

NAZOV STAVBY: ~~INTERIOVA VERTIKALNA VEGETACIA~~ ~~STENA NA PONOKE KULTURY~~

Miesto stavby: DOM KULTURY LITOVSKÝ MIKULÁŠ

INVESTOR: Mesto Litovský Mikuláš 12.

1. ZATÄZENIE & VETROU

STENOU

Oblasť N.

$$U_{bo} = 24,0 \text{ m/s}$$

$$H_{max} = 11,40$$

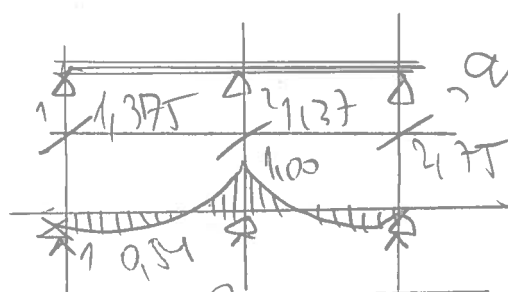
$$C_e = 0,80$$

$$\text{nosník (I)} \quad l_0 =$$

$$q_{\text{ex}} = 1,50 \text{ kN/m}^2$$

$$C_{pe} = 1,50 \times 1,35 = 2,00 \quad (\text{kN/m}^2)$$

$$q_{in} = 0,45 \text{ kN/m}^2$$

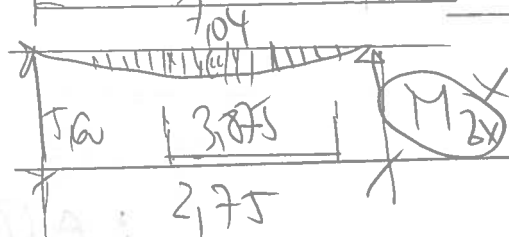


$$q_{\text{ex}} = 2,00 \times 2,0 + 0,10 = 4,10 \text{ (kN/m)}$$

POSUDENIE:

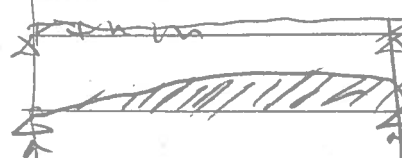
$$M_{\text{max}} = 3,01 \text{ kNm}$$

$$V_{\text{por}} = 16,10 \text{ (kN)}$$



$$M_{\text{max}} = 1,00$$

$$V_{\text{por}} = 3,100$$



$$q_w = 0,45 \times 0,8 \times 1,5 \times 2,0 = 1,08$$

$$M_{y \text{ max}} = \frac{1}{8} \times 2,75^2 \times 1,08 = 1,02$$

POSUDENIE POKRYVU

$$80/80/5 \quad A = 14,70 \text{ cm}^2$$

$$P_w = 0,57 \times 2,75 \times 1,08 = 1,74 \text{ kN}$$

$$I_y = 1,39 \cdot 10^{-6} \text{ m}^4$$

$$U_y = 34,70 \text{ cm}^2$$

$$i_{\text{cm}} = 3,05 \text{ cm}$$

14HOUSE 80/80/5

$$\sigma_{\text{max}} = \frac{0,00390}{0,00034} + \frac{0,00108}{0,00034} =$$

$$\sigma_{\text{max}} = \frac{5 \times 4,10 \times 2,75^4}{32 \times 20 \times 139 \times 1,40} = 0,007 \quad \gamma_{\text{red}} = 0,011$$

STOKA ①

13.

$$M_h = 2,0 \times 10,0 \times 2,55 \times 0,5 + 11,0 \times 0,70 = 29,30 \text{ kN}$$

$$M_x = \frac{0,74 \times 2,0^2}{8} = 0,370 \text{ kNm}$$

80/80/5

$$\sigma_{max} = \frac{90097}{0,6 \times 0,0044} - \frac{0,0037}{0,0044}$$