

zaměření síťky

aj slovníček

W/m²

$$V_{020V_{04}} \approx 920,25 \cdot 1,1 = 9,25$$

$$NA'_{\Sigma P} - \sigma_{\Sigma P} = 0,20 \cdot 18 \cdot 1,2 = 4,68$$

SRAIDOVY BENON NO,08.25.12 = 2,40

SIRPINI' D'ELUA $92.25.1,1 = 9,50$

20,82

5/11/16 20/12/16

NAME: LEONARDO MATRÍCULA: 25.12.72.1 $\frac{1}{2.5,6} = 3,22$

$$p_l = (2 \cdot 0,588 + 0,1) \cdot (2 \cdot 7,5 \cdot 1,2 \cdot 1,2 \cdot \frac{1}{1,73}) = 6,25$$

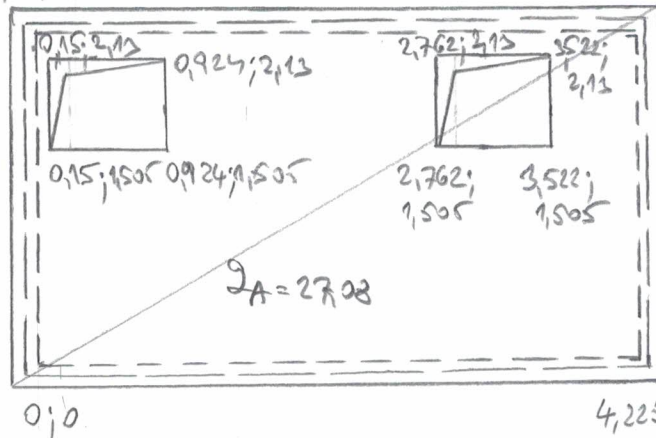
$$\cdot (2.2588 + 0.18) = 1.73 \text{ m}^2$$

column

27,08

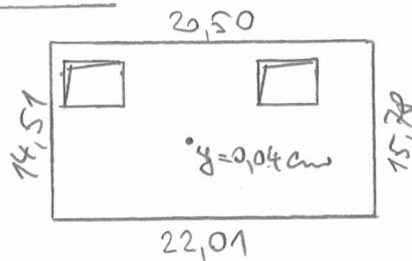
CONCERN DESK

0; 2, 3, 5



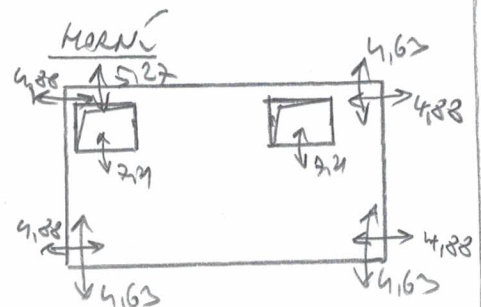
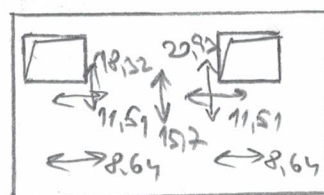
2 ၀၄/၂၀၁၁

REACTION



תורת המספרים

SPODNI



h) STĚNY

1. TLAK ZEMINY - VNEJŠÍ

$$\gamma = 18,0 \text{ kN/m}^3 \quad m = 1,2 \quad \varphi = 30^\circ$$

2. TLAK VODY - VNITŘNÍ

$$\gamma = 10 \text{ kN/m}^3 \quad m = 1,1$$

3. NABOBÍLE NA POKROUV + ZEMINA

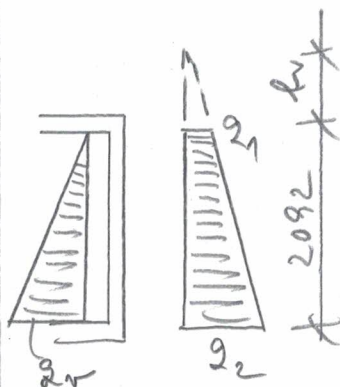
$$p = 6,25 + 20,83 = 27,08 \text{ kN/m}^2$$

$$h = \frac{p}{\gamma} = \frac{27,08}{18 \cdot 1,2} = 1,254 \text{ m} \quad k = 1 - \sin \varphi = 1 - \sin 30^\circ = 0,546$$

$$q_1 = h \cdot \gamma \cdot m \cdot k = 1,254 \cdot 18 \cdot 1,2 \cdot 0,546 = 14,79 \text{ kN/m}^2$$

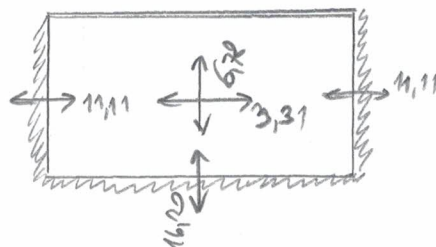
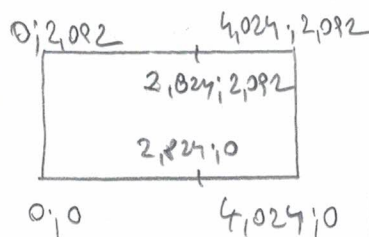
$$q_2 = (1,254 + 2,092) \cdot 18 \cdot 1,2 \cdot 0,546 = 39,46 \text{ kN/m}^2$$

$$q_3 = 10 \cdot 1,1 \cdot 2,092 = 23,04 \text{ kN/m}^2$$

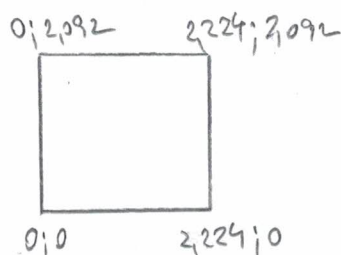
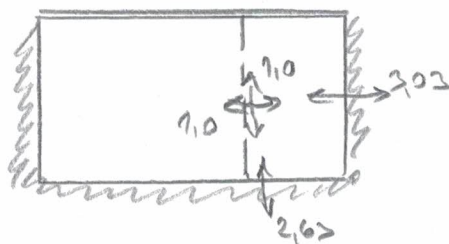


h1) STĚNY POŘEZNÉ

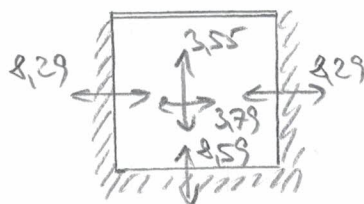
1. TLAK ZEMINY



2. TLAK VODY

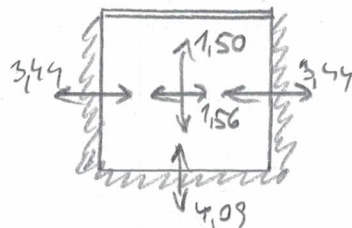


h2) STĚNA POŘEZNÁ LEVÁ - TLAK ZEMINY



23) STĚNA PRŮČNÁ PRÁVA - TLAK VODY

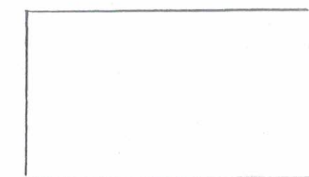
(TLAK ZOTVINY - V/2 PRŮČNOSTI)



C) DESKA DNA

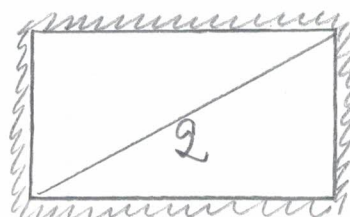
0, 2,225

4,024, 2,225



0,0

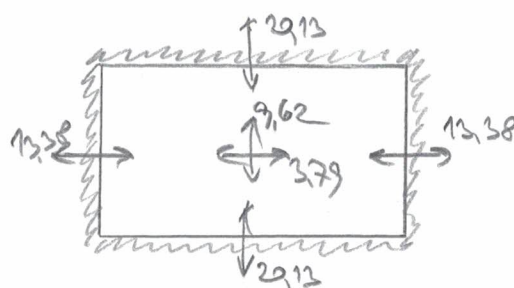
4,024,0



$$Q_2 = \frac{1}{4,225 \cdot 2,335} \left[(20,5 + 22,01) \cdot 4,225 + (14,51 + 15,78) \cdot 2,335 + (0,15 + 0,1) \cdot 2,292 \cdot (4,225 + 2,335) \cdot 2 \cdot 25 \cdot 1,1 \right]$$

$$= 46,38 \text{ W/m}^2$$

2 VÝPOČTY



NAPĚTÍ V ŽIVOTNÉ SPÁŘE

$$Q_2 = 46,38 + 0,2 \cdot 25 \cdot 1,1 + 0,1 \cdot 22 \cdot 1,3 = 54,88 \text{ W/m}^2$$

$$Q_{2max} = 54,88 + 2,012 \cdot 10 \cdot 1,1 = 77,01 \text{ W/m}^2$$

1. DESKA SROVN

a) SPODNÝ VÝČET

$$\text{SVAŘ. KARI SÍŤ } 8 \times 8 / 100 \times 100 - f_a = 5102 \text{ cm}^2$$

$$N_a = 226,2 \text{ kN}$$

$$\eta = \frac{5102}{20} \cdot \frac{400}{20} = 0,54\% \quad \gamma = 1 - \frac{1}{20} = 0,95$$

$$\beta = 0,20 - 0,02 - 0,008 - 0,004 - \frac{226,2 \cdot 10^3}{2 \cdot 1 \cdot 14,5} = 0,1602 \text{ mm}$$

$$P_m' = 0,1602 \cdot 0,95 \cdot 226,2 = 34,4 \text{ kN} > P_{\text{max}, \text{XIX}}$$

b) HORNÝ VÝČET

JEN V MÍSTĚ HORNÍM ROZCHYTÍ A ULOŽENÍ
OTVORŮ

$$\text{SVAŘ. KARI SÍŤ } 6 \times 6 / 100 \times 100 \quad f_a = 382 \text{ cm}^2$$

$$N_a = 127,23 \text{ kN}$$

$$\eta = \frac{382}{20} \cdot \frac{400}{20} = 0,3\% \quad \gamma = 0,95$$

$$\beta = 0,20 - 0,02 - 0,006 - 0,003 - \frac{127,23 \cdot 10^3}{2 \cdot 1 \cdot 14,5} = 0,1666 \text{ mm}$$

$$P_m' = 0,1666 \cdot 0,95 \cdot 127,23 = 20,1 \text{ kN} > P_{\text{max}, \text{XIX}}$$

2. STĚNY

$$\text{SVAŘ. KARI SÍŤ } 8 \times 8 / 200 \times 100 \quad f_a = 5102 \text{ cm}^2$$

$$N_a = 226,2 \text{ kN}$$

$$\eta = \frac{5102}{15} \cdot \frac{400}{20} = 0,72\% \quad \gamma = 1 - \frac{1}{15} = 0,933$$

$$\beta = 0,15 - 0,02 - 0,008 - 0,004 - \frac{226,2 \cdot 10^3}{2 \cdot 1 \cdot 14,5} = 0,1102 \text{ mm}$$

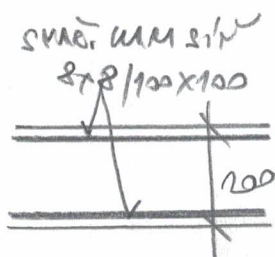
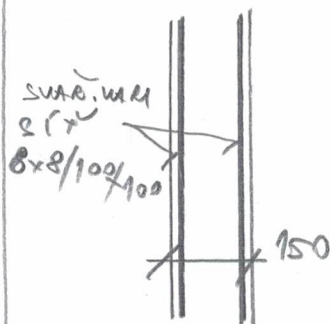
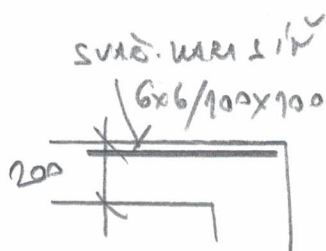
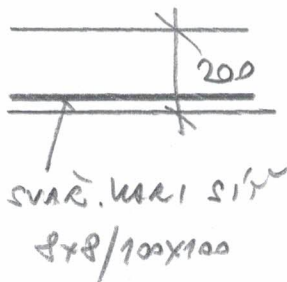
$$P_m' = 0,1102 \cdot 0,933 \cdot 226,2 = 23,26 \text{ kN} > P_{\text{max}, \text{XIX}}$$

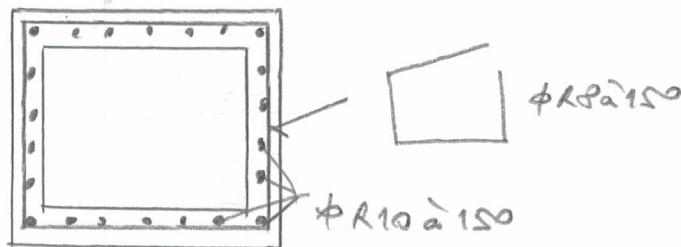
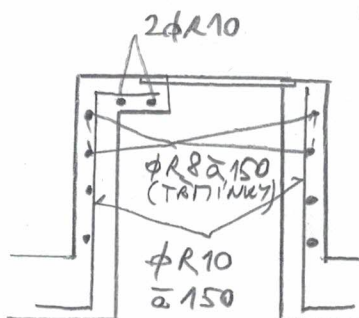
3. DESKA DNA

SVAŘ. KARI SÍŤ $8 \times 8 / 100 \times 100$ U OBOU LÍČÍ

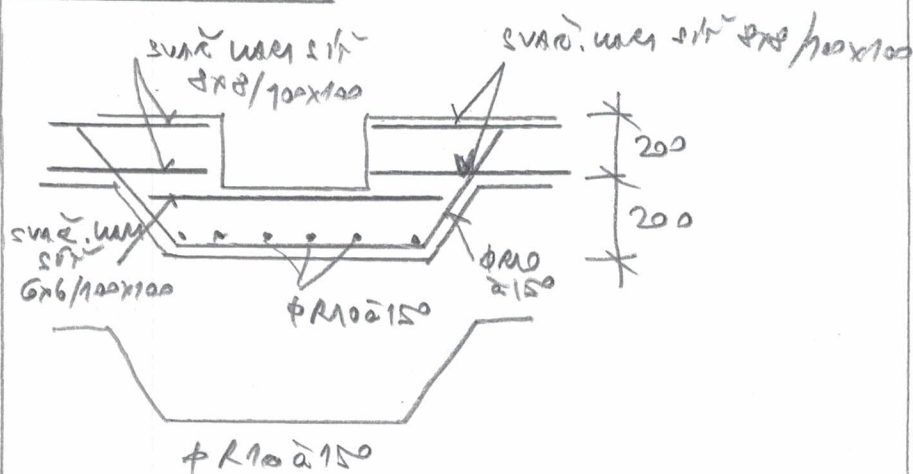
$$P_m' = 34,4 \text{ kN} > P_{\text{max}, \text{XIX}}$$

(VIZ DESKA SROVN)





ÚPRAVA UÝZEVÝ V DESCE DNA V MÍSTĚ ČERPAČÍ ŽÍTKY



V MÍSTĚ ROZSTAVU POTRUBÍ VE STĚNĚ

SE UÝZEVÝ UÝZEVÝ
(JEN V PŘÍPADĚ KOTÍKOVÝ POTRUBÍ S PROTĚTÍ
SÍLOVINY – KONKRETNÍ PRŮT)

PROJEKT, DUBEN 2021

Jan Elías