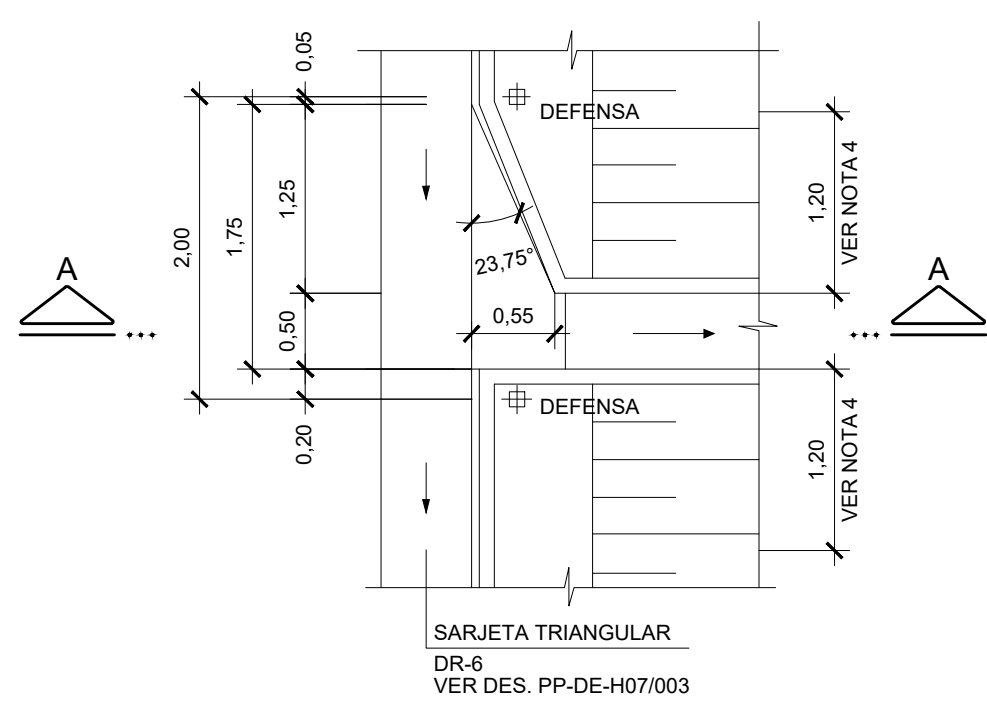


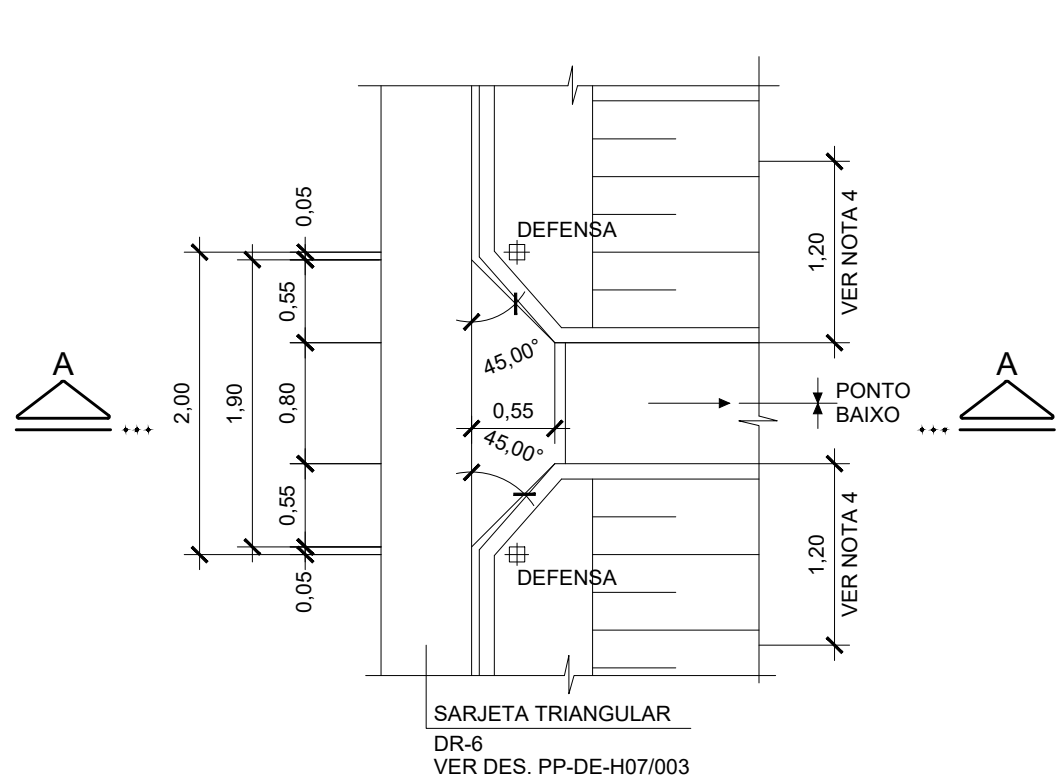
DR-11 - DESCIDA D'ÁGUA DE ATERRO TIPO RÁPIDO

ENTRADA D'ÁGUA EM SARJETA DE BORDA DE ATERRO
SARJETA EM GREIDE - RÁPIDO TIPO DR-11A



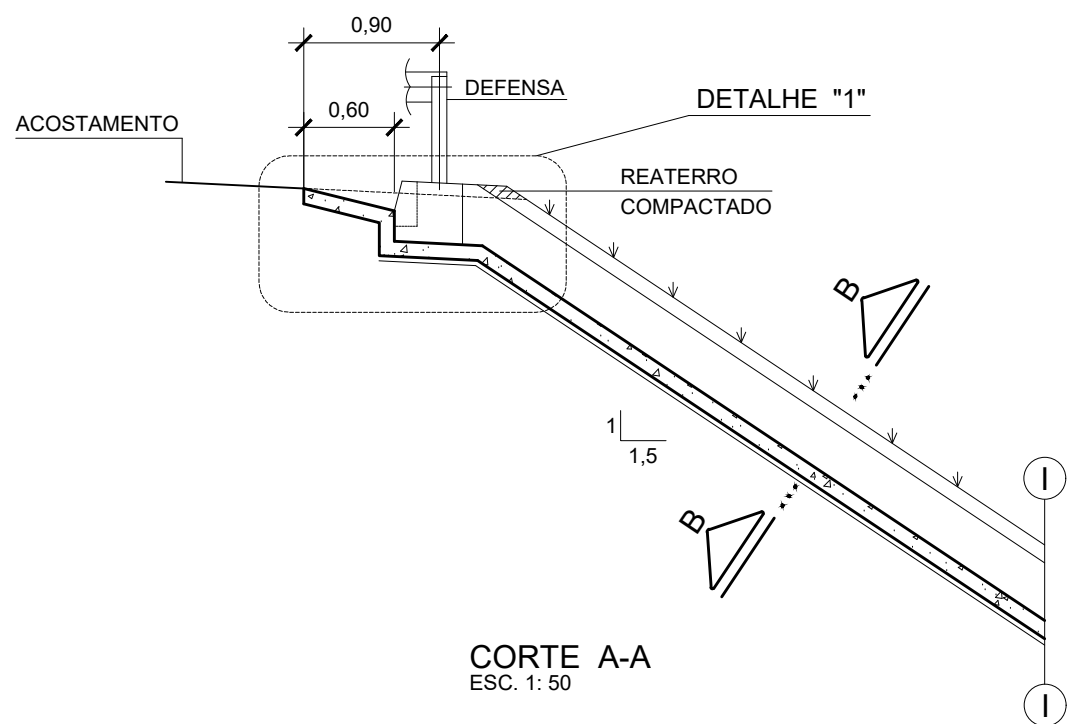
PLANTA
ESC. 1:50

ENTRADA D'ÁGUA EM SARJETA DE BORDA DE ATERRO
SARJETA EM PONTO BAIXO - RÁPIDO TIPO DR-11B

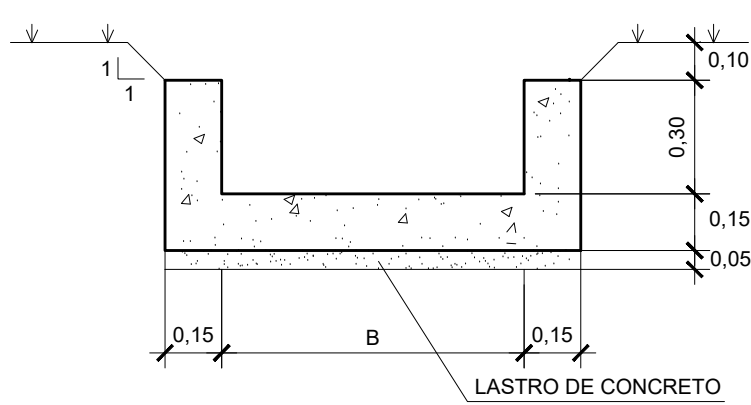


PLANTA
ESC. 1:50

ENTRADA D'ÁGUA EM SARJETA DE BORDA DE ATERRO

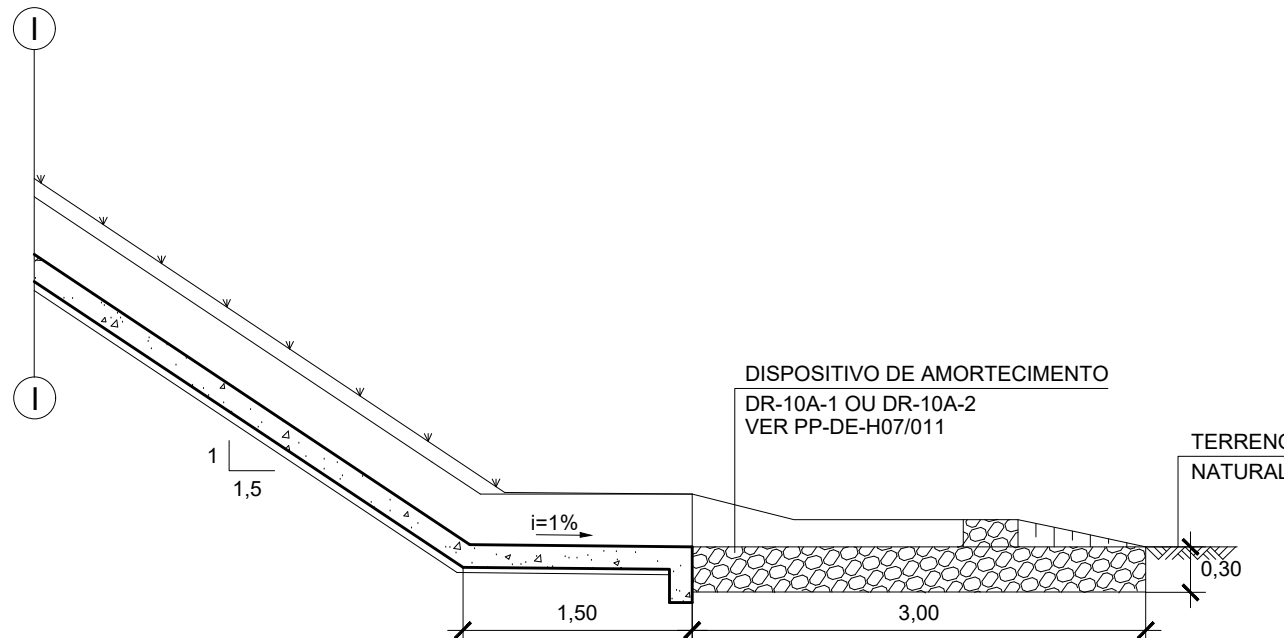


CORTE A-A
ESC. 1:50

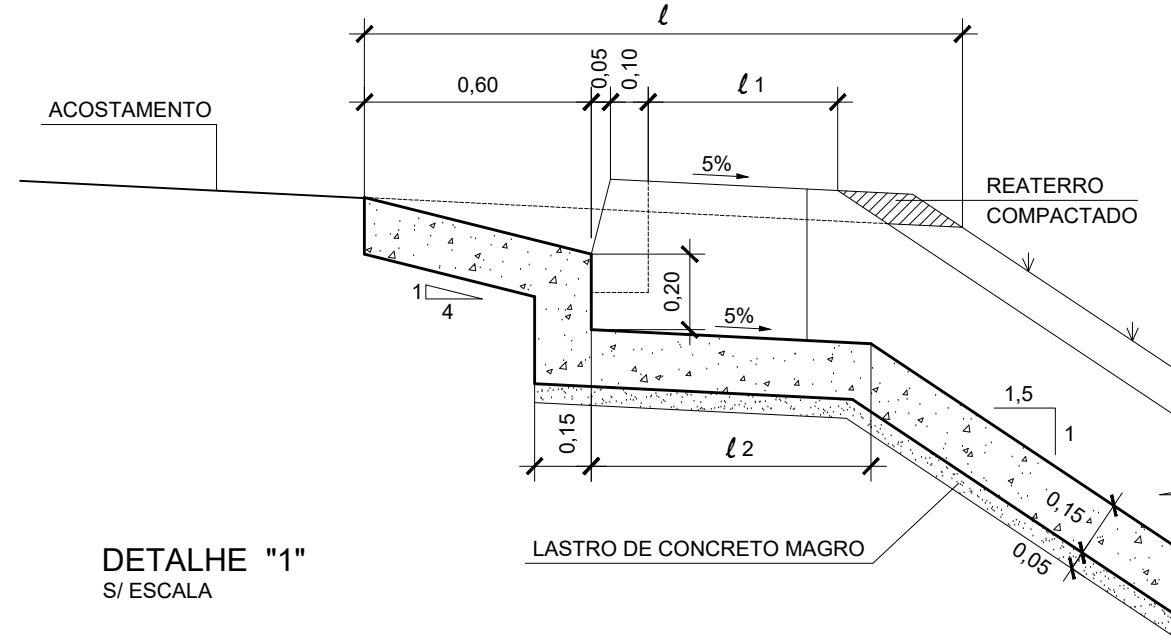


CORTE B-B
ESC. 1:20

RÁPIDO TIPO	B (m)
DR-11A	0,50
DR-11B	0,80



LANÇAMENTO EM TERRENO NATURAL
CORTE TRANSVERSAL
ESC. 1:50



DETALHE "1"
S/ ESCALA

ℓ (m)	ℓ1(m)	ℓ2(m)
1,50	0,42	0,64
2,00	0,92	1,14
3,00	1,92	2,14

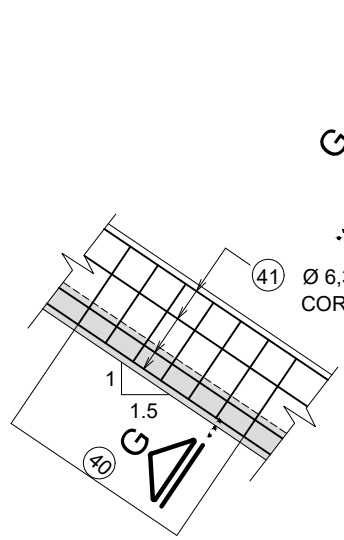
QUANTIDADE POR METRO LINEAR DE RÁPIDO			
RÁPIDO TIPO	CONCRETO ESTRUTURAL (m³)	FORMAS (m²)	CONCRETO MAGRO (m³)
DR-11A	0,210	1,600	0,040
DR-11B	0,255	1,600	0,055

ENTRADA D'ÁGUA EM SARJETA DE BORDA DE ATERRO				
RÁPIDO TIPO	LARGURA ℓ	CONCRETO ESTRUTURAL (m³)	FORMAS (m²)	CONCRETO MAGRO (m³)
DR-11A	1,50	0,40	2,69	0,04
	2,00	0,49	3,49	0,06
	3,00	0,69	5,09	0,09
DR-11B	1,50	0,46	2,91	0,05
	2,00	0,58	3,71	0,07
	3,00	0,82	5,31	0,12

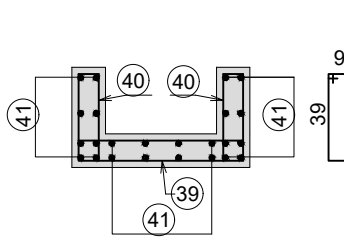
NOTAS:

- 1- MEDIDAS EM METRO, EXCETO INDICAÇÃO CONTRÁRIA.
- 2- CARACTERÍSTICAS DOS MATERIAIS:
CONCRETO ESTRUTURAL - CLASSE C20 (fck > 20 MPa)
CONSUMO MÍNIMO DE CIMENTO = 300 kg/m³ DE CONCRETO
CONCRETO MAGRO - CLASSE C10 (fck > 10 MPa)
AÇO CA-50 (fyk > 500 MPa)
- 3- IMEDIATAMENTE APÓS A EXECUÇÃO DA DESCIDA D'ÁGUA DEVERÁ SER FEITO REATERRO LATERAL COM MATERIAL ARGILOSO UTILIZANDO-SE COMPACTADOR MANUAL E REVESTIMENTO SUPERFICIAL COM GRAMA EM PLACAS.
- 4- A ALTURA MÍNIMA DA VALETA DE PÉ DE ATERRO, QUE RECEBER LANÇAMENTO DO RÁPIDO, DEVERÁ SER DE 0,30 m. COINCIDENTE COM A ALTURA DO MESMO. ESTA VALETA SEMPRE DEVERÁ SER REVESTIDA EM CONCRETO (DR-3B).
- 5- A VAZÃO MÁXIMA ADMITIDA NO RÁPIDO TIPO DR-11A É DE Q=90/s E NO RÁPIDO TIPO DR-11B É DE Q=180/s.

DESCIDA TIPO RÁPIDO
(TIPO DR-11A e DR-11B)



ELEVÇÃO DA
DESCIDA



CORTE G-G

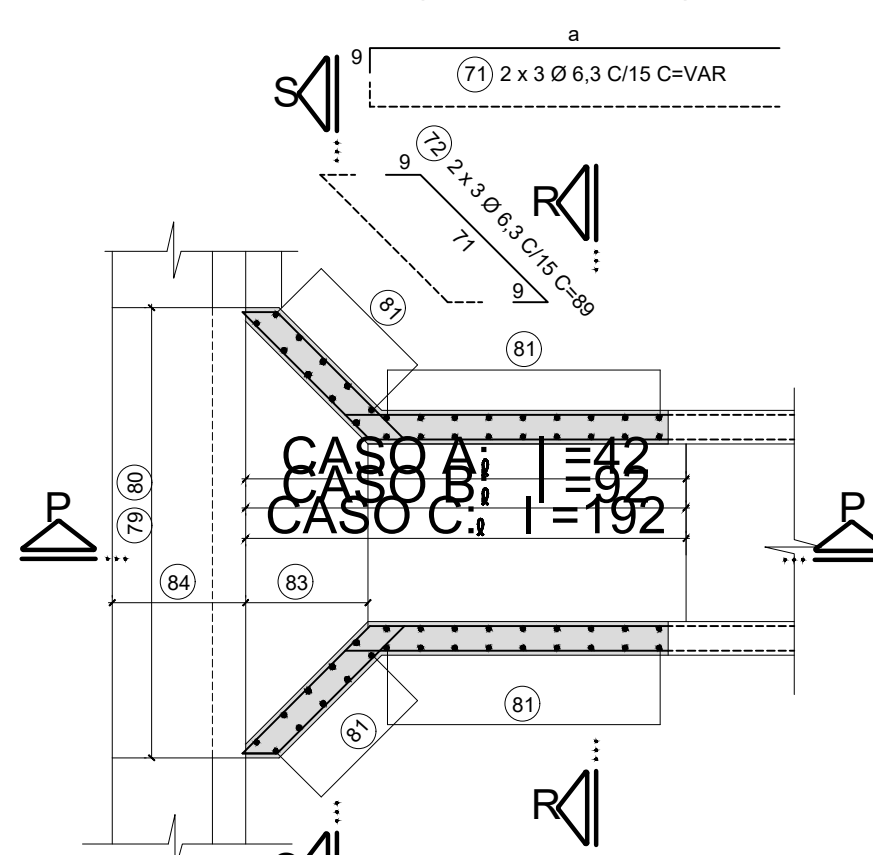
LISTA DE FERROS P/ 1,0m NA HORIZONTAL (DR-11A)						
POS	Ø	QUANT	DIREÇÃO	UNIT	TOTAL	
39	6,3	16	74	92	1472	
43	6,3	4	---	---	200	800
44	6,3	6	---	---	240	1440
41	6,3	20	---	---	120	2400

RESUMO AÇO CA-50-P/DR-11A		
Ø	COMPRIMENTO (m)	PESO (kg)
6,3	56,32	14
TOTAL		14

LISTA DE FERROS P/ 1,0m NA HORIZONTAL (DR-11B)						
POS	Ø	QUANT	DIREÇÃO	UNIT	TOTAL	
39	6,3	16	104	122	1952	
40	6,3	16	---	---	110	1760
41	6,3	24	---	---	120	2880

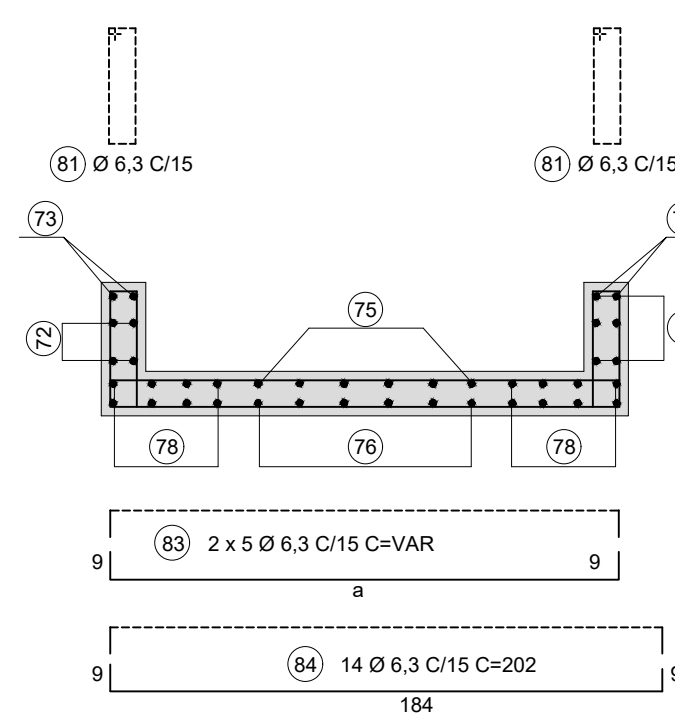
RESUMO AÇO CA-50-P/DR-11B		
Ø	COMPRIMENTO (m)	PESO (kg)
6,3	65,92	17
TOTAL		17

ENTRADA D'ÁGUA
(TIPO DR-11B)

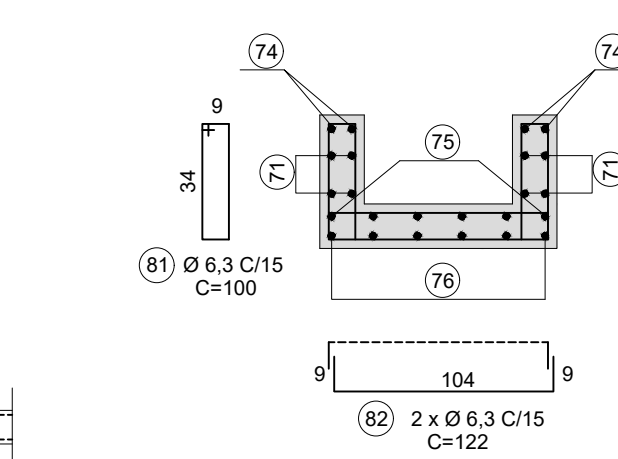


CORTE P-P

CORTE R-R

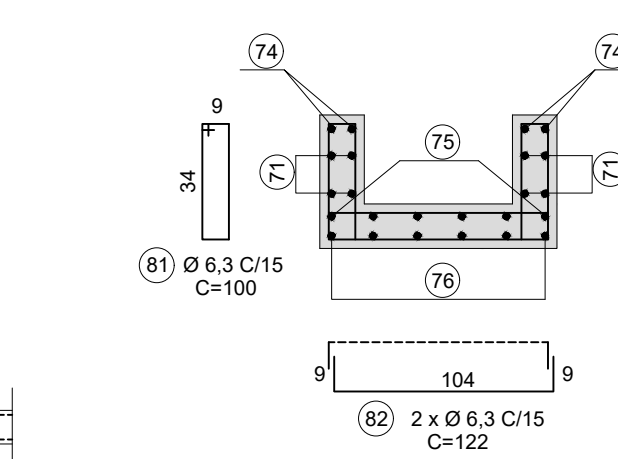


CORTE S-S

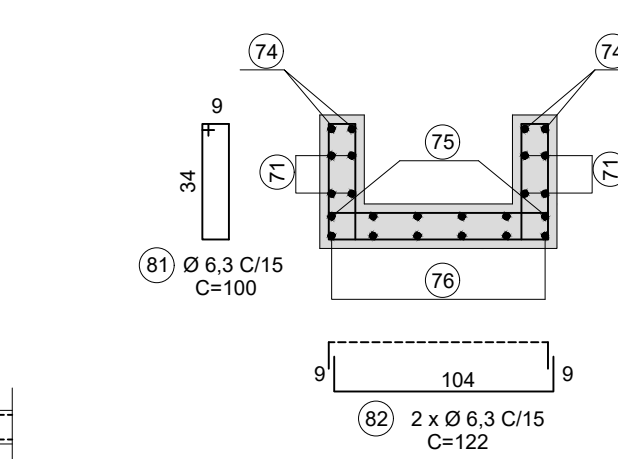


CORTE H-H

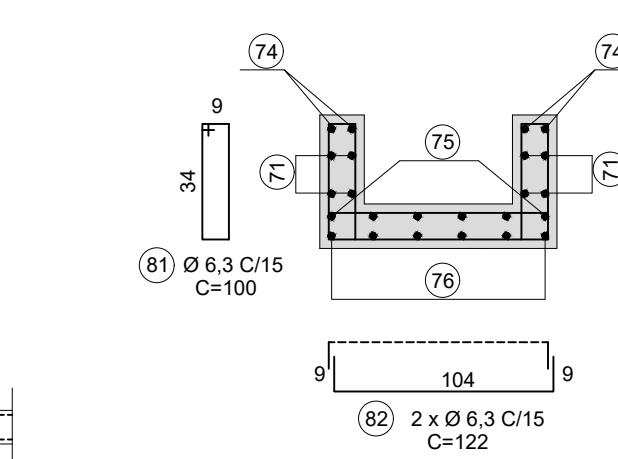
CORTE F-F



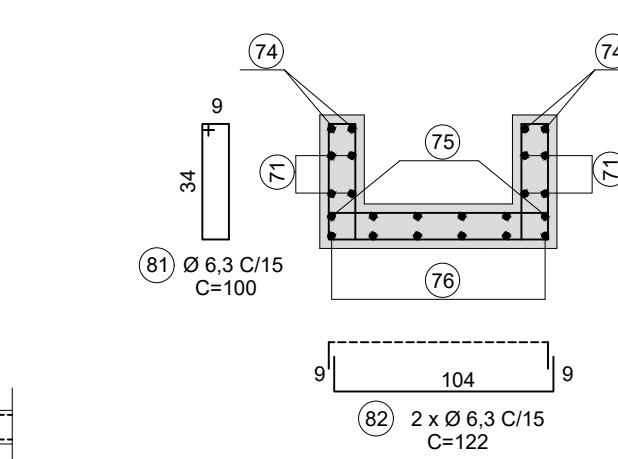
CORTE K-K



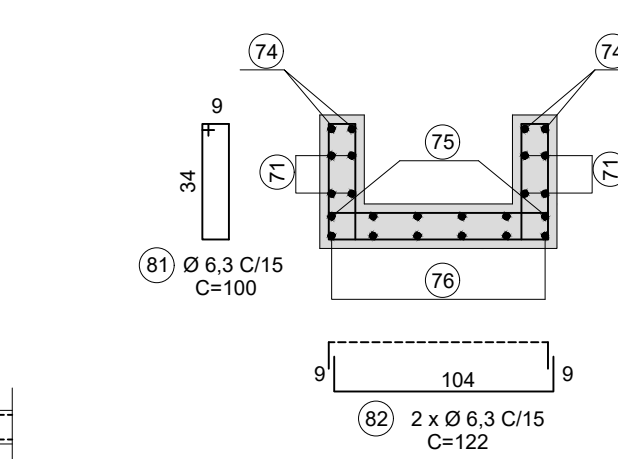
CORTE M-M



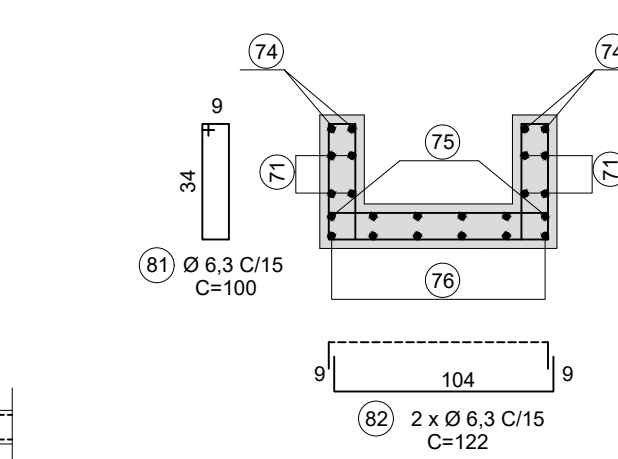
CORTE N-N



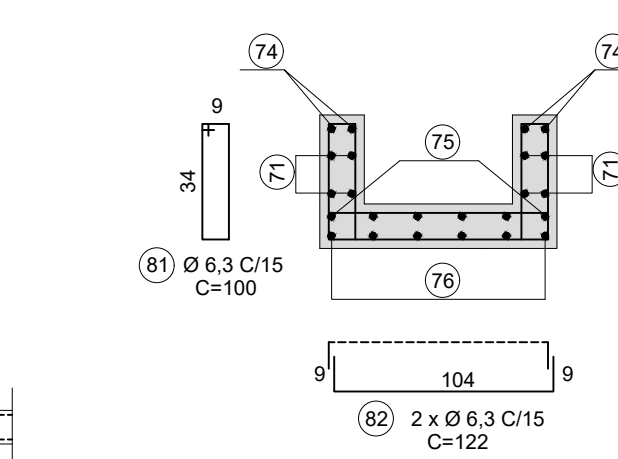
CORTE O-O



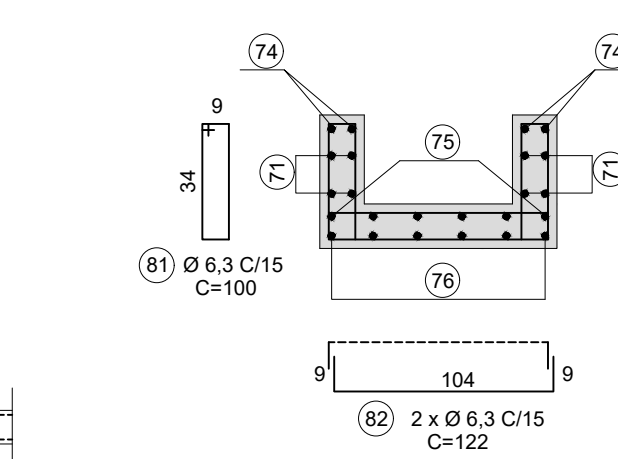
CORTE Q-Q



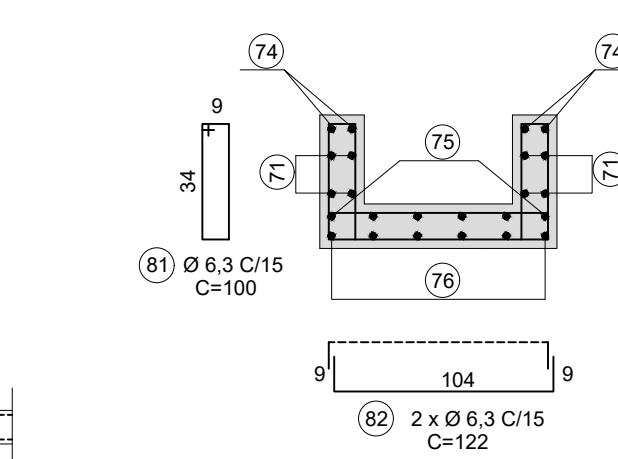
CORTE R-R



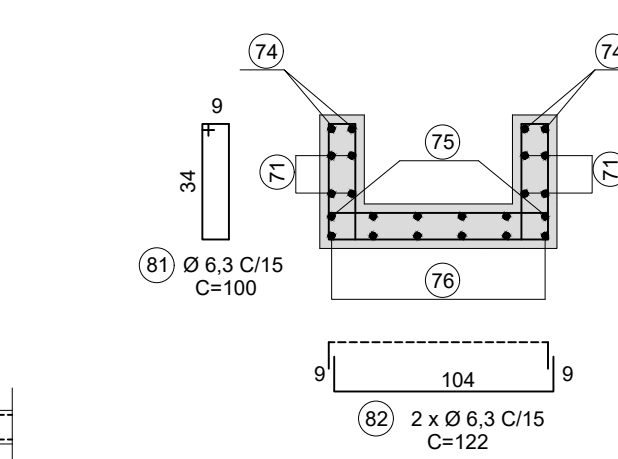
CORTE S-S



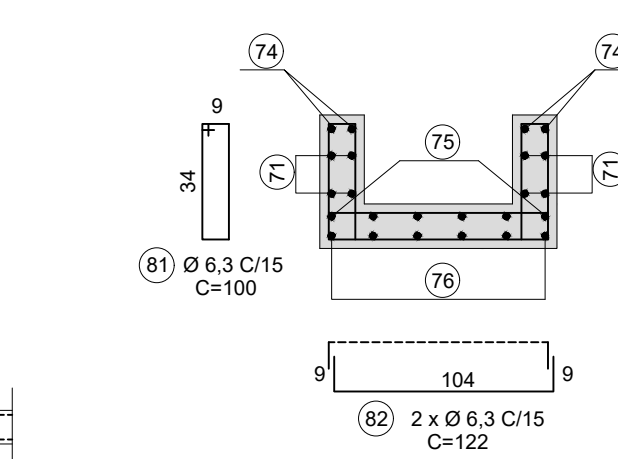
CORTE T-T



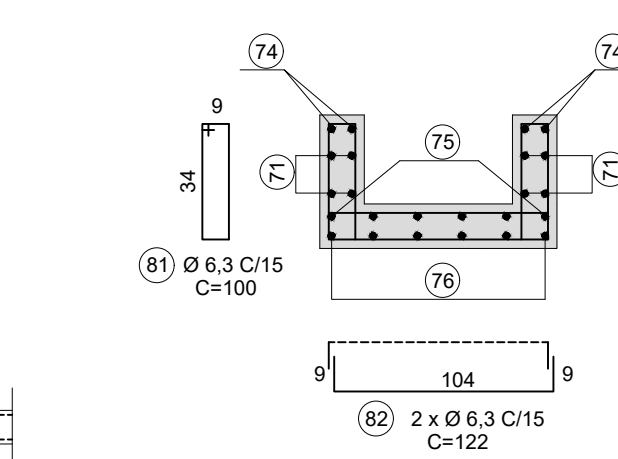
CORTE U-U



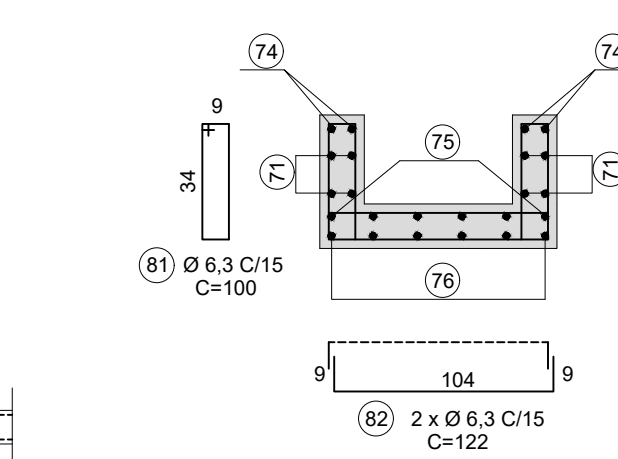
CORTE V-V



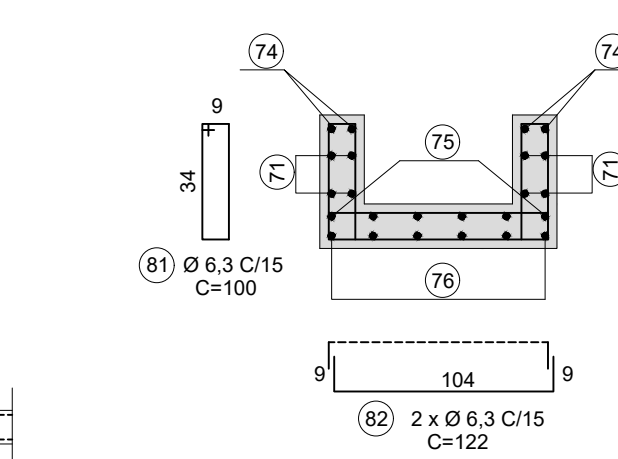
CORTE W-W



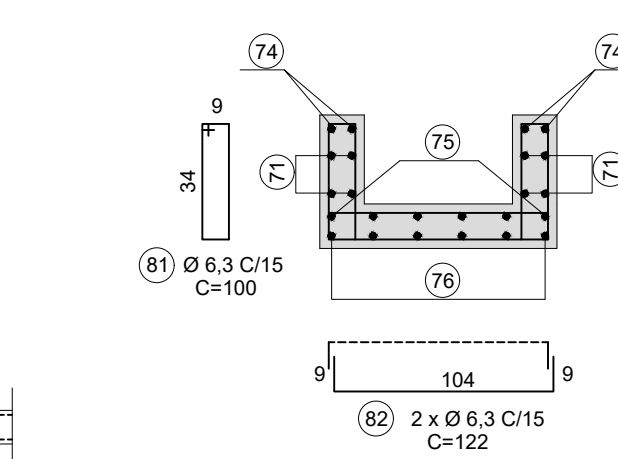
CORTE X-X



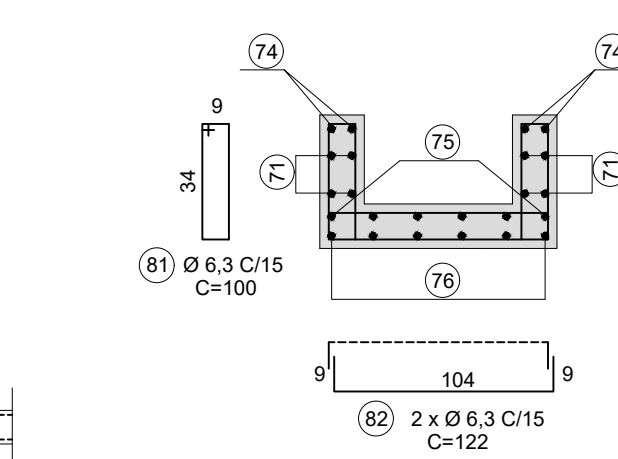
CORTE Y-Y



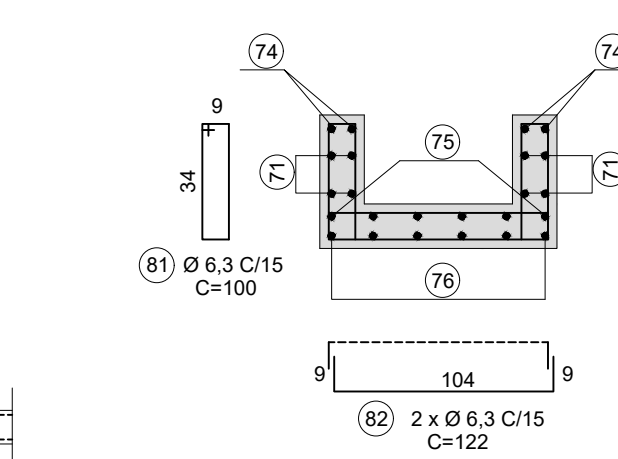
CORTE Z-Z



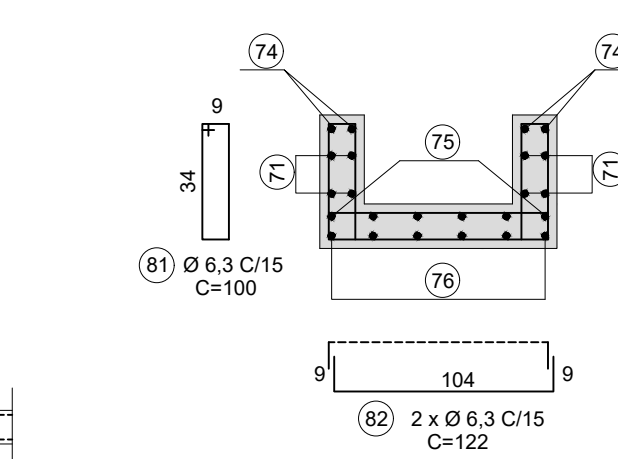
CORTE AA



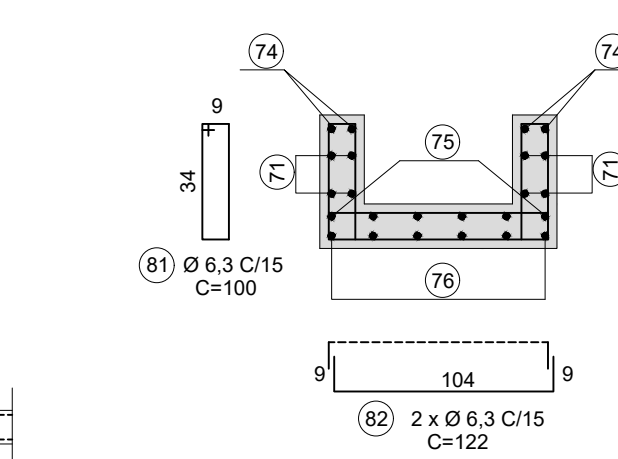
CORTE BB



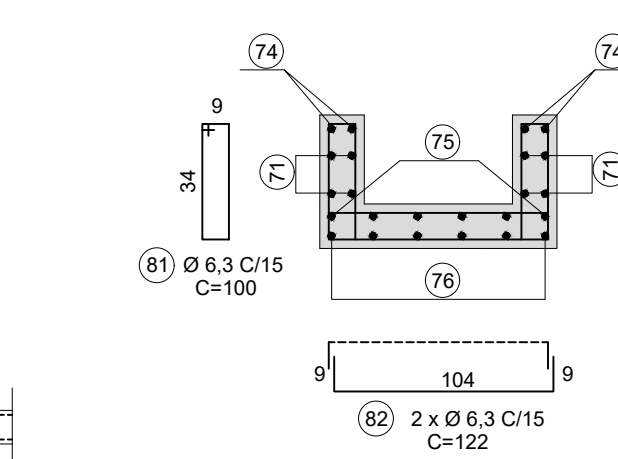
CORTE CC



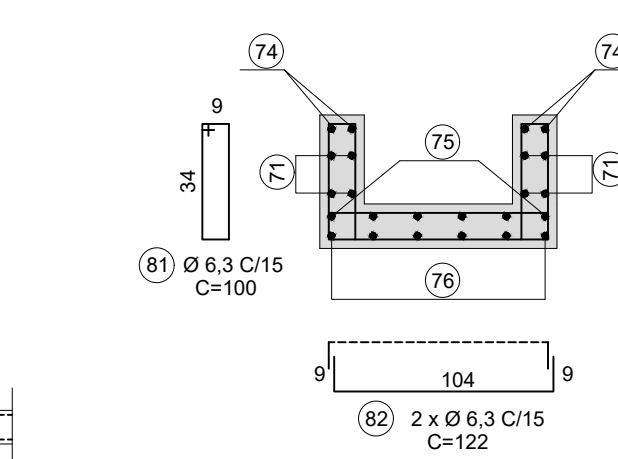
CORTE DD



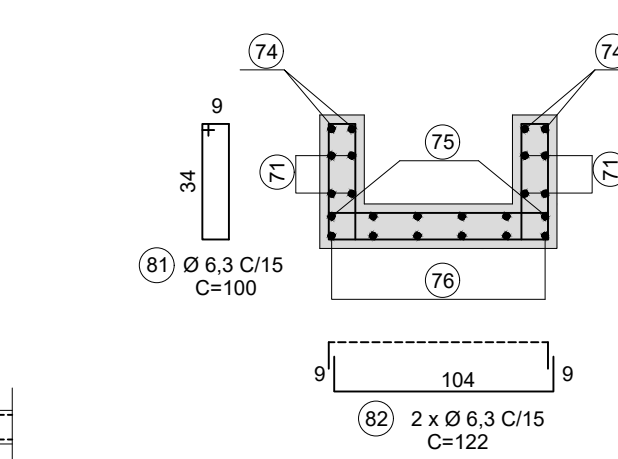
CORTE EE



CORTE FF



CORTE GG



CORTE HH