

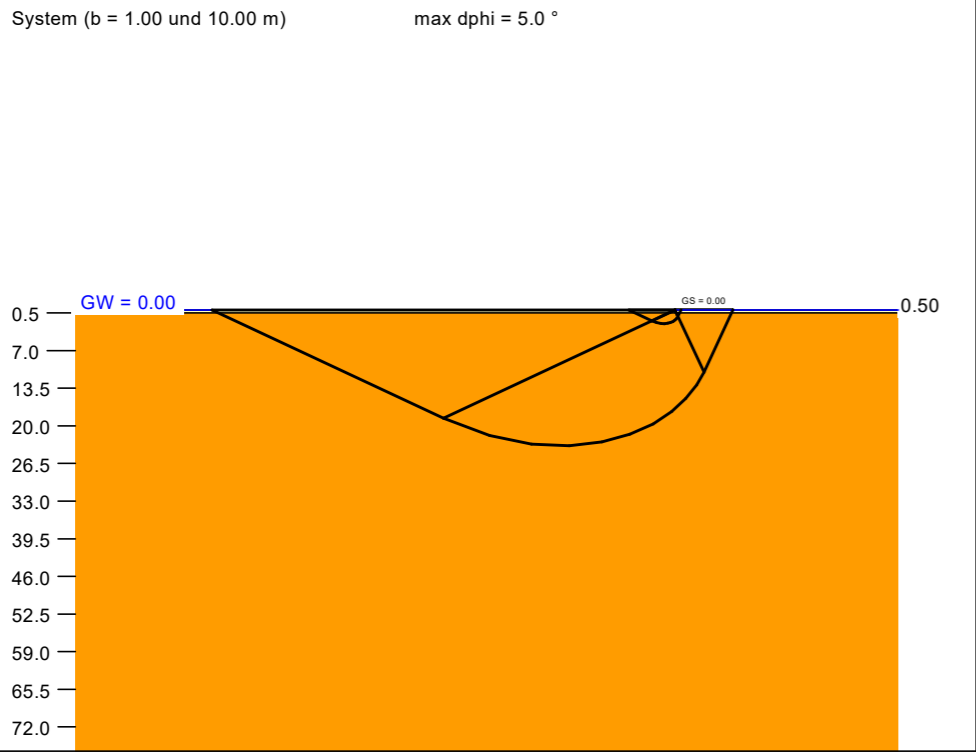
Dipl.- Geol. F. Ohin-GmbH
Achenweg 3
83101 Rohrdorf
08032/91220

Ainring
Ulrichshögeler Straße 2
Bodenplatte

AZ:22-09-10

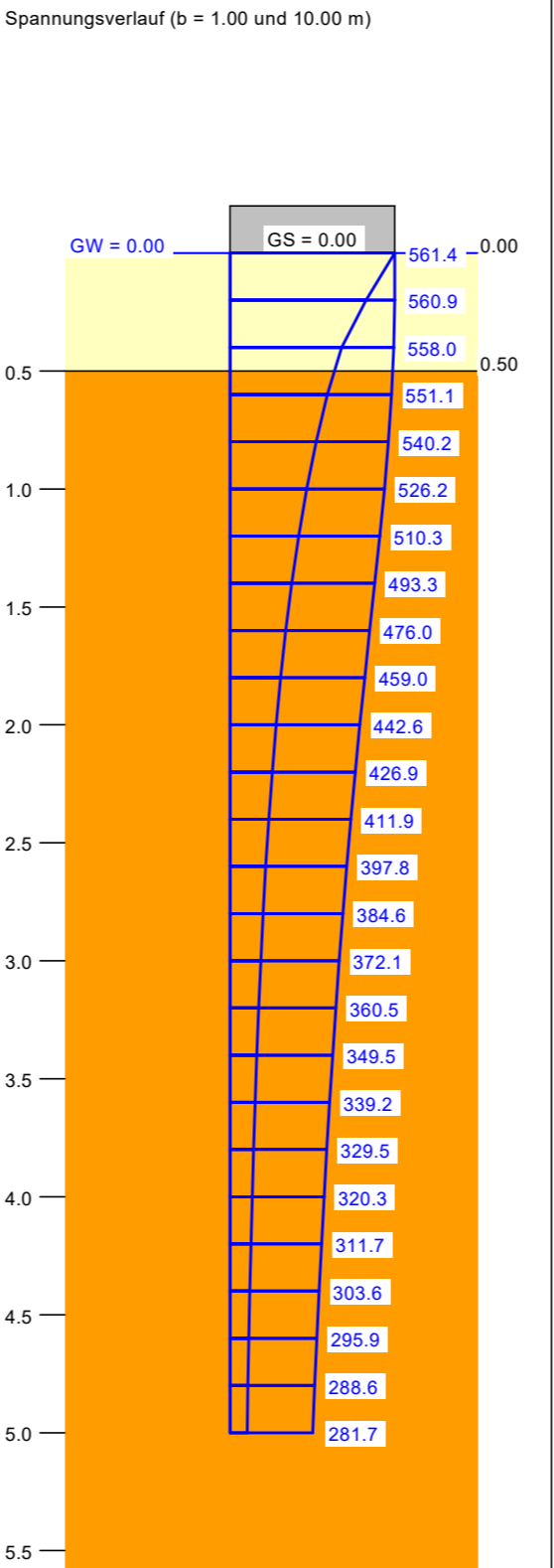
Anlage 3.1

Boden	γ [kN/m³]	γ' [kN/m³]	φ [°]	c [kN/m²]	E_s [MN/m²]	ν [-]	Bezeichnung
	20.0	10.0	35.0	0.0	80.0	0.00	Kieskofer
	22.0	12.0	45.0	0.0	150.0	0.00	Sandstein



a [m]	b [m]	$\sigma_{R,d}$ [kN/m²]	$R_{n,d}$ [kN/m]	$\sigma_{E,k}$ [kN/m²]	s [cm]	cal φ [°]	cal c [kN/m²]	γ_2 [kN/m³]	$\sigma_{\dot{U}}$ [kN/m²]	t_g [m]	UK LS [m]
20.00	1.00	418.0	418.0	293.4	0.33 *	39.9 **	0.00	11.37	0.00	5.00	2.34
20.00	1.50	636.1	954.1	446.4	0.64 *	39.9 **	0.00	11.57	0.00	5.00	3.52
20.00	2.00	800.0	1600.0	561.4	0.93 *	40.0 **	0.00	11.68	0.00	5.00	4.70
20.00	2.50	800.0	2000.0	561.4	1.02 *	40.0 **	0.00	11.74	0.00	5.00	5.87
20.00	3.00	800.0	2400.0	561.4	1.09 *	39.9 **	0.00	11.78	0.00	5.00	7.03
20.00	3.50	800.0	2800.0	561.4	1.14 *	40.0 **	0.00	11.81	0.00	5.00	8.22
20.00	4.00	800.0	3200.0	561.4	1.19 *	39.9 **	0.00	11.83	0.00	5.00	9.37
20.00	4.50	800.0	3600.0	561.4	1.23 *	39.9 **	0.00	11.85	0.00	5.00	10.55
20.00	5.00	800.0	4000.0	561.4	1.27 *	39.9 **	0.00	11.87	0.00	5.00	11.73
20.00	5.50	800.0	4400.0	561.4	1.30 *	40.0 **	0.00	11.88	0.00	5.00	12.91
20.00	6.00	800.0	4800.0	561.4	1.32 *	40.0 **	0.00	11.89	0.00	5.00	14.09
20.00	6.50	800.0	5200.0	561.4	1.35 *	40.0 **	0.00	11.90	0.00	5.00	15.27
20.00	7.00	800.0	5600.0	561.4	1.37 *	40.0 **	0.00	11.91	0.00	5.00	16.45
20.00	7.50	800.0	6000.0	561.4	1.39 *	40.0 **	0.00	11.91	0.00	5.00	17.63
20.00	8.00	800.0	6400.0	561.4	1.41 *	39.9 **	0.00	11.92	0.00	5.00	18.73
20.00	8.50	800.0	6800.0	561.4	1.43 *	39.9 **	0.00	11.92	0.00	5.00	19.91
20.00	9.00	800.0	7200.0	561.4	1.44 *	39.9 **	0.00	11.93	0.00	5.00	21.08
20.00	9.50	800.0	7600.0	561.4	1.46 *	39.9 **	0.00	11.93	0.00	5.00	22.26
20.00	10.00	800.0	8000.0	561.4	1.47 *	39.9 **	0.00	11.93	0.00	5.00	23.43

* Vorbelastung = 30.0 kN/m²
** phi wegen 5° Bedingung abgemindert
 $\sigma_{E,k} = \sigma_{of,k} / (\gamma_{R,v} \cdot \gamma_{(G,Q)}) = \sigma_{of,k} / (1.40 \cdot 1.43) = \sigma_{of,k} / 1.99$ (für Setzungen)
Verhältnis Veränderliche(Q)/Gesamtlasten(G+Q) [-] = 0.50



Berechnungsgrundlagen:
Norm: EC 7
BS: DIN 1054: BS-P
Grundbruchformel nach DIN 4017:2006
Teilsicherheitskonzept (EC 7)
Streifenfundament (a = 20.00 m)
 $\gamma_{R,v} = 1.40$
 $\gamma_G = 1.35$
 $\gamma_Q = 1.50$
Anteil Veränderliche Lasten = 0.500

$\gamma_{(G,Q)} = 0.500 \cdot \gamma_Q + (1 - 0.500) \cdot \gamma_G$
 $\gamma_{(G,Q)} = 1.425$
 $\sigma_{R,d}$ auf 800.00 kN/m² begrenzt
Gründungssohle = 0.00 m
Grundwasser = 0.00 m
Vorbelastung = 30.0 kN/m²
Grenztiefe mit festem Wert von 5.00 m u. GS

— Sohlbruck
— Setzungen

