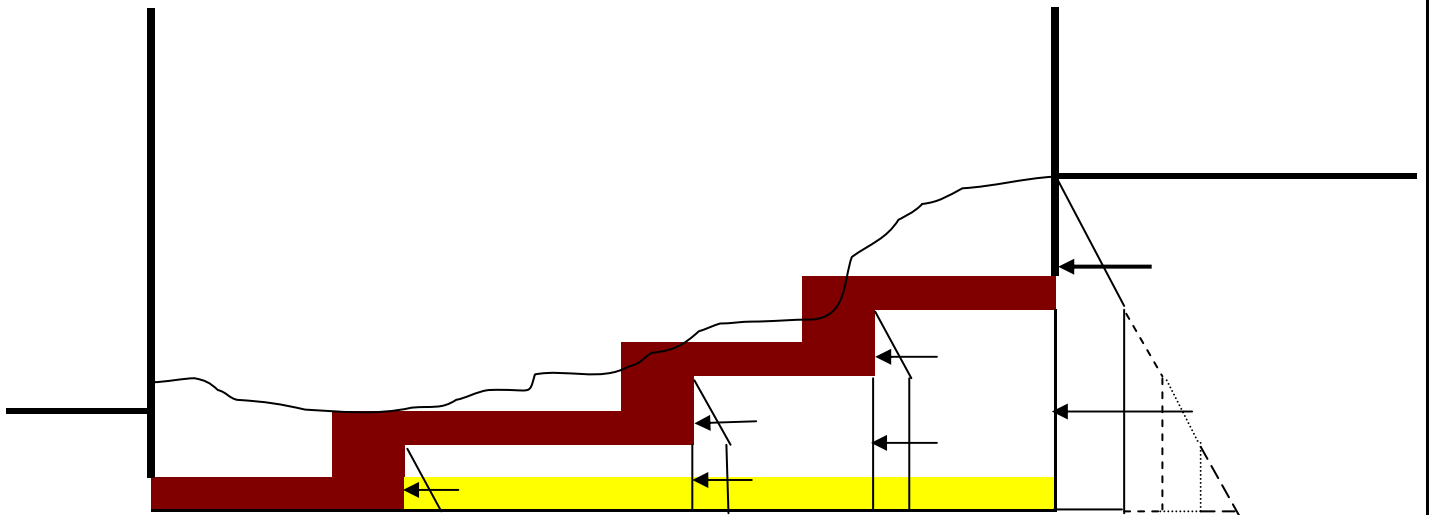


House - flat footing at bottom



House - stepped footings

Notes:

1. Earth Pressures are the same pushing against the house causing the sliding.  
See diagram above
2. Vertical loading on the house which is applying the normal force to the sliding surface is basically the same. - so no increase in vertical loading, hence no increase in frictional resistance. If "clayey" soil at bottom the length of adhesion at the bottom to resist sliding - same (same horizontal lengths)
3. Building the step footing in the manner shown mimics the manner in which an outside fill is placed against an existing slope. This keys the foundation into the slope removing any tendency of infinite stability problems.

