

$$C = 1,32 + \frac{2,20 \cdot 1,40}{3,00} + \frac{1,88 \cdot 0,90 \cdot 2,55}{3,00} = \frac{1,47 - 1,06}{3,00}$$

$$= 1,32 + 1,03 + 1,44 = 0,14 \cdot 3,65 \text{ nP/m}$$

$$C_{(\max)} = 1,32 + 1,03 + 1,44 = \frac{1,44 - 1,49}{3,00} = 3,71 \text{ nP/m}$$

Feldmomente:

$$M_1 = \frac{1,11^2}{1,36} = 0,91 \text{ nPm}$$

$$B_r = 2,04 - 0,20 + \frac{1,47 - 1,36}{3,00} = 2,88 \text{ nP/m}$$

$$\frac{2,10}{2,10} = \frac{x}{2} + 0,88x = 2,88$$

$$x^2 + 1,76x = 5,76$$

$$x = -0,88 \pm \sqrt{0,77 + 5,76} = -0,88 + 2,56 = 1,68 \text{ m}$$

$$\left[\frac{2,10}{2,10} \cdot \frac{1,68^2}{2} + 0,88 \cdot 1,68 = 1,41 + 1,48 = 2,89 \right. \\ \left. \approx B_r \right]$$

$$M_2 = 2,88 \cdot 1,68 - \frac{1,41 \cdot 1,68}{3} - \frac{1,48 \cdot 1,68}{2} = 1,47$$

$$= 4,84 - 0,79 - 1,24 = 1,47 = 1,34 \text{ nPm}$$

Bemessung der Pos 16-24: d. 16,0 m

Pos 16: h = 13,5 m

n = 0,37 nPm, fex = 1,20 m

gew. $\bar{b}_{8/20} = 2,50 \text{ m}$ Kreuzweise

geprüft

Pos 17: h = 14,5 m

n = 1,34 nPm

fex = 4,30 m, $\bar{b}_{10/18} = 4,37 \text{ m}$; Zulage

an Rand (Treppenseite) \bar{b}_{10} .

Pos 18: h = 14,5 m

n = 1,34 nPm

Bemessung wie Pos 17.

Pos 19: h = 14,5 m

n = 1,15 nPm

fex = 3,70 m, $\bar{b}_{10/20} = 3,93 \text{ m}$

Pos 20: h_x = 14,5 m, h_y = 13,5 m

n_x = 1,58 nPm, n_y = $\frac{1,46}{1,14} \text{ nPm}$

fex = 5,05 m, $\bar{b}_{10/15} = 5,25 \text{ m}$

fey = $\frac{3,40}{4,65} \text{ m}$, $\bar{b}_{10/25} = \frac{16,5}{8,75} = 3,15 \text{ m}$

Pos 22: h_x = 13,5 m, h_y = 14,5 m

n_x = $\frac{0,67}{0,45} \text{ nPm}$, n_y = 1,18 nPm

fex = $\frac{2,16}{2,50} \text{ m}$, $\bar{b}_{8/20} = 2,50 \text{ m}$

fey = 3,80 m, $\bar{b}_{10/20} = 3,93 \text{ m}$

geprüft