Notes:

These equations assume that concentrated dead load #2 is located within the active zone behind the reinforced soil mass.

For relatively thick facing elements, (e.g., segmental concrete facing blocks), it is acceptable to include the facing dimensions and weight in sliding, overturning, and bearing capacity calculations (i.e., use B in lieu of L).

P_{V1}, P_{H1}, $\Delta\sigma_{v1}$, $\Delta\sigma_{v2}$, $\Delta\sigma_{H2}$, and I_2 are as determined from Figures 3.11.6.3-1 and 3.11.6.3-2, and F_p results from P_{V2} (i.e., $K\Delta\sigma_{v2}$ from Figure 3.11.6.3-1. H is the total wall height at the face. h_p is the distance between the centroid of the trapezoidal distribution shown and the bottom of that distribution.

Figure 11.10.10.1-1—Superposition of Concentrated Dead Loads for External and Internal Stability Evaluation
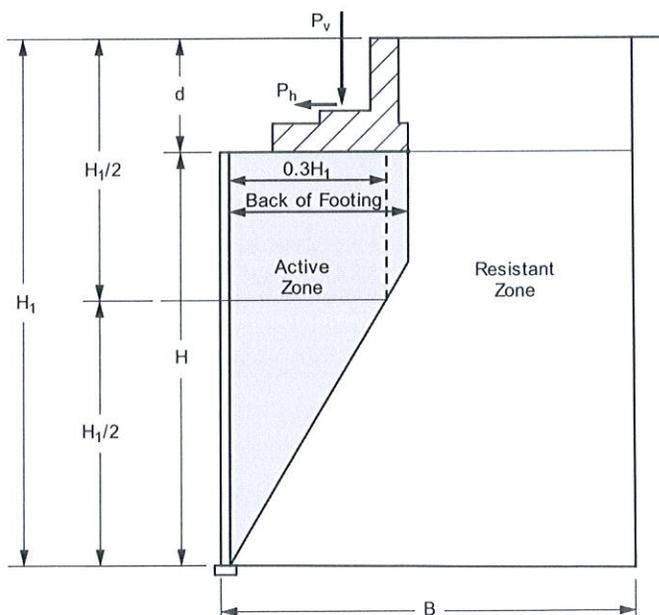

Figure 11.10.10.1-2—Location of Maximum Tensile Force Line in Case of Large Surcharge Slabs (Inextensible Reinforcements)