


John Shively PE

Overall verification - bearing capacity of found. soil is SATISFACTORY**Input data (Stage of construction 2)****Geological profile and assigned soils**

No.	Thickness of layer t [ft]	Depth z [ft]	Assigned soil	Pattern
1		- 0.00 .. ∞	Lean Clay	

Terrain profile

Terrain behind construction has the slope 1: 4.01 (slope angle is 14.00 °).

Embankment height is 0.75 ft, embankment length is 3.00 ft.

Water influence

Ground water table is located below the structure.

Input surface surcharges

No.	Surcharge new	change	Action	Mag.1 [lbf/ft ²]	Mag.2 [lbf/ft ²]	Ord.x x [ft]	Length l [ft]	Depth z [ft]
1	No	No	permanent	125.00		5.00	30.00	on terrain

No.	Name
1	Parking Lot

Resistance on front face of the structure

Resistance on front face of the structure: at rest

Soil on front face of the structure - Lean Clay

Soil thickness in front of structure

$$h = 2.30 \text{ ft}$$

Soil slope in front of structure

$$\beta = -18.40^\circ$$

Earthquake

Factor of horizontal acceleration $K_h = 0.1100$

Factor of vertical acceleration $K_v = 0.0000$

Water below the GWT is restricted.

Settings of the stage of construction

Design situation : seismic

Reduction of soil/soil friction angle : do not reduce

Verification No. 1 (Stage of construction 2)**Forces acting on construction**

Name	F_{hor} [lbf/ft]	App.Pt. z [ft]	F_{vert} [lbf/ft]	App.Pt. x [ft]	Design coefficient
Weight - wall	0.0	-3.18	3530.6	2.57	1.000
Earthq.- constr.	390.3	-3.26	0.0	2.56	1.000
FF resistance	-138.4	-0.77	0.2	-0.25	1.000
Weight - earth wedge	0.0	-1.31	28.2	5.67	1.000
Earthquake - soil wedge	3.1	-1.31	0.0	5.67	1.000
Weight - earth wedge	0.0	-4.13	451.6	4.10	1.000
Earthquake - soil wedge	49.7	-4.13	0.0	4.10	1.000
Weight - earth wedge	0.0	-8.40	132.9	2.43	1.000
Earthquake - soil wedge	14.6	-8.40	0.0	2.43	1.000
Active pressure	1516.7	-2.96	1760.6	4.97	1.000