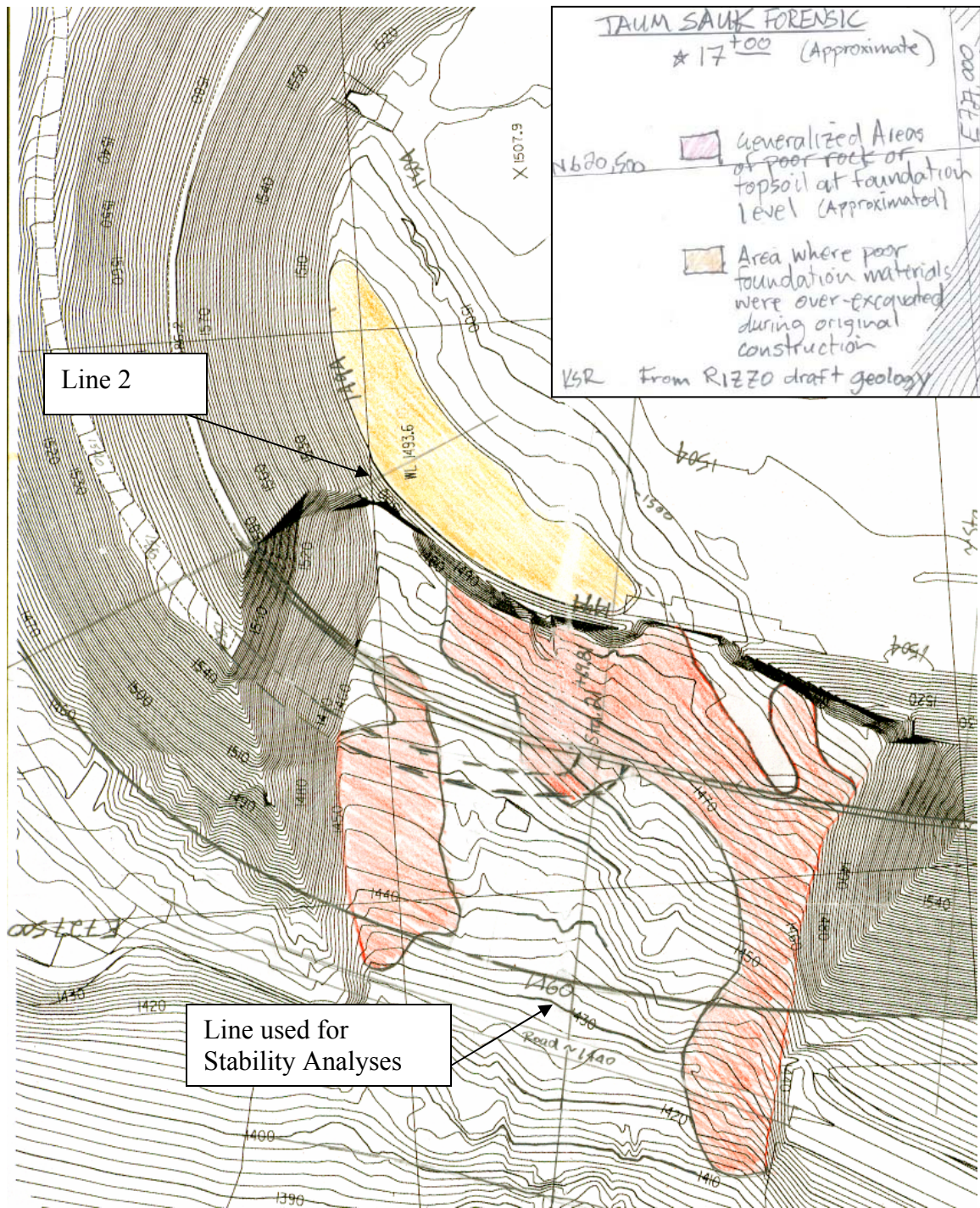


## **Appendix D. Stability Analyses**



**Figure D.1- Taum Sauk Forensic Reconstruction**

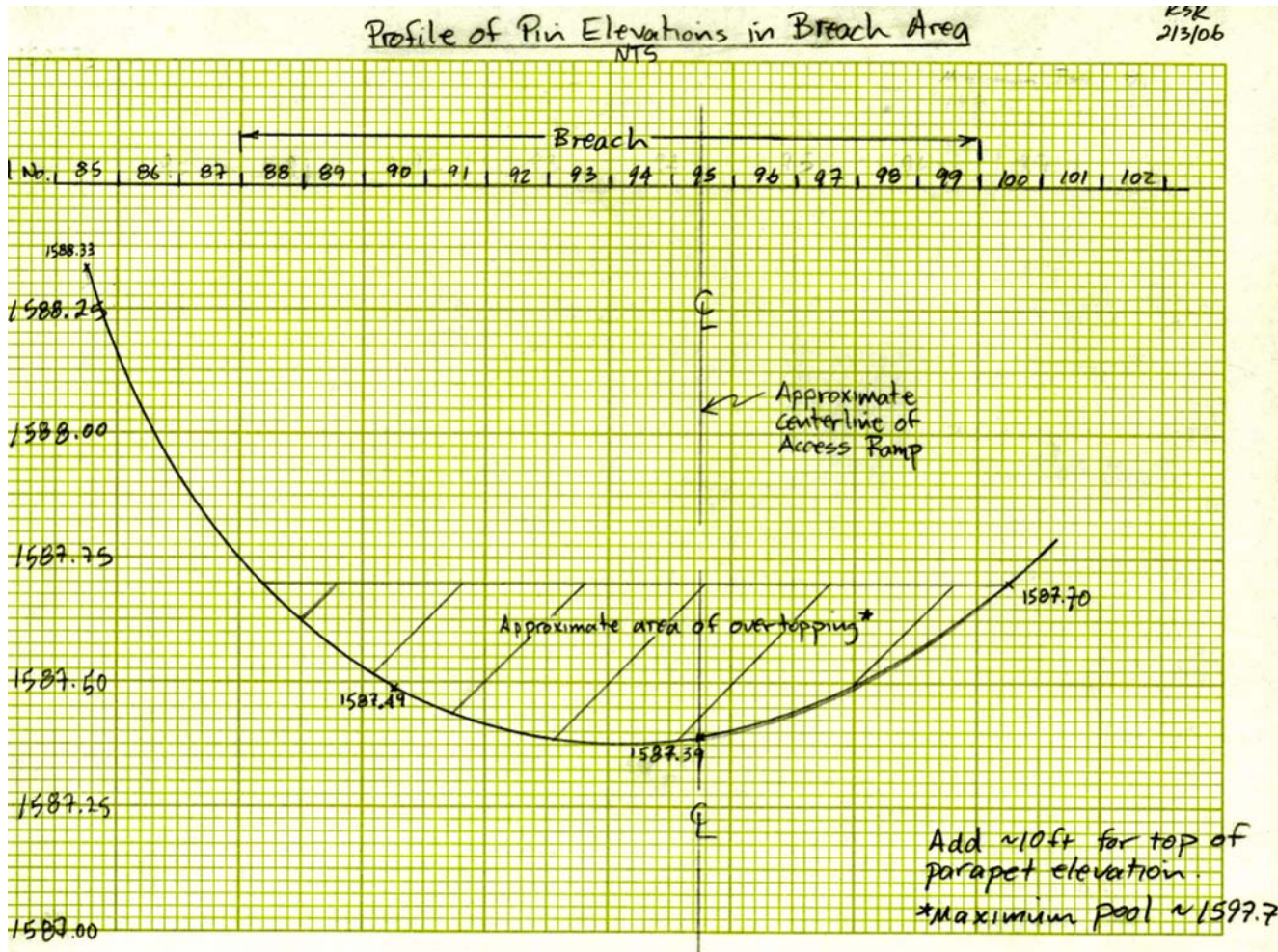


Figure D.2 - Vertical curve in the area of the breach. Approximate extent of overtopping is hatched.

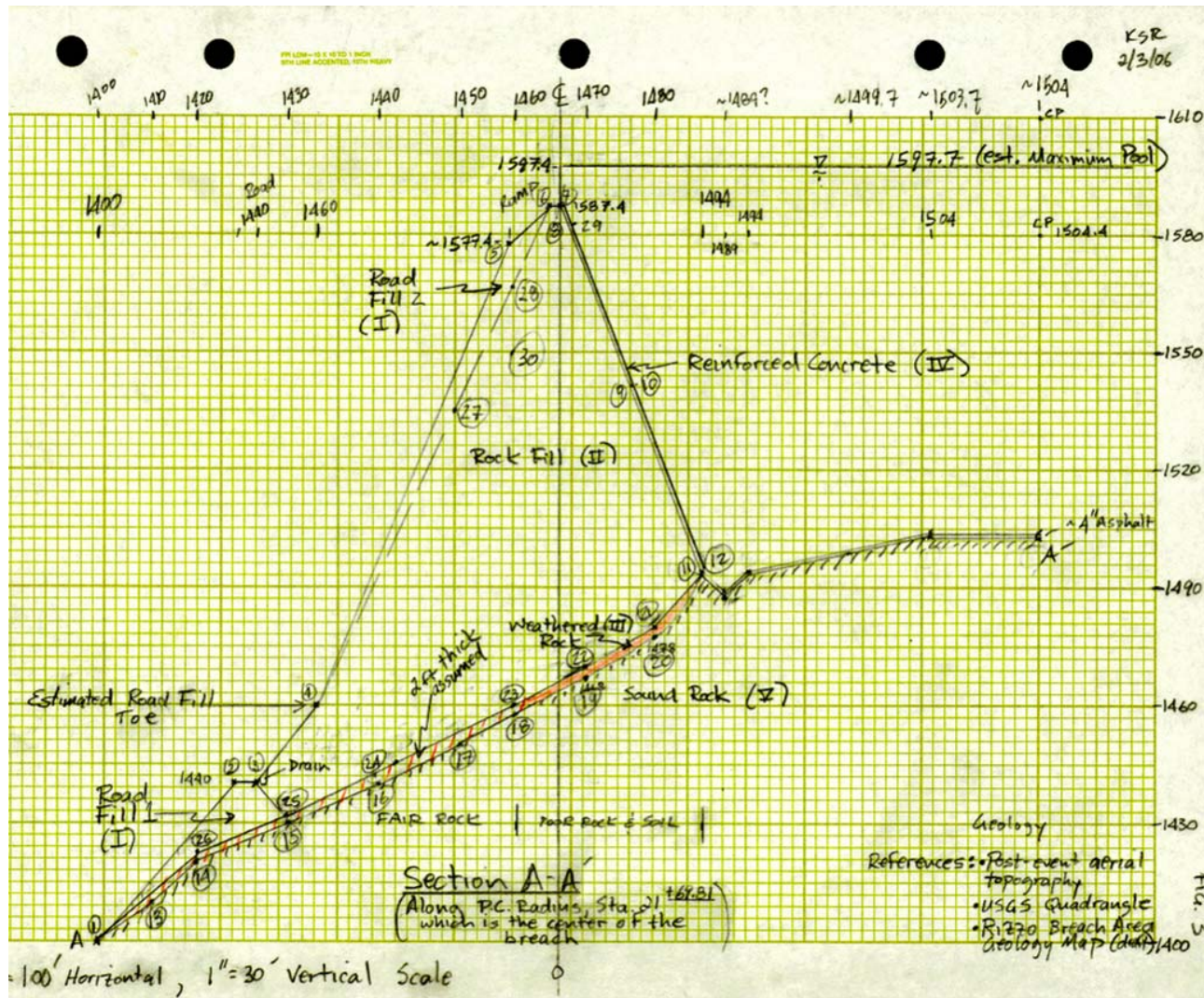
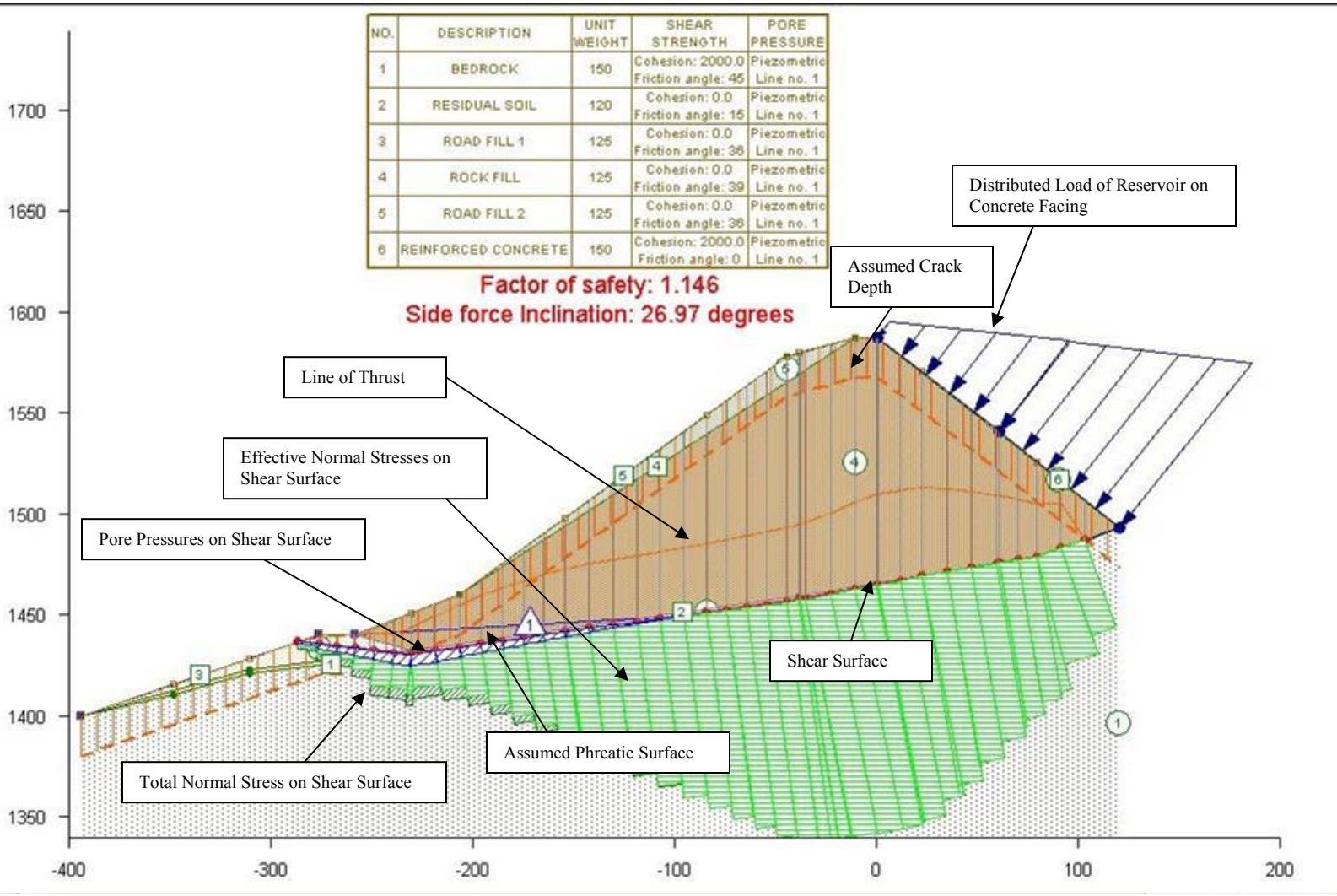


Figure D.3 - Zones selected for model parameters.



**Figure D.4 - Trial 1a, and Key for other figures.**

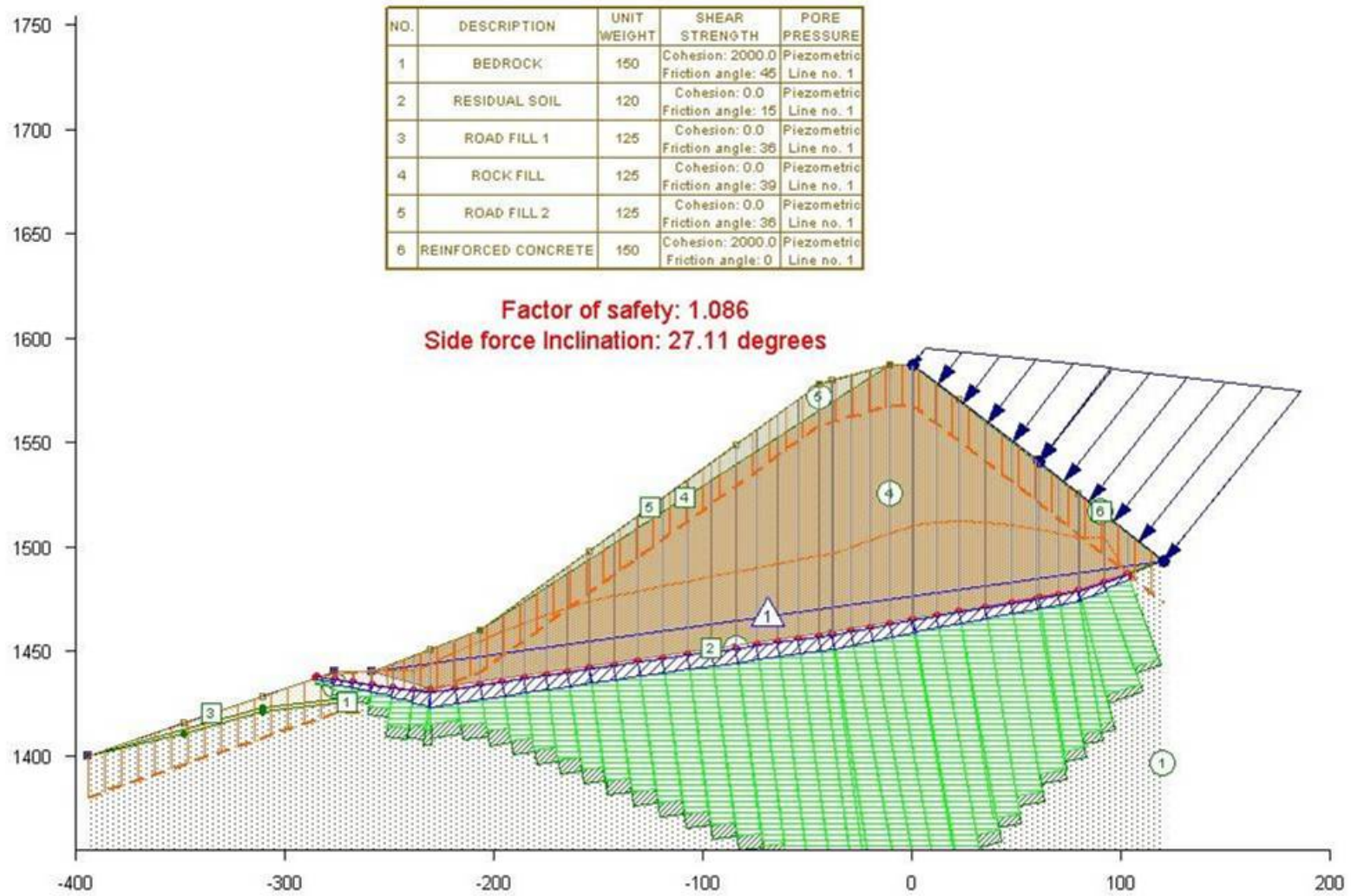


Figure D.5 - Trial 1b

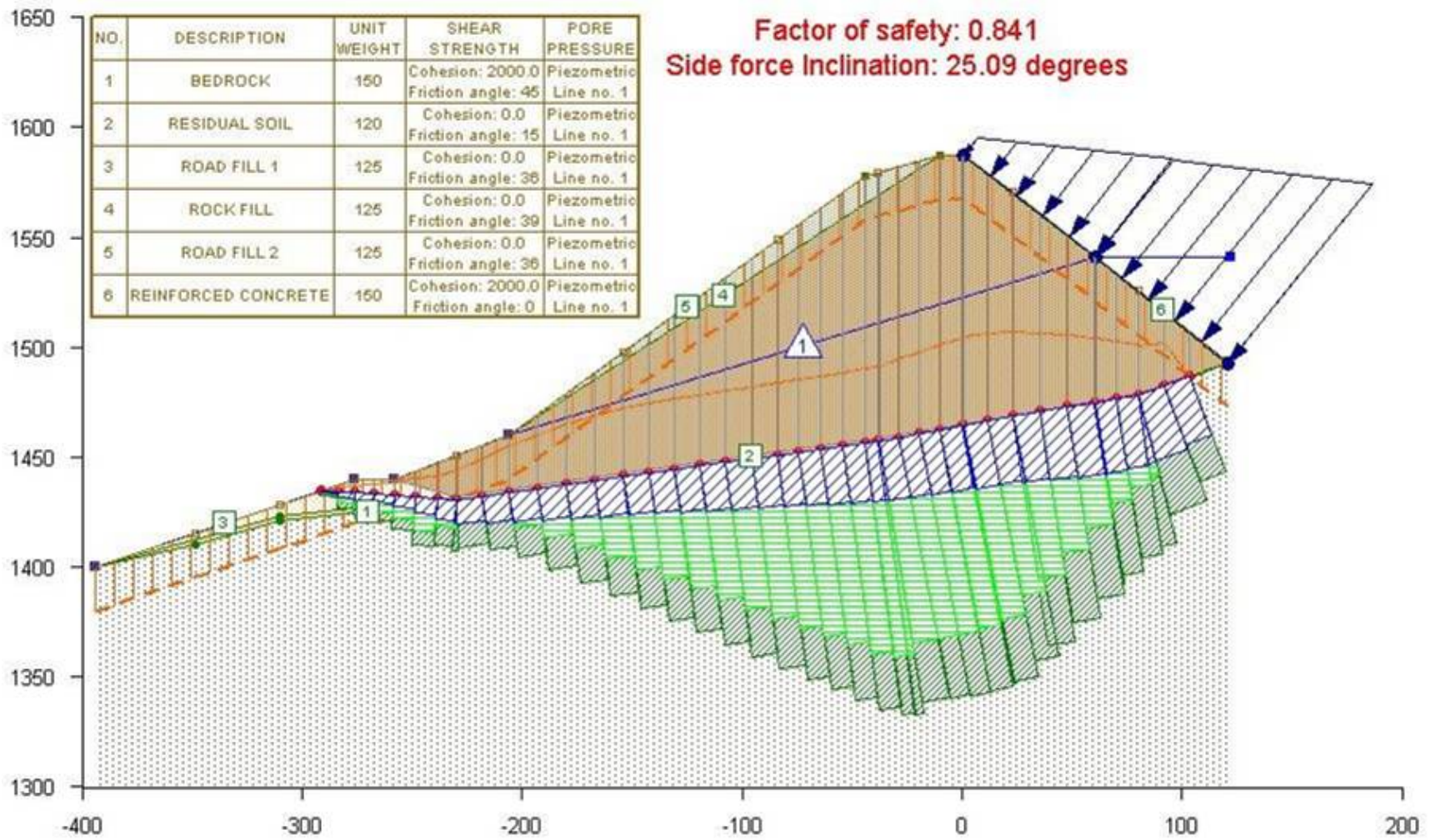


Figure D.6 - Trial 1c

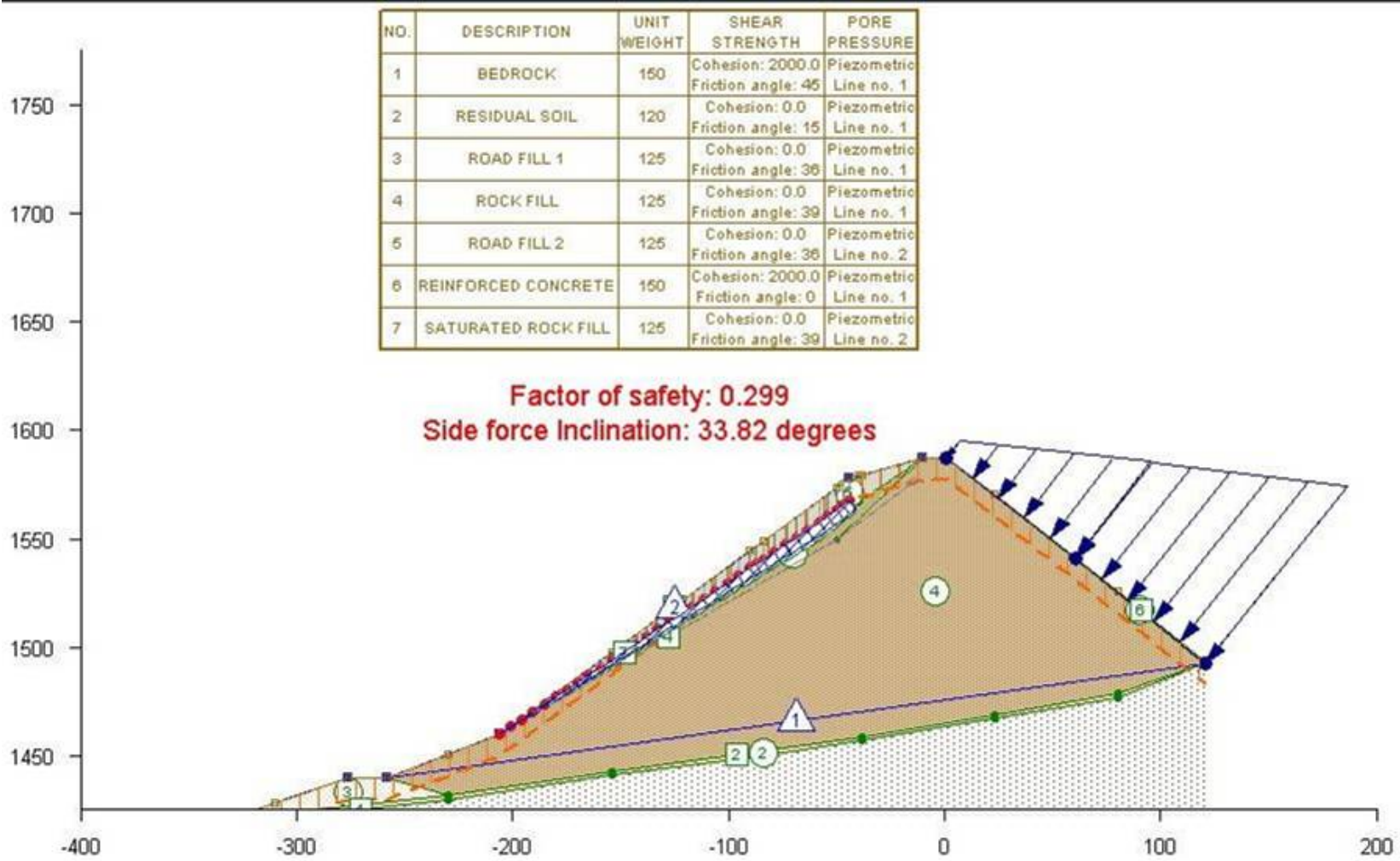


Figure D.7 - Trial 1d





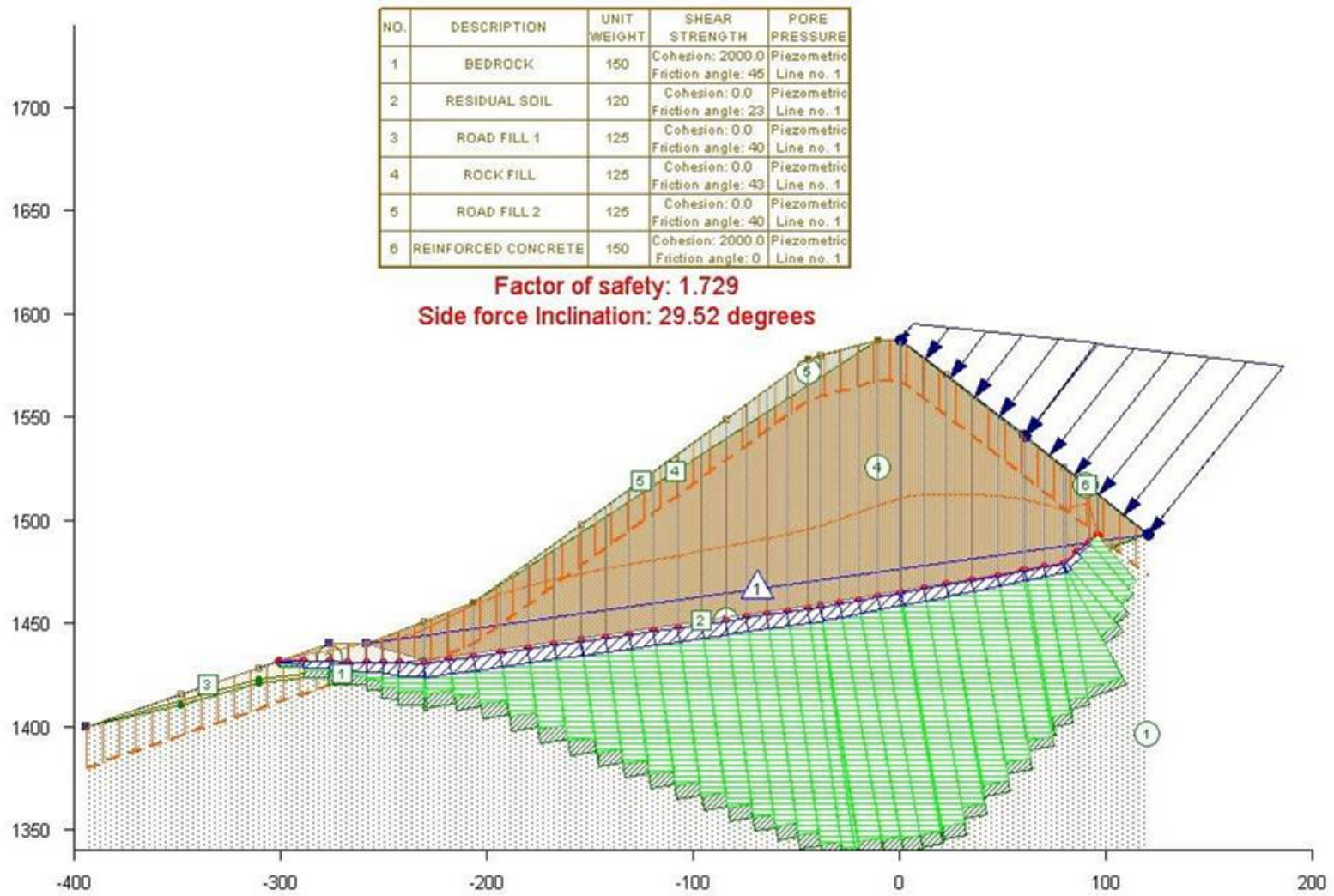


Figure D.9 - Trial 2b

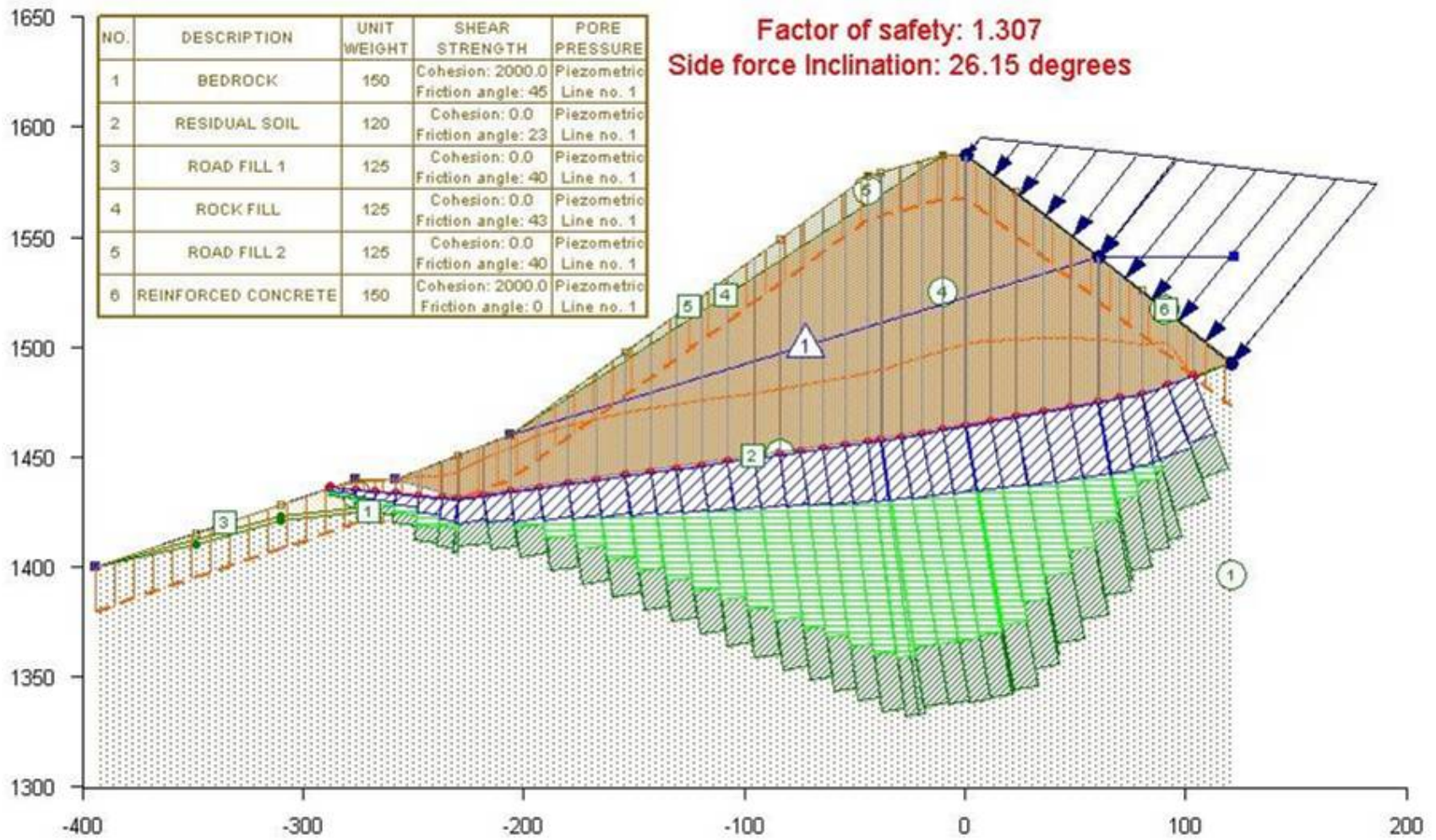


Figure D.10 - Trial 2c

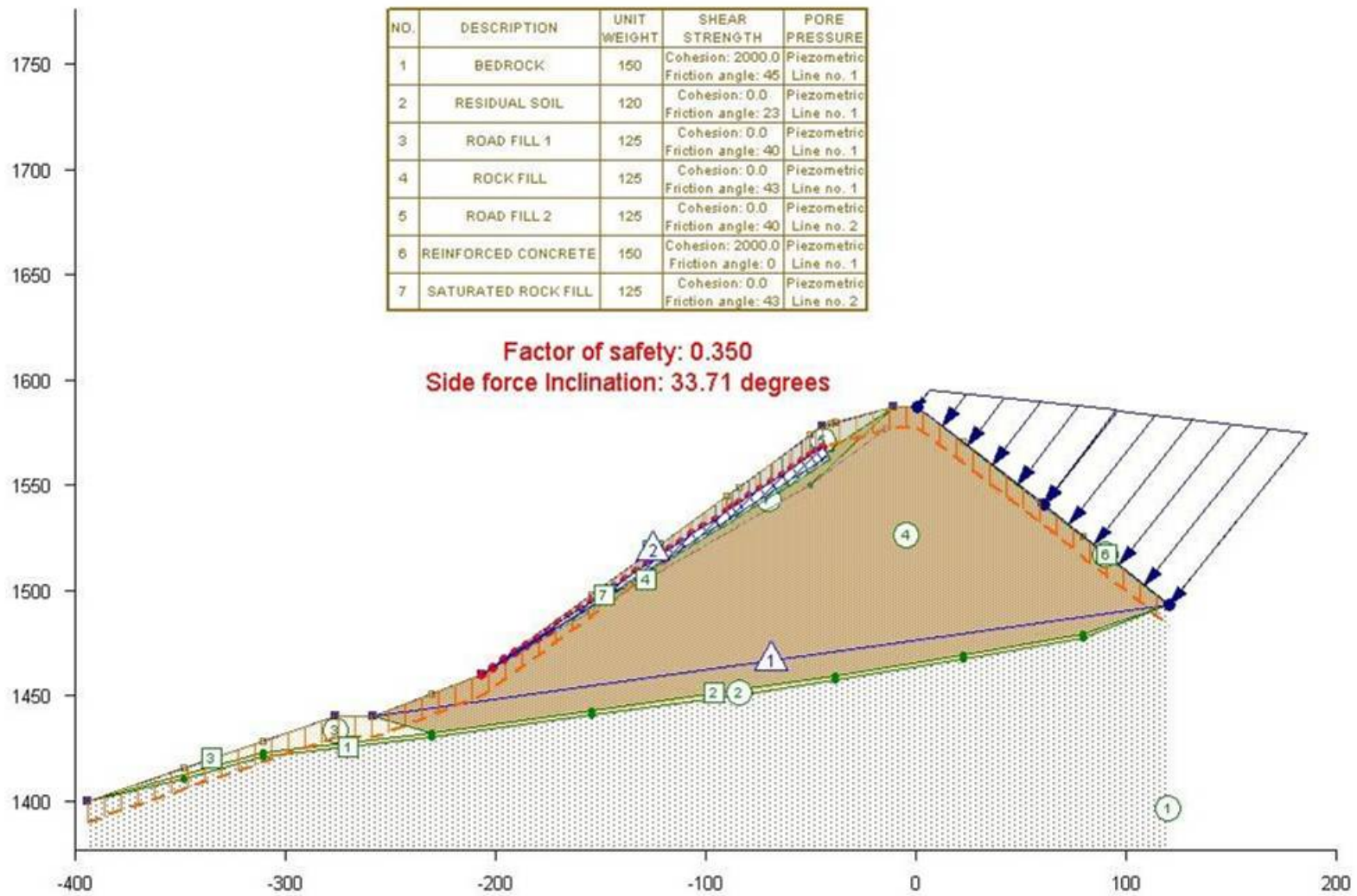


Figure D.11 - Trial 2d

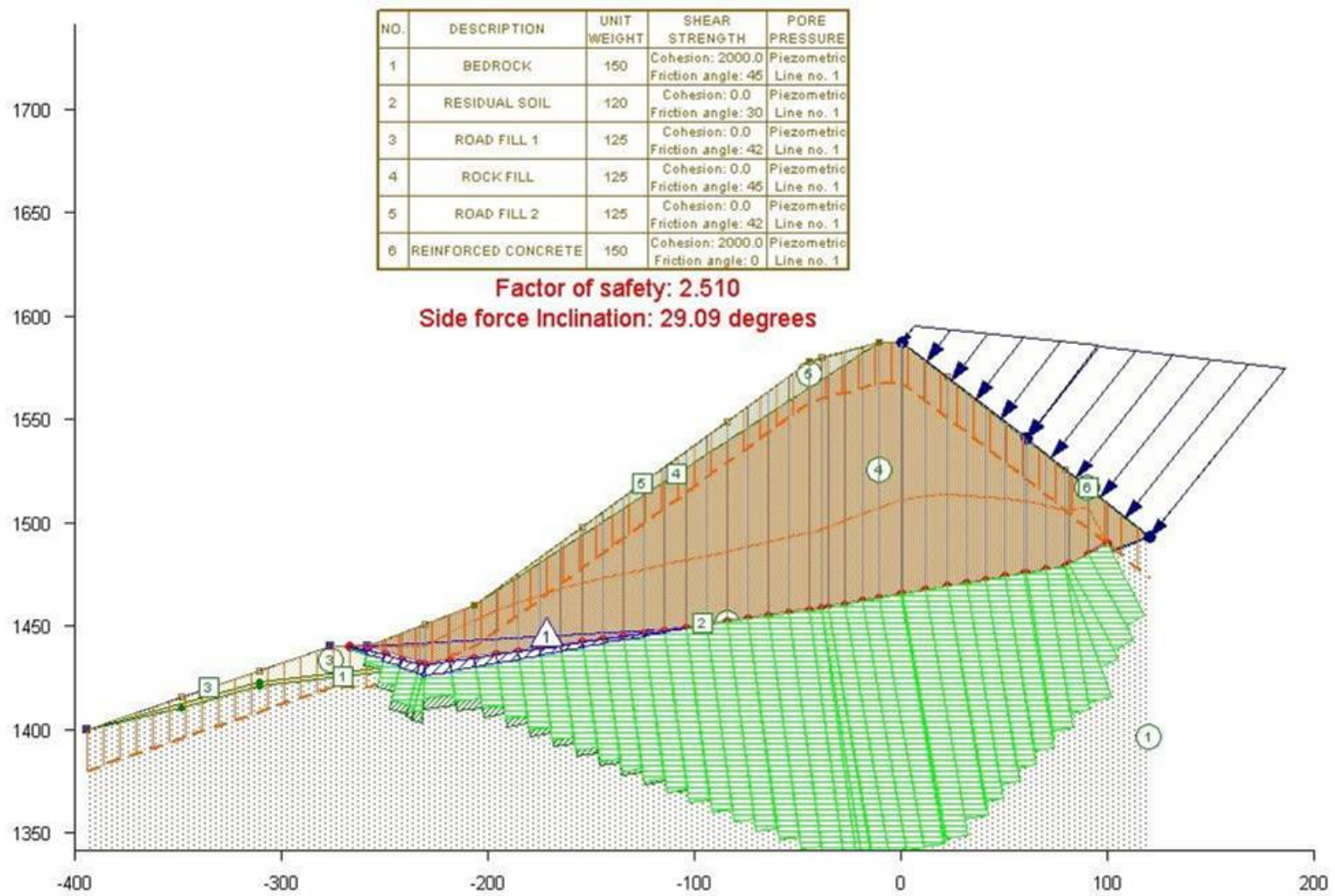


Figure D.12 - Trial 3a

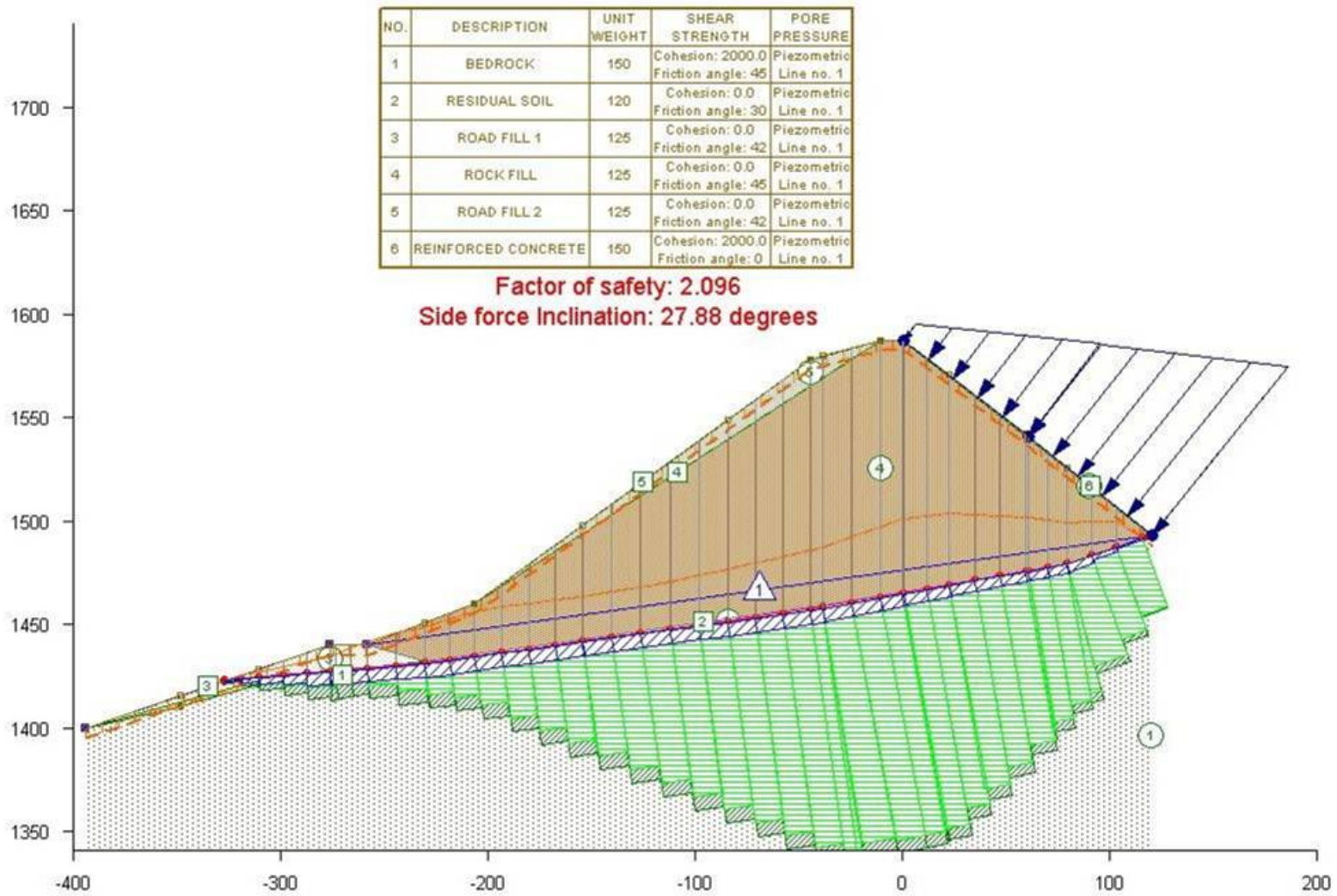


Figure D.13 - Trial 3b

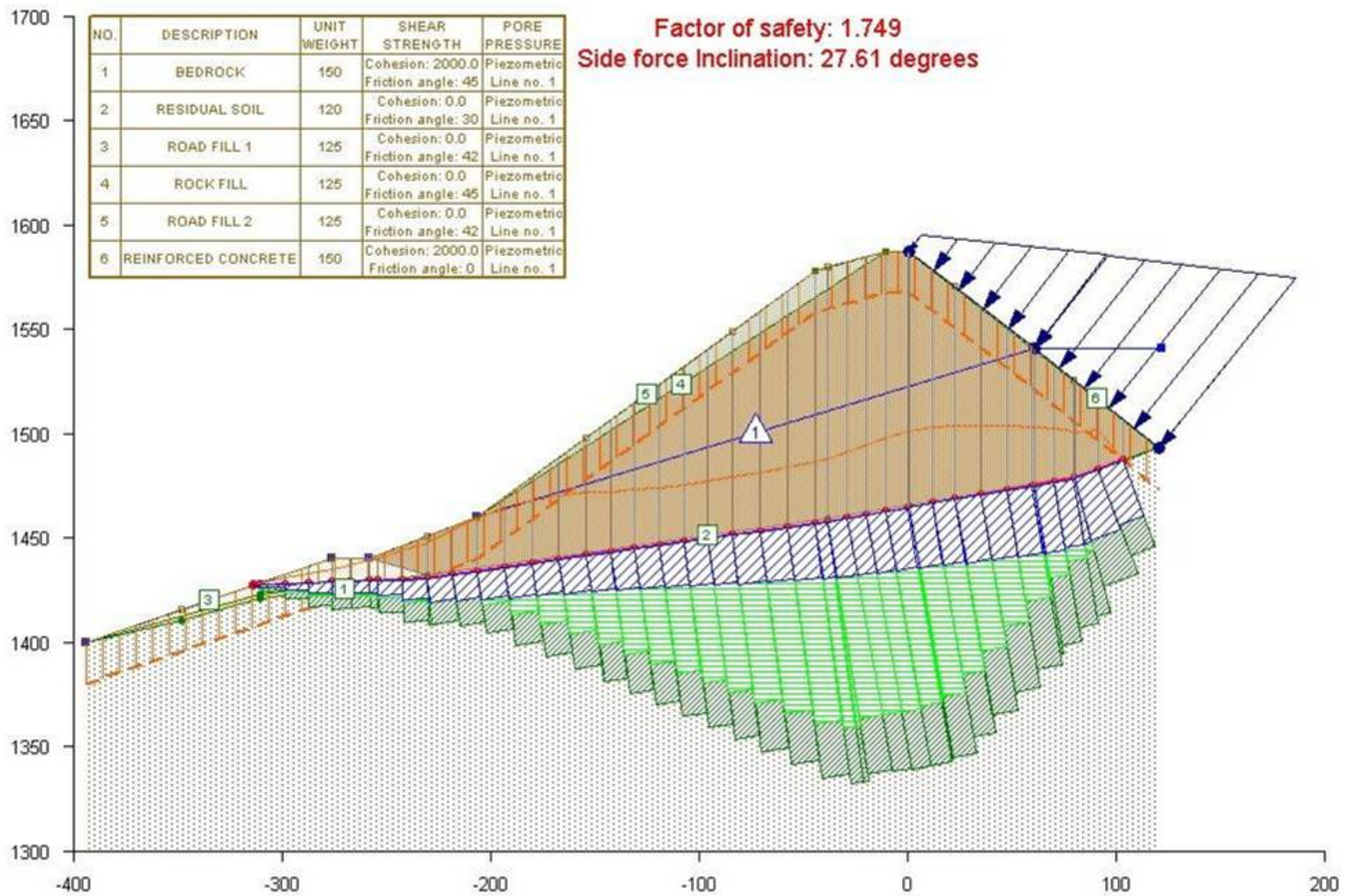
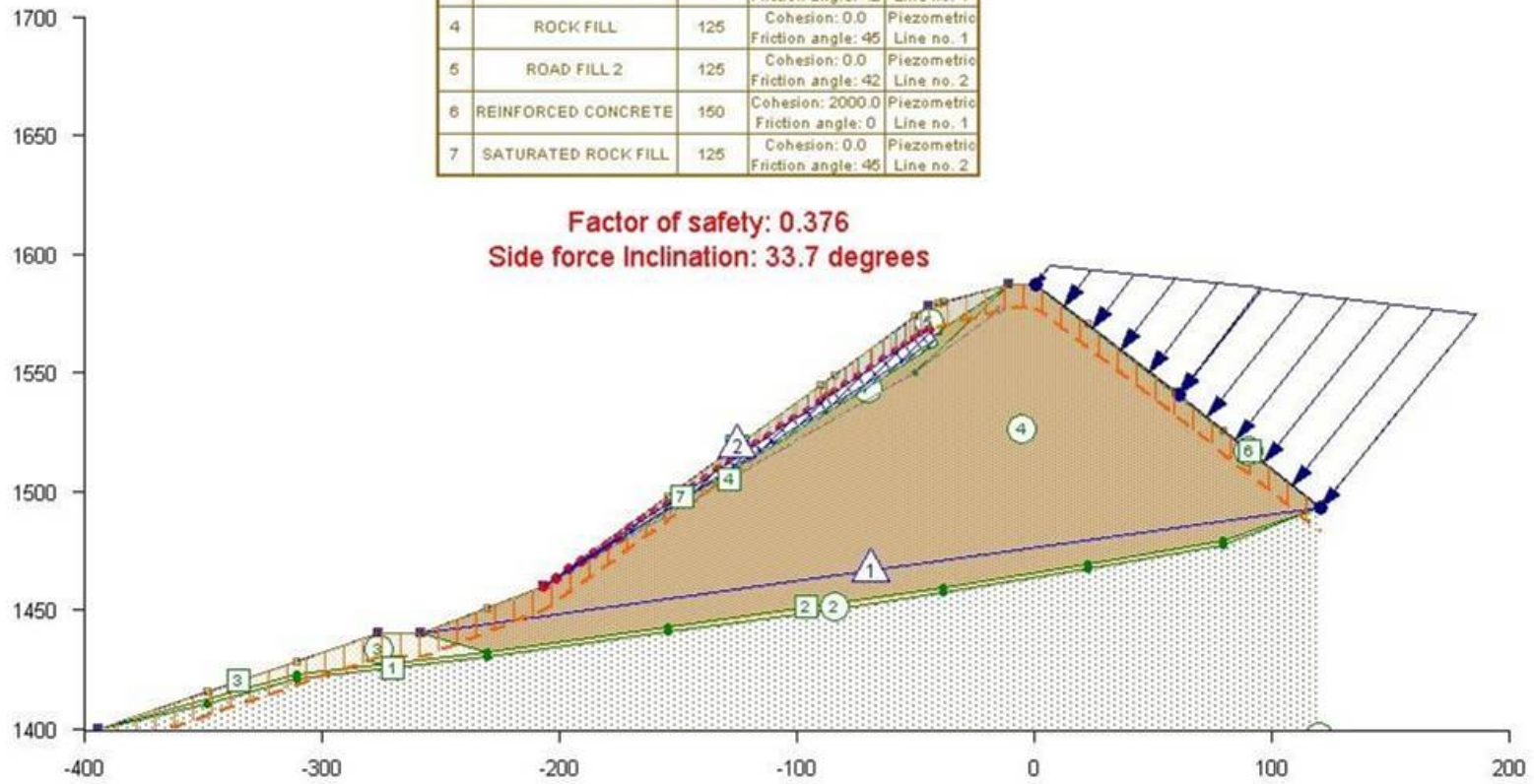


Figure D.14 - Trial 3c

NO.	DESCRIPTION	UNIT WEIGHT	SHEAR STRENGTH	PORE PRESSURE
1	BEDROCK	150	Cohesion: 2000.0 Friction angle: 45	Piezometric Line no. 1
2	RESIDUAL SOIL	120	Cohesion: 0.0 Friction angle: 30	Piezometric Line no. 1
3	ROAD FILL 1	125	Cohesion: 0.0 Friction angle: 42	Piezometric Line no. 1
4	ROCK FILL	125	Cohesion: 0.0 Friction angle: 45	Piezometric Line no. 1
5	ROAD FILL 2	125	Cohesion: 0.0 Friction angle: 42	Piezometric Line no. 2
6	REINFORCED CONCRETE	150	Cohesion: 2000.0 Friction angle: 0	Piezometric Line no. 1
7	SATURATED ROCK FILL	125	Cohesion: 0.0 Friction angle: 45	Piezometric Line no. 2



**Figure D.15 - Trial 3d**



NO.	DESCRIPTION	UNIT WEIGHT	SHEAR STRENGTH	PORE PRESSURE
1	BEDROCK	150	Cohesion: 2000.0 Friction angle: 45	Piezometric Line no. 1
2	RESIDUAL SOIL	120	Cohesion: 0.0 Friction angle: 20	Piezometric Line no. 1
3	ROAD FILL 1	125	Cohesion: 0.0 Friction angle: 40	Piezometric Line no. 1
4	ROCK FILL	125	Cohesion: 0.0 Friction angle: 43	Piezometric Line no. 1
5	ROAD FILL 2	125	Cohesion: 0.0 Friction angle: 40	Piezometric Line no. 1
6	REINFORCED CONCRETE	150	Cohesion: 2000.0 Friction angle: 0	Piezometric Line no. 1
7	SATURATED ROCK FILL	125	Cohesion: 0.0 Friction angle: 43	Piezometric Line no. 1

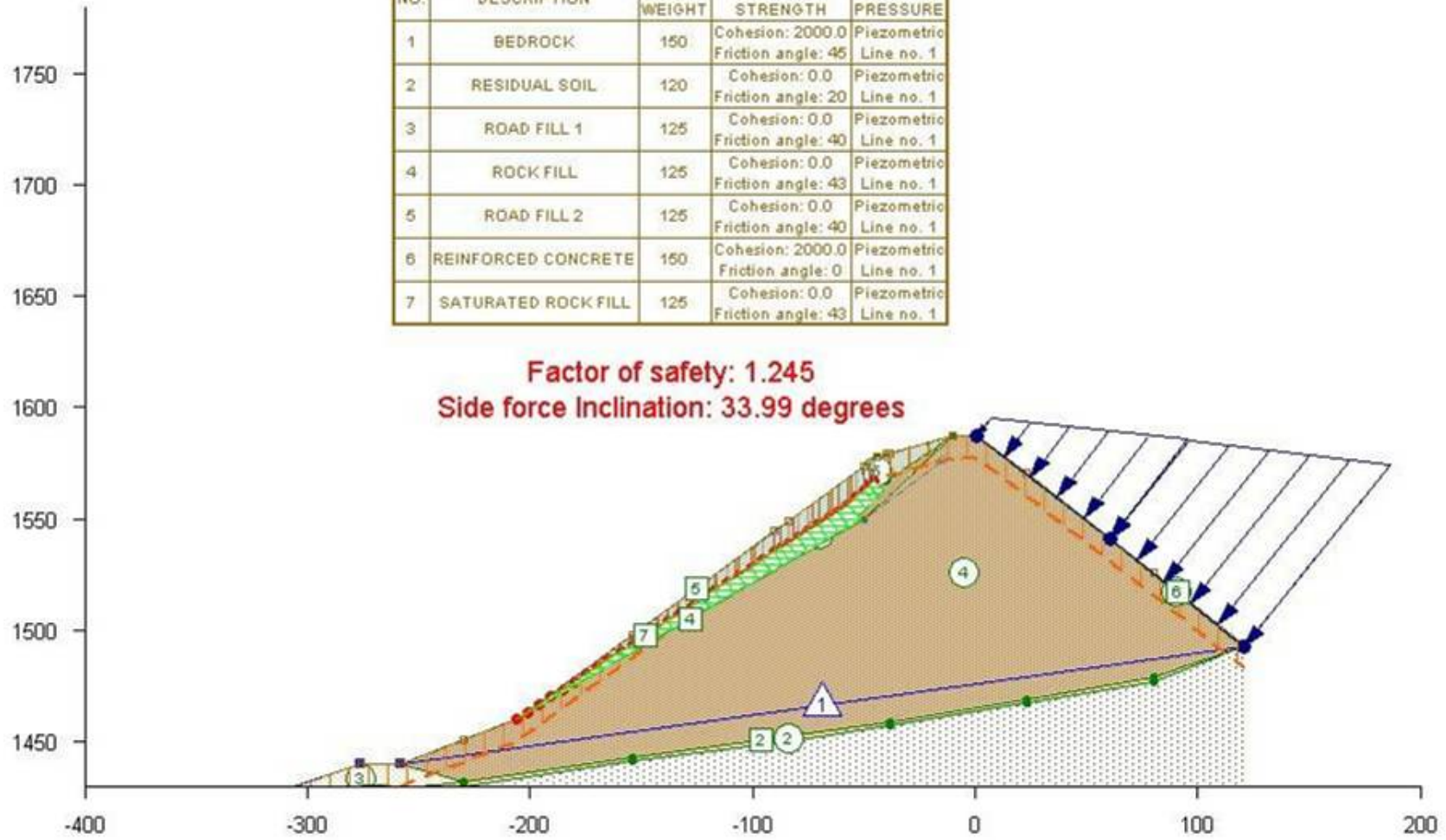


Figure D.16 - Trial 4

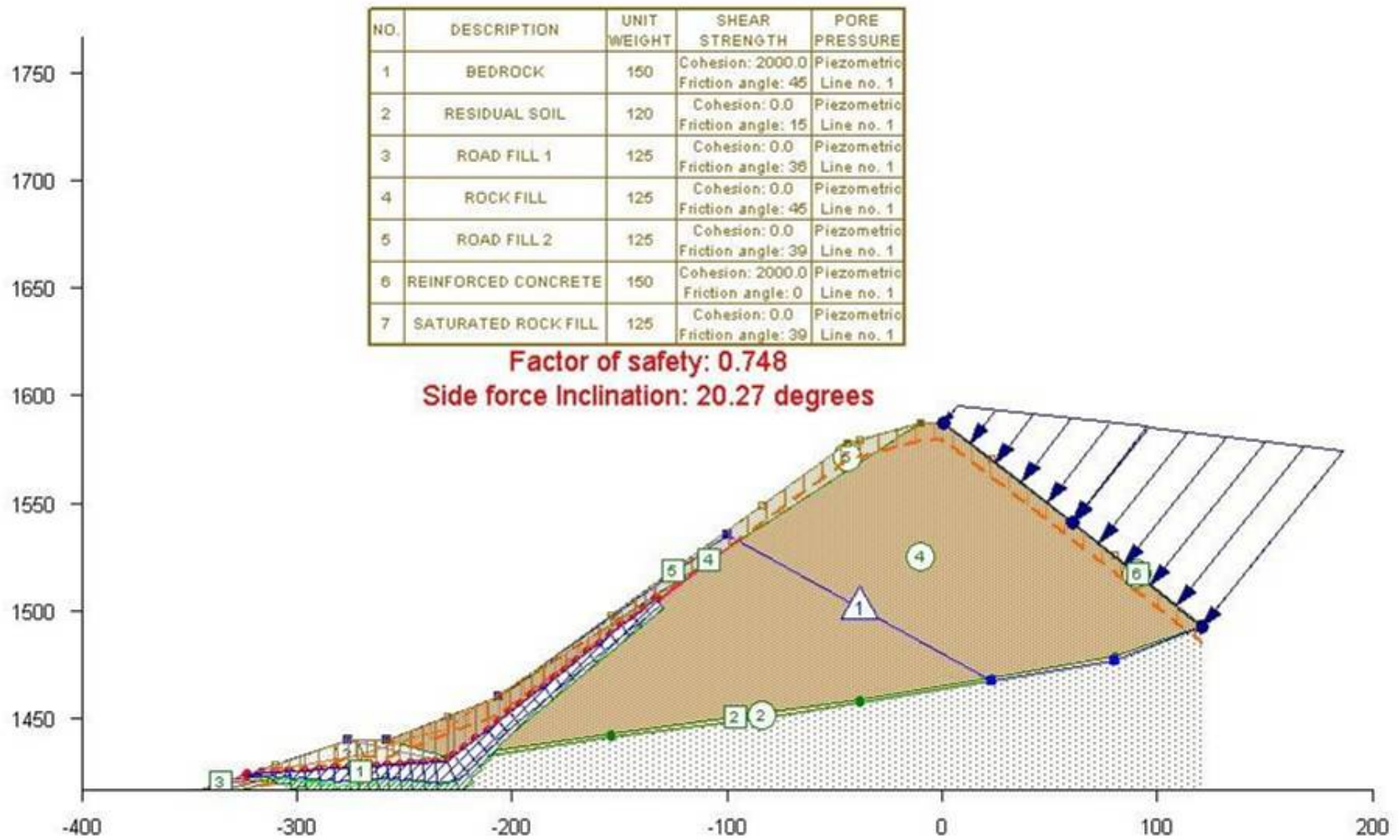


Figure D.17 - Trial 5

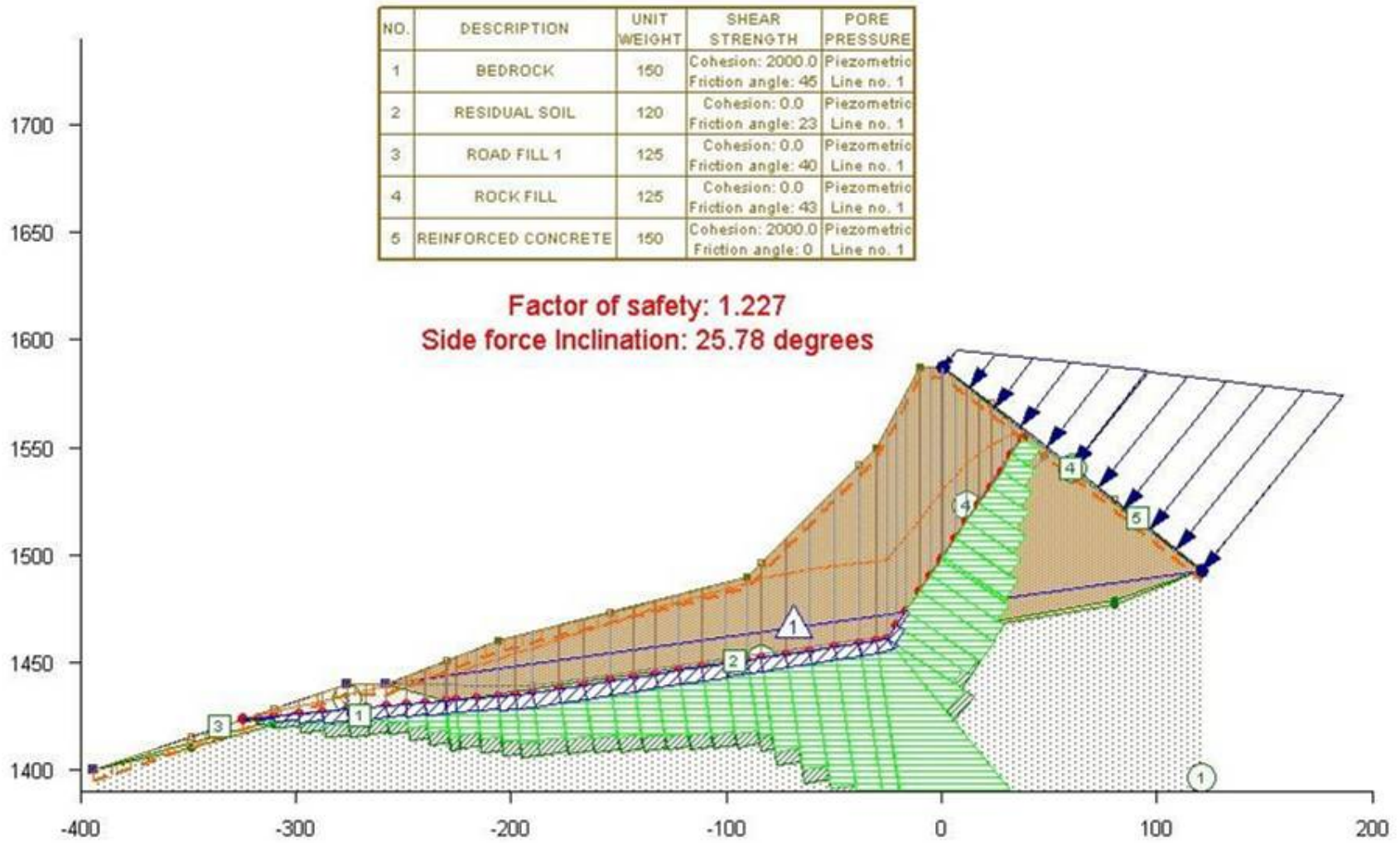


Figure D.18 - Trial 6