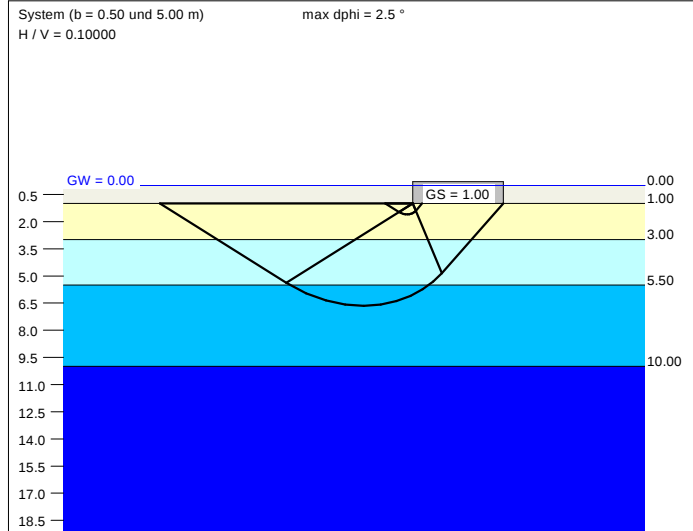


| Boden | $\gamma$<br>[kN/m³] | $\gamma'$<br>[kN/m³] | $\phi$<br>[°] | c<br>[kN/m²] | $E_s$<br>[MN/m²] | $\nu$<br>[-] | Bezeichnung     |
|-------|---------------------|----------------------|---------------|--------------|------------------|--------------|-----------------|
|       | 17.0                | 9.0                  | 25.0          | 0.0          | 4.0              | 0.00         | Auffüllung      |
|       | 19.5                | 9.5                  | 27.5          | 4.0          | 60.0             | 0.00         | Polster         |
|       | 19.5                | 9.5                  | 24.0          | 6.0          | 8.0              | 0.00         | Beckenschluff   |
|       | 21.0                | 11.0                 | 26.5          | 10.0         | 25.0             | 0.00         | Geschiebemergel |
|       | 21.0                | 11.0                 | 28.0          | 12.0         | 40.0             | 0.00         | Geschiebemergel |

Berechnungsgrundlagen:  
A 14, Stendal, BW 52A  
Norm: EC 7  
Grundbruchformel nach DIN 4017:2006  
Teilsicherheitskonzept (EC 7)  
Streifenfundament (a = 10.00 m)  
 $\gamma_{Gr} = 1.40$   
 $\gamma_G = 1.35$   
 $\gamma_Q = 1.50$

$\gamma_{(G,Q)} = 0.400 \cdot \gamma_Q + (1 - 0.400) \cdot \gamma_G$   
 $\gamma_{(G,Q)} = 1.410$   
Anteil Veränderliche Lasten = 0.400  
H/V = 0.1000  
Gründungssohle = 1.00 m  
Grundwasser = 0.00 m  
Grenztiefe mit p = 20.0 %  
Grenztiefen spannungsvariabel bestimmt  
— Sohldruck



| a<br>[m] | b<br>[m] | $\sigma_{R,d}$<br>[kN/m²] | $R_{n,d}$<br>[kN/m] | $\sigma_{E,k}$<br>[kN/m²] | s<br>[cm] | cal $\phi$<br>[°] | cal c<br>[kN/m²] | $\gamma_2$<br>[kN/m³] | $\sigma_{\bar{u}}$<br>[kN/m²] | $t_g$<br>[m] | UK LS<br>[m] |
|----------|----------|---------------------------|---------------------|---------------------------|-----------|-------------------|------------------|-----------------------|-------------------------------|--------------|--------------|
| 10.00    | 0.50     | 156.9                     | 78.4                | 111.2                     | 0.31      | 27.5              | 4.00             | 9.50                  | 9.00                          | 4.30         | 1.60         |
| 10.00    | 1.00     | 176.9                     | 176.9               | 125.4                     | 0.82      | 27.5              | 4.00             | 9.50                  | 9.00                          | 5.82         | 2.20         |
| 10.00    | 1.50     | 196.4                     | 294.6               | 139.3                     | 1.31      | 27.5              | 4.00             | 9.50                  | 9.00                          | 7.00         | 2.80         |
| 10.00    | 2.00     | 200.9                     | 401.8               | 142.5                     | 1.68      | 26.5              | 4.58             | 9.50                  | 9.00                          | 7.83         | 3.31         |
| 10.00    | 2.50     | 208.9                     | 522.4               | 148.2                     | 2.06      | 26.0              | 4.87             | 9.50                  | 9.00                          | 8.61         | 3.84         |
| 10.00    | 3.00     | 218.1                     | 654.4               | 154.7                     | 2.44      | 25.7              | 5.05             | 9.50                  | 9.00                          | 9.33         | 4.37         |
| 10.00    | 3.50     | 227.5                     | 796.2               | 161.3                     | 2.82      | 25.5              | 5.18             | 9.50                  | 9.00                          | 10.00        | 4.90         |
| 10.00    | 4.00     | 236.8                     | 947.3               | 168.0                     | 3.16      | 25.3              | 5.28             | 9.50                  | 9.00                          | 10.63        | 5.43         |
| 10.00    | 4.50     | 282.5                     | 1271.1              | 200.3                     | 4.06      | 25.8              | 6.41             | 9.55                  | 9.00                          | 11.84        | 6.06         |
| 10.00    | 5.00     | 308.1                     | 1540.6              | 218.5                     | 4.69      | 25.9              | 6.86             | 9.63                  | 9.00                          | 12.68        | 6.65         |

$\sigma_{E,k} = \sigma_{G,k} / (\gamma_{Gr} \cdot \gamma_{(G,Q)}) = \sigma_{G,k} / (1.40 \cdot 1.41) = \sigma_{G,k} / 1.97$  (für Setzungen)  
Verhältnis Veränderliche(Q)/Gesamtlasten(G+Q) [-] = 0.40

