + 10% H
- 2H:1V 2.0’ + 10% H

**Min. Embedment for Back Slope**
- Level 10% H
- 4H:1V 10% H
- 3H:1V 10% H
- 2H:1V 10% H

**Sloping Toe - Level Backslope**

**Backslope - Level Toe**