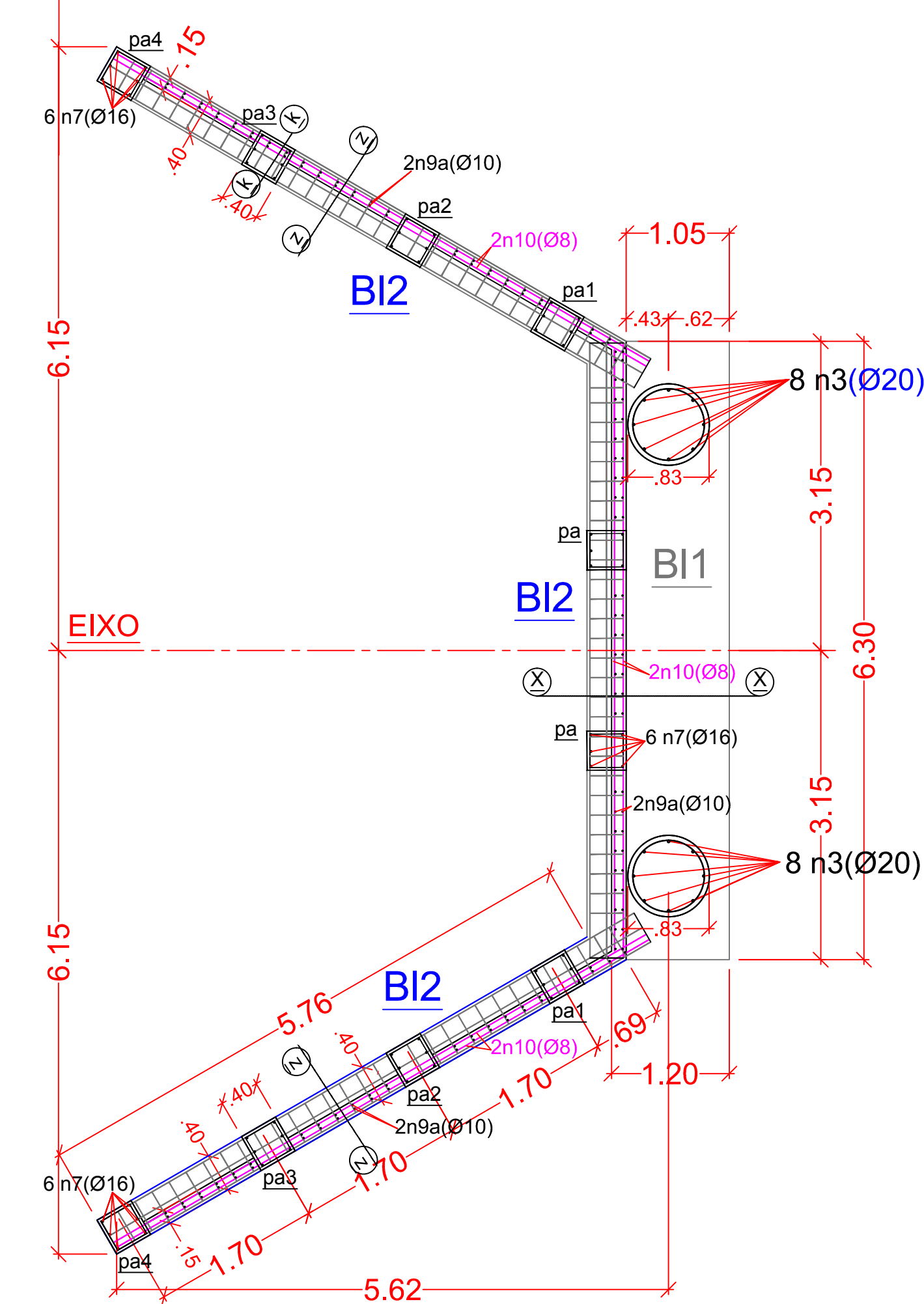
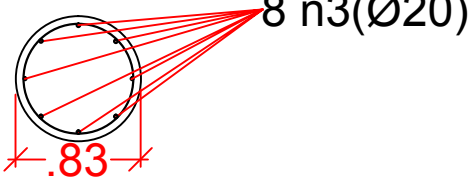


FUNDAÇÕES (2x)

escala - 1:50



P(Ø 0.83)m
(4x)



8 n3(Ø20)

8 n3(Ø20)

n4(Ø8) c/ 20 cm

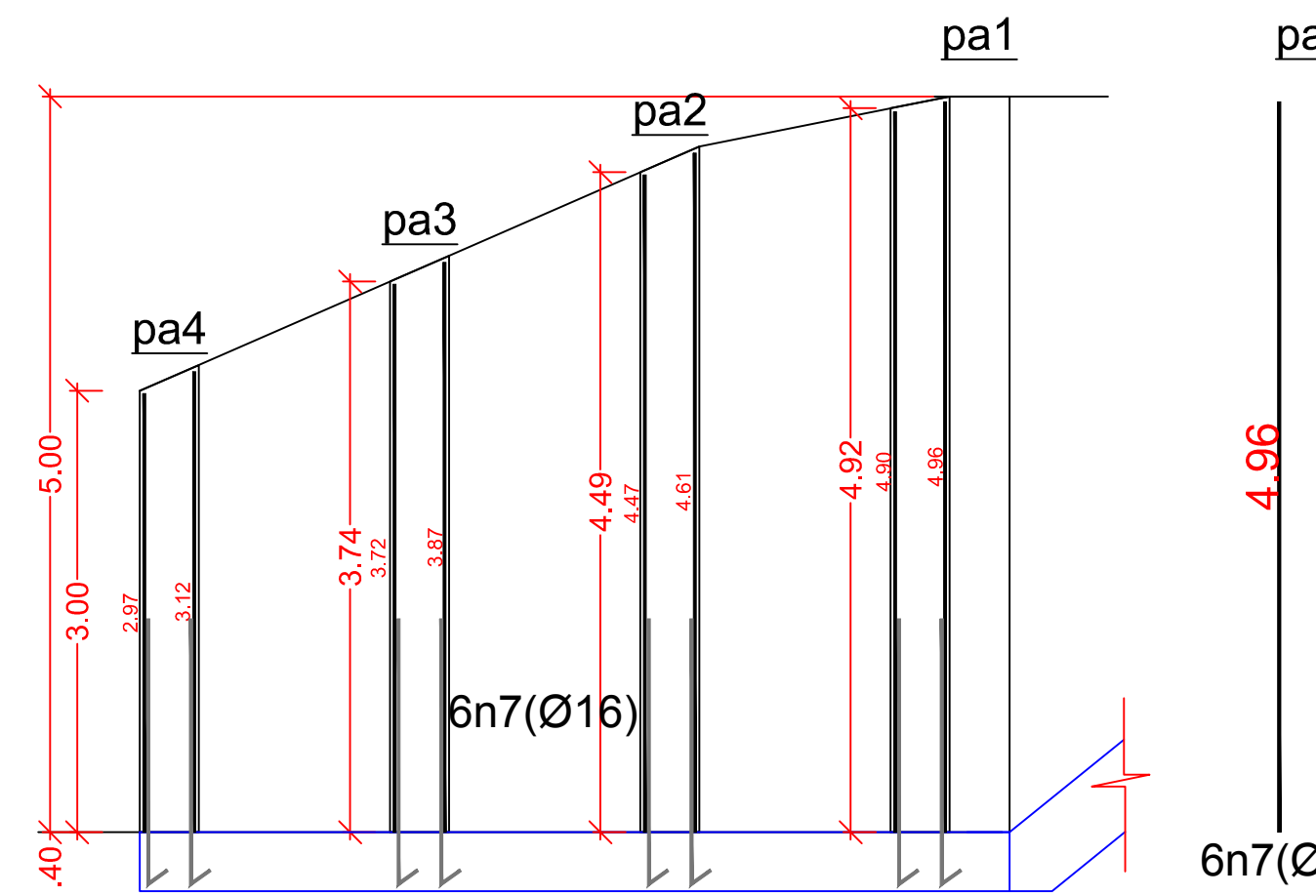
cortar: 2 x 2 x 21 = 84X c/ 2.45 m

4.10

cortar: 2 x 2 x 8 = 32X c/ 4.10 m

pa(.40 x .40)
(20x)

6n7(Ø16)



pa4: 4x[3x (2.97 + 3.12)] m = 73.08 m

pa3: 4x[3x (3.72 + 3.87)] m = 91.08 m

pa2: 4x[3x (4.47 + 4.61)] m = 108.96 m

pa1: 4x[3x (4.90 + 4.96)] m = 118.32 m

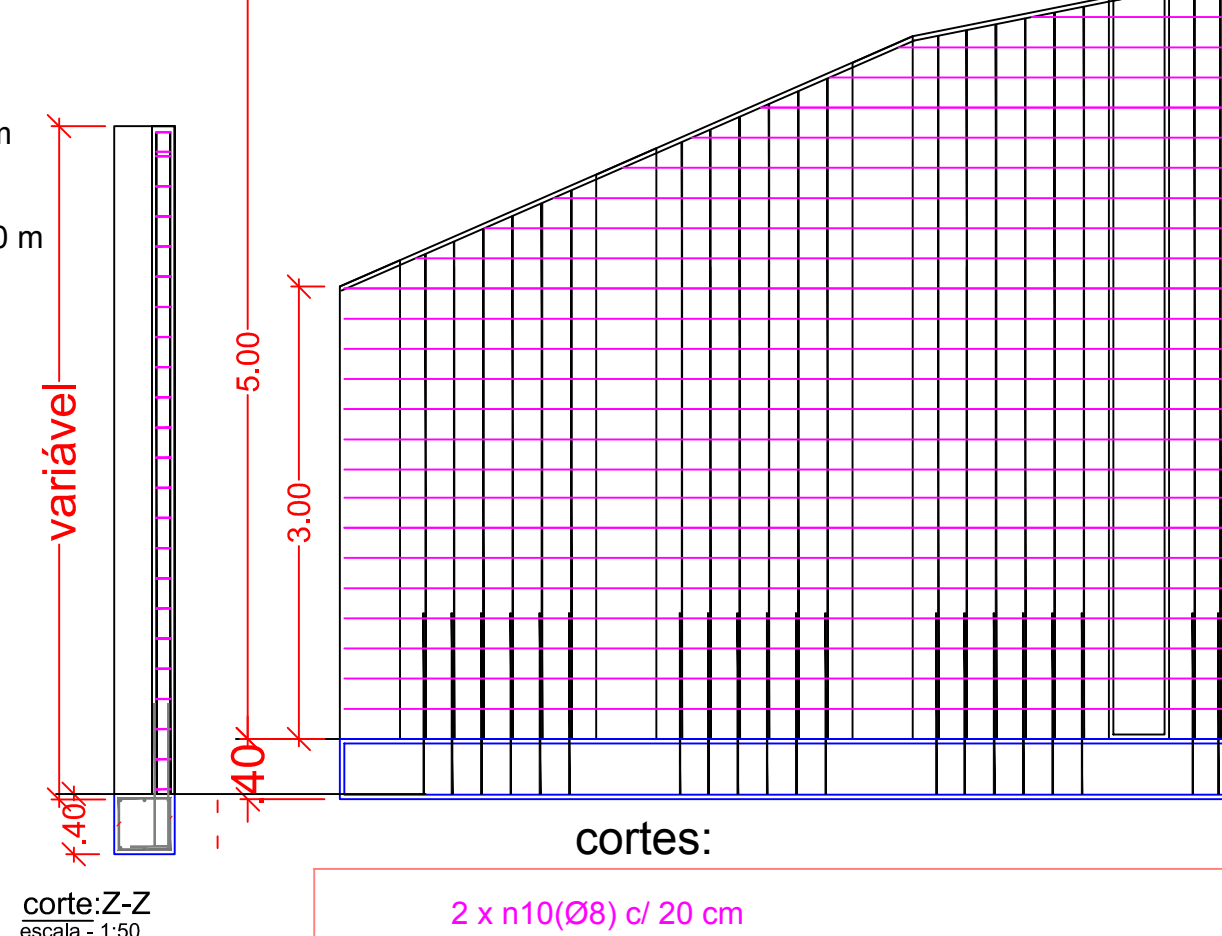
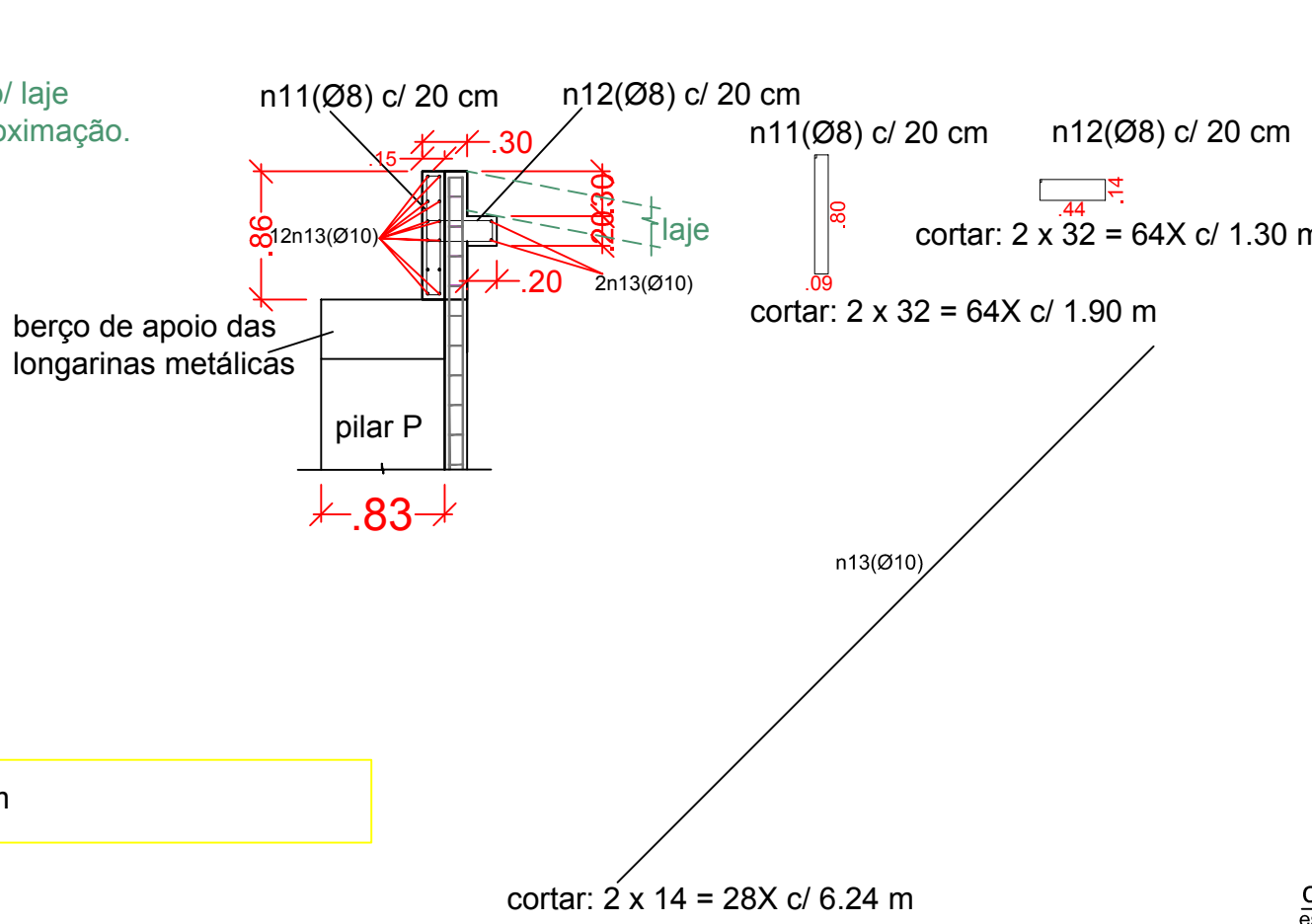
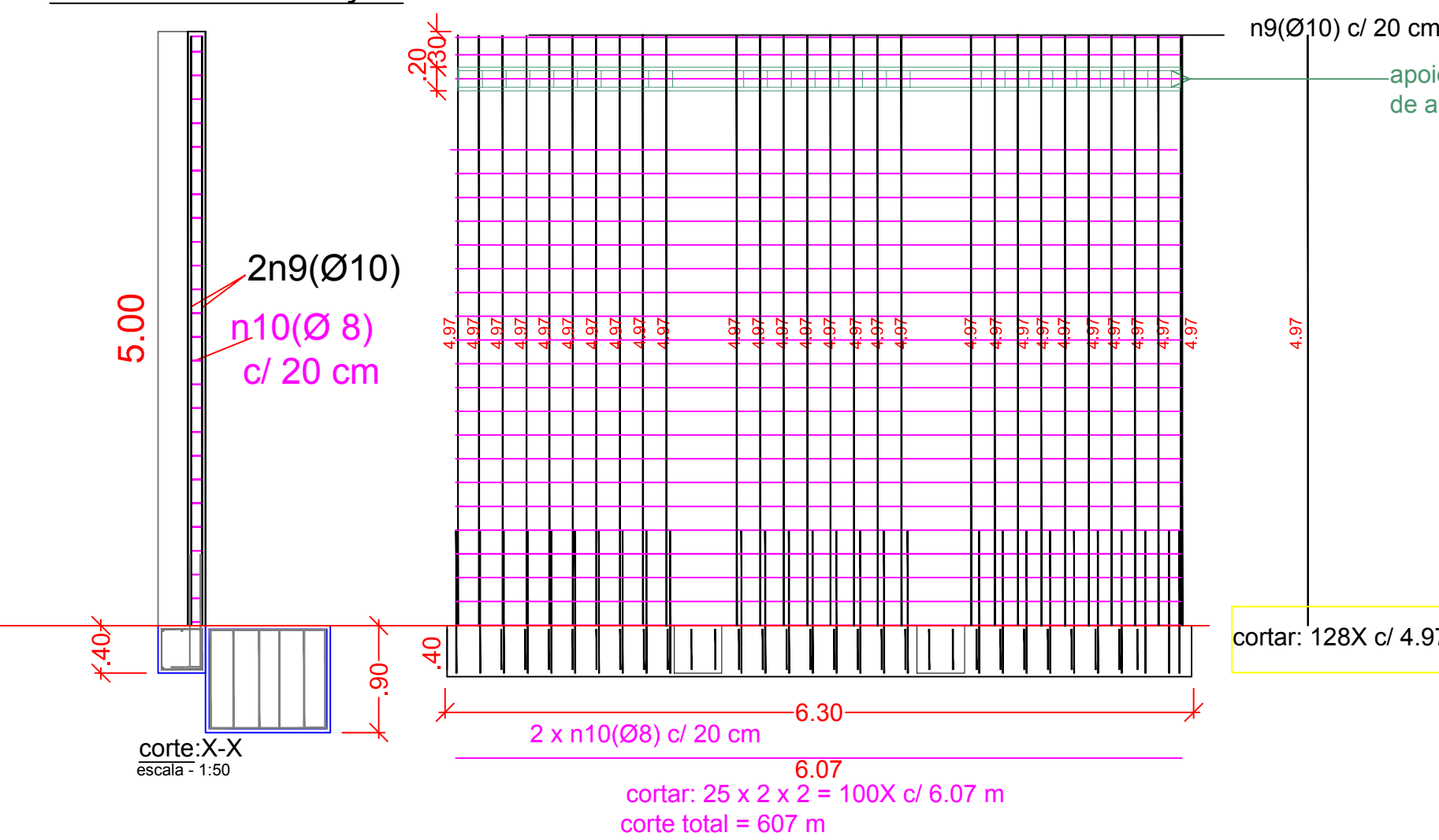
pa : 4x[6x4.96] m = 119.04 m

510.48 m

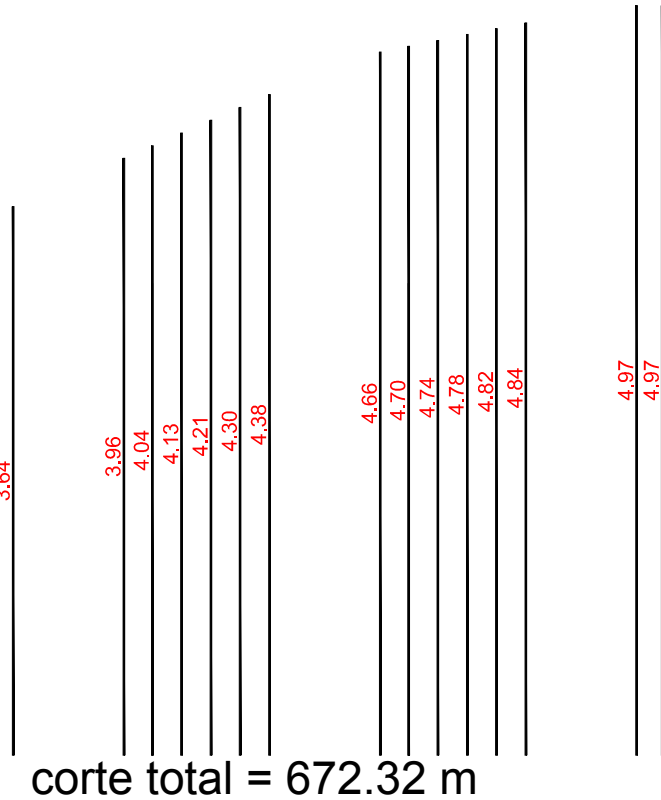
n8(Ø 8) c/ 20 cm

Soma: 2.97/0.2 + 3.72/0.20 + 4.47/0.20 + 4.90/0.20 = 4.96/0.20 =
cortar: 4x(15 + 19 + 23 + 24 + 25) = 424X c/ 1.50 m

Paredes de Contenção



n9a(Ø10) c/ 20 cm
cortar: 4 x 2 = 8X var.

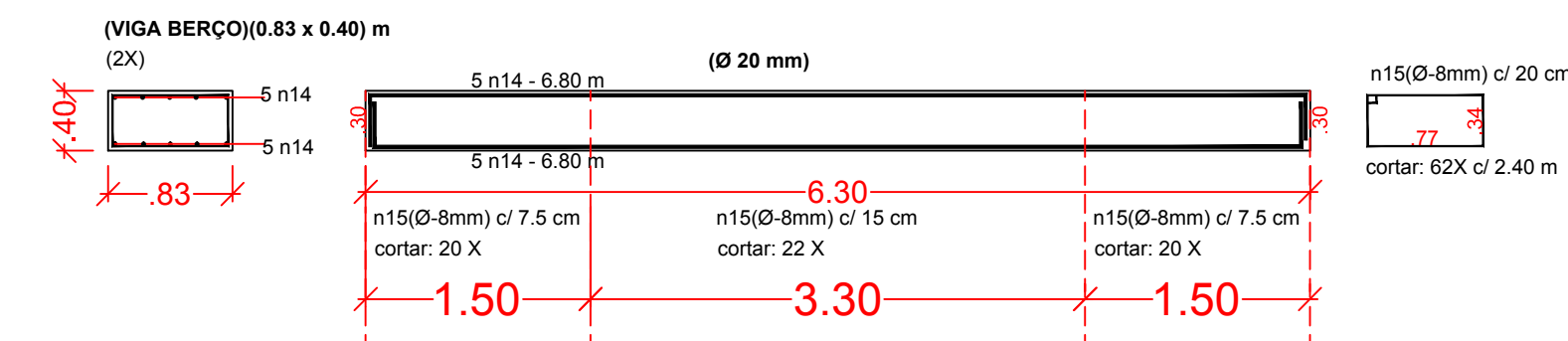


corte total = 672.32 m

corte/ dobra aço/Ca50

POSICÃO	BITOLA	quant	CORTE(m)	total(m)	Peso (KG)
N3	20	32	4.1	131.2	328
N4	8	84	2.45	205.8	82.32
N7	16	VAR.	VAR.	510.48	816.77
N8	8	424	1.5	636.00	254.40
N9	10	128	4.97	636.16	400.78
N9a	10	var.	VAR.	672.32	423.56
N10	8	100	6.07	607.00	242.80
N10	8	VAR.	VAR.	1.003.60	401.44
N11	8	64	1.9	121.6	48.64
N12	8	64	1.3	83.2	33.28
N13	10	28	6.24	174.72	110.07
N14	20	20	6.8	136	340
N15	8	62	2.4	148.8	59.52
N14				0	3.541.58

BITOLA	kg/m	kg
4.2	0	0.11
5	0	0.16
6.3	0	0.25
8	2806	0.4
10	1483.2	0.63
12.5	0	1
16	510.48	1.6
20	267.2	2.5
		668
		3.541.58



normas : ABNT:

- NBR - 6118 - Projeto de estruturas de concreto/ procedimentos.

- NBR - 7187 - 2.003 - pontes

- NBR - 7188 - pontes- 2.013 /REVISÃO

- NBR -6122- 2.010 - Projeto e execução de fundações.

- NBR - 14 - PROJETO E EXECUÇÃO EM ESTRUTURA DE AÇO.

formas curvas: 38 m²

formas plana : 251 m²

concreto - Fck -30 Mpa - 41.60 m³

PROJETO ESTRUTURAL - COLUNAS/PAREDES DE CONTENÇÃO -ALAS	F-3/6
PREFEITURA MUNICIPAL DE CAJATI- SP	escalas
Local - Ponte da Estrada da Forquilha	indicadas
Antônio Nelson Pires Cria - 1605919-28 tel (15) 3384-1999	122.920
vitoriacompra@gmail.com	
ART: 28027230210190424	