

**ADMINISTRATIVE MANUAL
LOS ANGELES COUNTY PUBLIC WORKS
GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION**

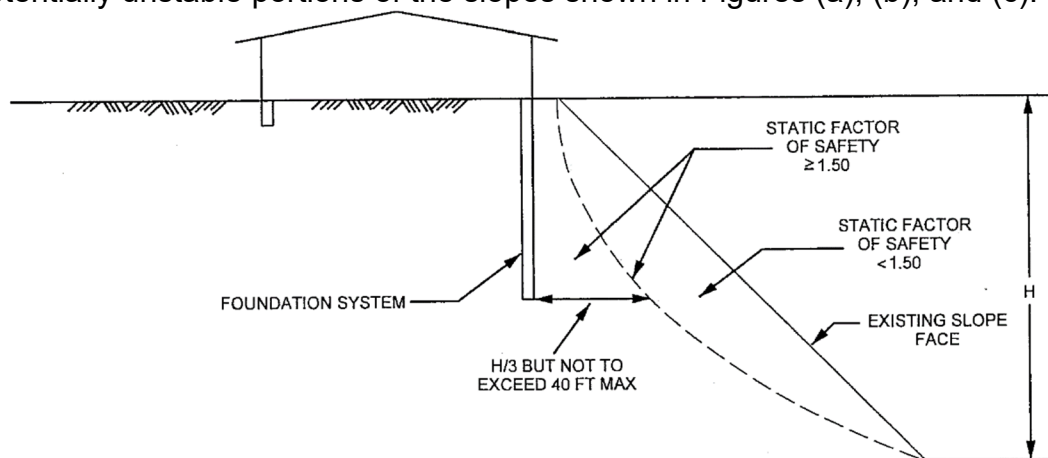
SETBACKS FROM DESCENDING SLOPES

Slope setbacks required by the Los Angeles County Building Code are based upon the assumption that the slope in question is grossly and surficially stable. Building Code Section 1808.7.2 states that the intent is to provide vertical and lateral support for the footing without detrimental settlement. Therefore, if Factors of Safety demonstrate that the adjacent descending slope is potentially unstable, the setback must be increased and measured from a hypothetical surface demonstrating Factors of Safety that meet or exceed all County minimum standards for slope stability (grossly and surficially stable). This hypothetical slope surface representing a stable slope is often called a "geotechnical setback plane or line".

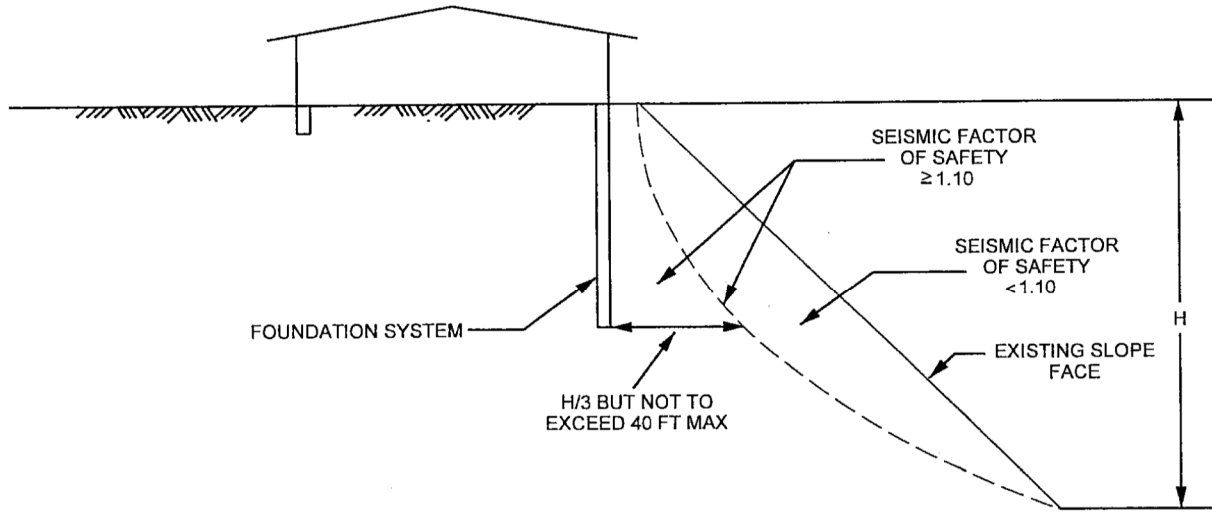
A stable slope and "geotechnical setback plane or line" must meet or exceed all minimum Factors of Safety requirements for slope stability as indicated below:

- Static Slope Stability Factor of Safety of 1.50 or greater. (gross stability)
- Seismic Slope Stability Factor of Safety of 1.10 or greater. (seismic stability)
- Surficial Slope Stability Factor of Safety of 1.50 or greater. (surficial stability)

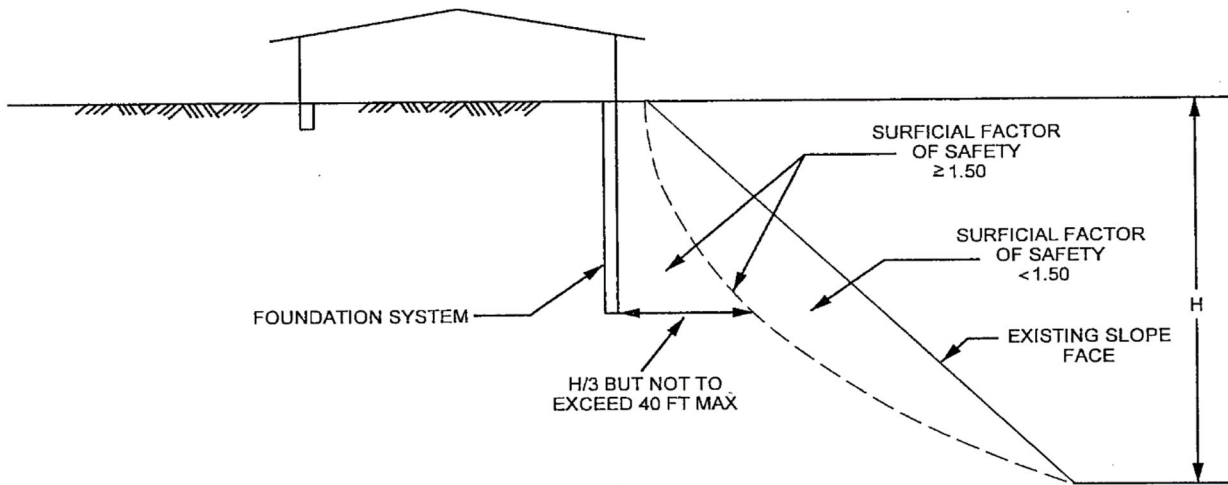
The "geotechnical setback plane or line" must be based on the most conservative hypothetical failure surface of these three slope stability analyses. The County setback requirement must be applied to the hypothetical slope surface representing the stable slope. The "geotechnical setback plane or line" must be established beyond and below all potentially unstable portions of the slopes shown in Figures (a), (b), and (c).



(a) STATIC CONDITION



(b) SEISMIC CONDITION



(c) SURFICIAL CONDITION

Approved By:

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