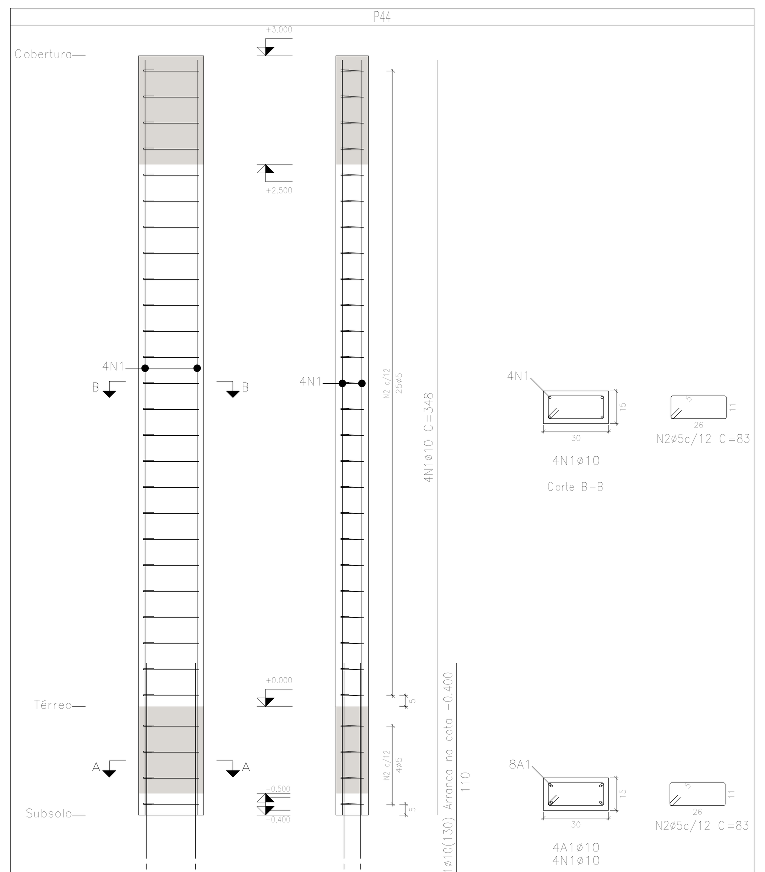
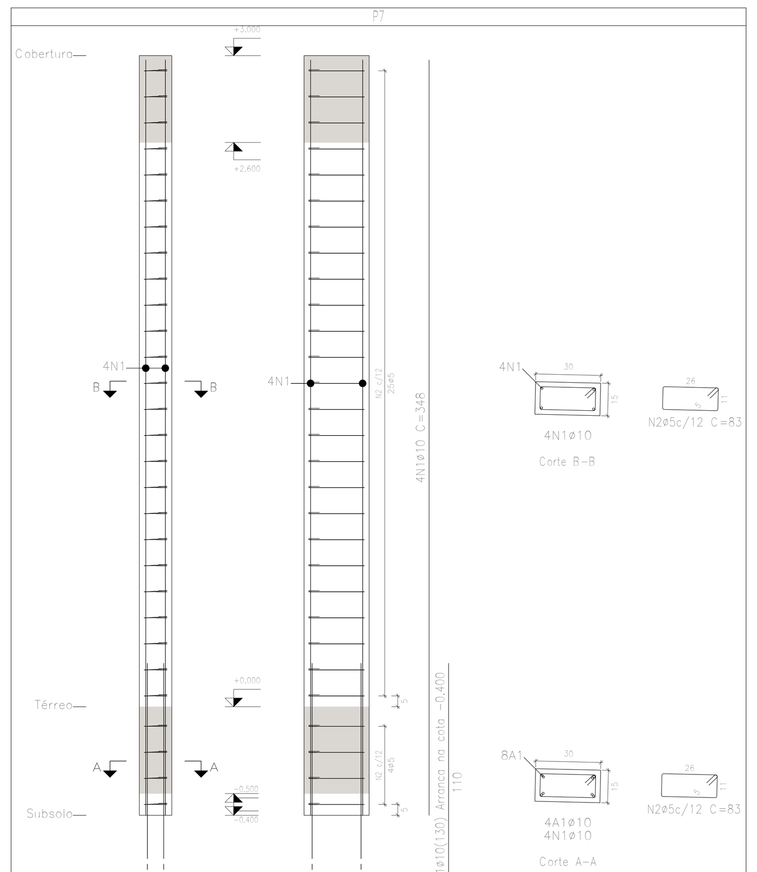
P44



Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	30x15	0.14	2.70	-	3.3	3.6	24.44
Térreo		0.02	0.45	8.6	0.5	10.0	404.44
Total		0.16	3.15	8.6	3.8	13.6	78.73

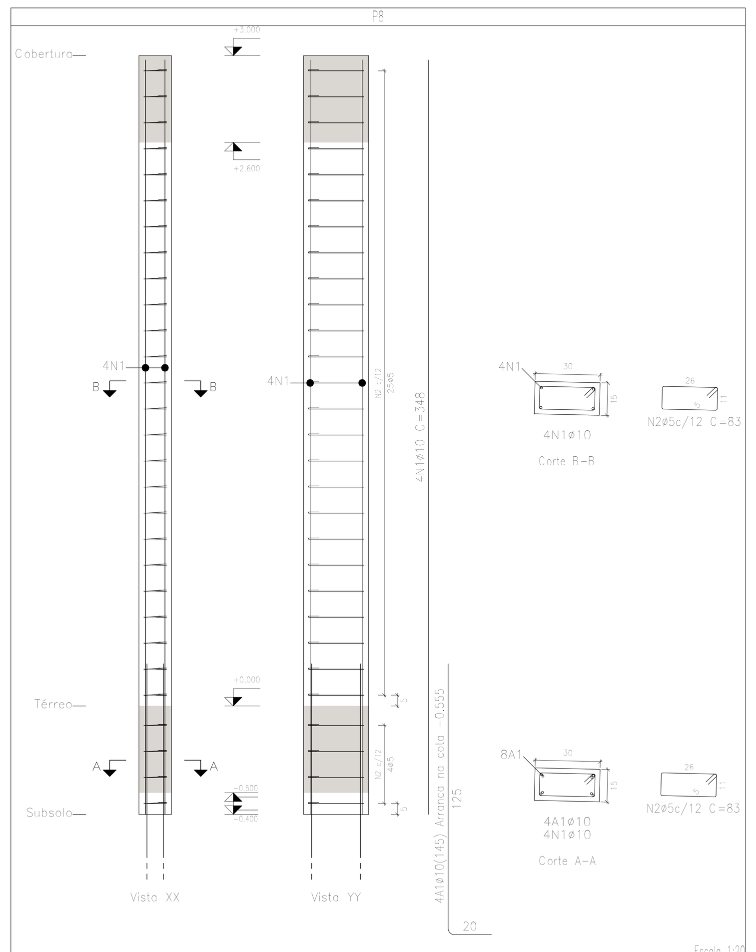
Concreto: Tipo: C30, em geral; Cobrimento: 2 cm

P7



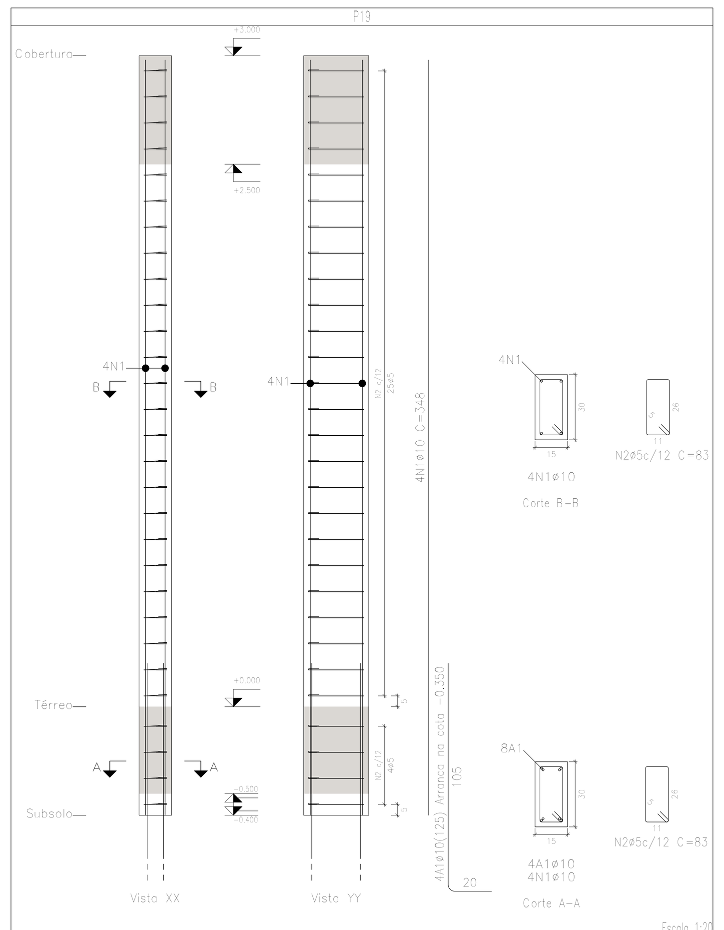
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.14	2.70	-	3.3	3.6	24.44
Térreo		0.02	0.45	8.6	0.5	10.0	404.44
Total		0.16	3.15	8.6	3.8	13.6	78.73

P8



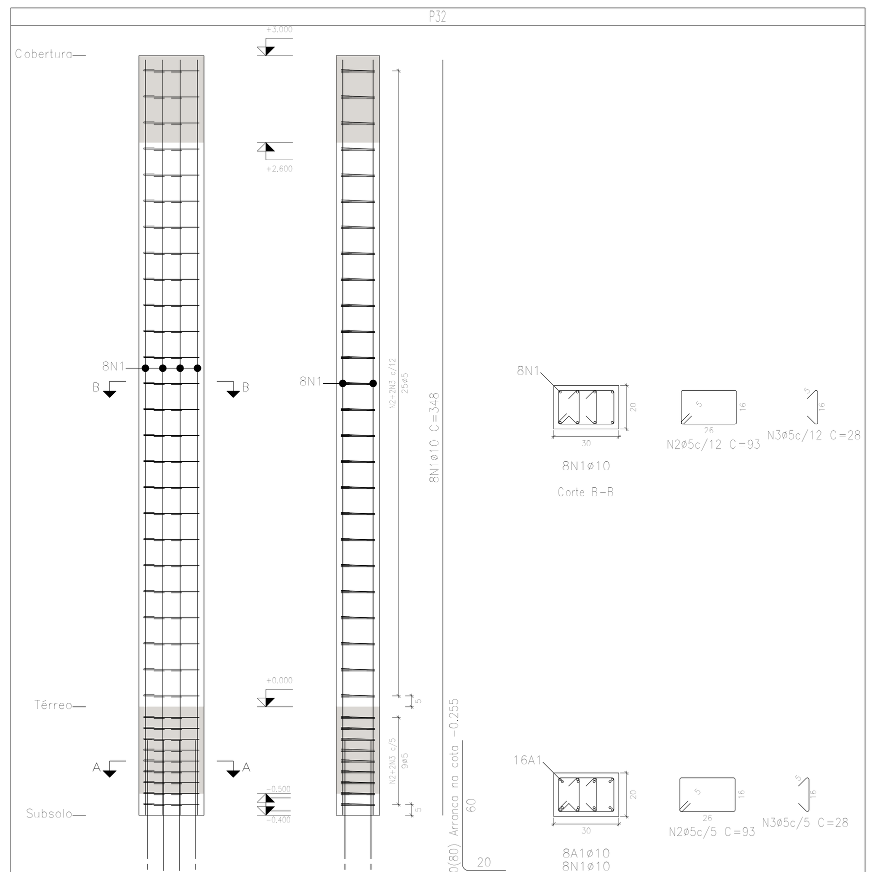
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.14	2.70	-	3.3	3.6	24.44
Térreo		0.02	0.45	8.6	0.5	10.0	404.44
Total		0.16	3.15	8.6	3.8	13.6	78.73

P19



Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.14	2.70	-	3.3	3.6	24.44
Térreo		0.02	0.45	8.6	0.5	10.0	404.44
Total		0.16	3.15	8.6	3.8	13.6	78.73

P32



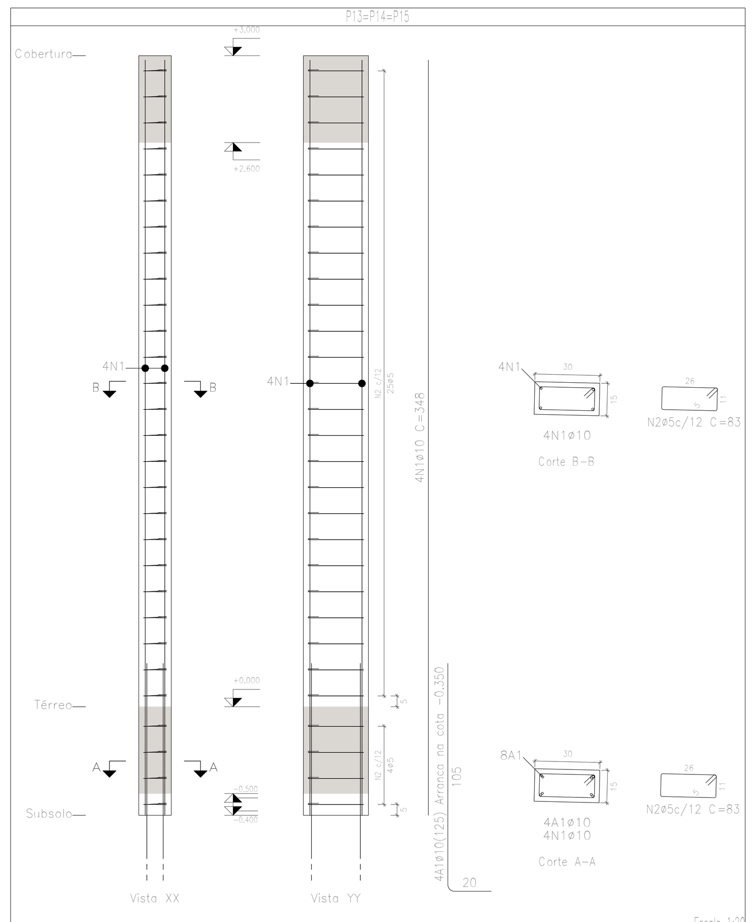
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	30x20	0.18	3.00	-	5.8	6.4	32.22
Térreo		0.03	0.50	17.2	2.1	21.2	643.33
Total		0.21	3.50	17.2	8.0	27.6	119.52

PILARES – RESUMO GERAL DE AÇO

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P44	1	ø10	4		348	1392	8.6	
	2	ø5	29		83	2407		3.8
					Total+10%:		9.5	4.2
P7	1	ø10	4		348	1392	8.6	
	2	ø5	29		83	2407		3.8
					Total+10%:		9.5	4.2
P8	1	ø10	4		348	1392	8.6	
	2	ø5	29		83	2407		3.8
					Total+10%:		9.5	4.2
P13=P14=P15	1	ø10	4		348	1392	8.6	
	2	ø5	29		83	2407		3.8
					Total+10%:		9.5	4.2
						(x3):	28.5	12.6
P19	1	ø10	4		348	1392	8.6	
	2	ø5	29		83	2407		3.8
					Total+10%:		9.5	4.2
P20=P21=P34 P38=P39	1	ø10	4		348	1392	8.6	
	2	ø5	29		83	2407		3.8
					Total+10%:		9.5	4.2
						(x5):	47.5	21.0
P22=P23=P24 P25=P26	1	ø10	4		348	1392	8.6	
	2	ø5	29		83	2407		3.8
					Total+10%:		9.5	4.2
						(x5):	47.5	21.0
P16	1	ø10	10		348	3480	21.4	
	2	ø5	33		83	2739		4.3
	3	ø5	99		23	2277		3.6
					Total+10%:		23.5	8.7
P17	1	ø10	4		348	1392	8.6	
	2	ø5	29		93	2697		4.2
					Total+10%:		9.5	4.6
P18	1	ø10	4		348	1392	8.6	
	2	ø5	32		83	2656		4.2
					Total+10%:		9.5	4.6
P32	1	ø10	8		348	2784	17.2	
	2	ø5	34		93	3162		5.0
	3	ø5	68		28	1904		3.0
					Total+10%:		18.9	8.8
P54	1	ø10	4		348	1392	8.6	
	2	ø5	29		93	2697		4.2
					Total+10%:		9.5	4.6
						ø5:	0.0	102.7
						ø10:	232.4	0.0
						Total:	232.4	102.7

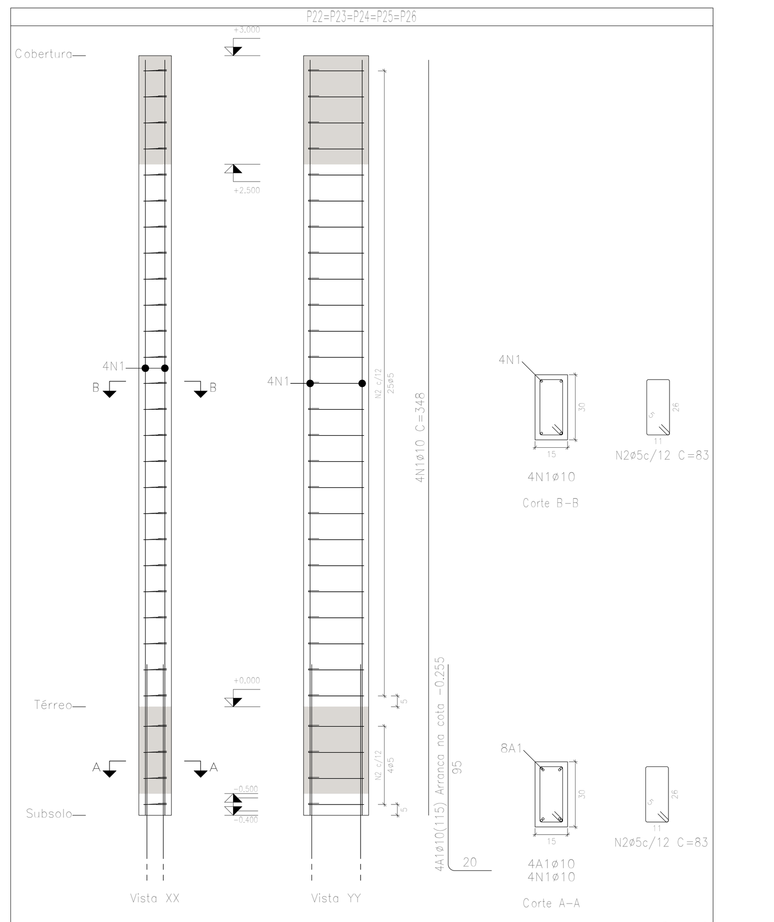
Resumo Aço Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50 ø10	828.2	561	561
CA-60 ø5	1476.5	255	255
Total			816

P13=P14=P15



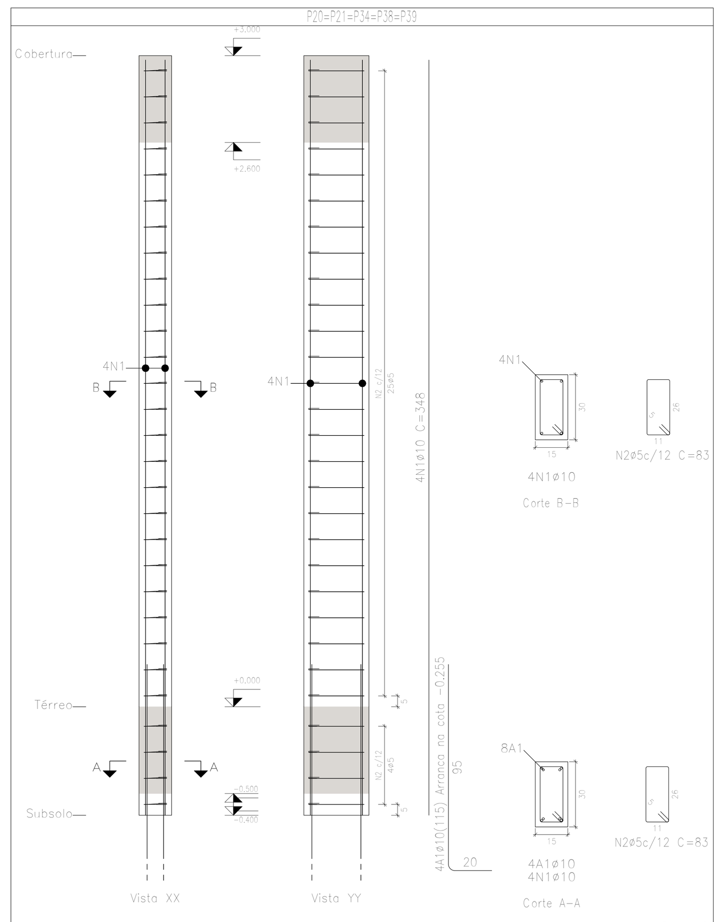
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.41	2.70	-	3.3	3.6	8.15
Térreo		0.07	0.45	8.6	0.5	10.0	134.81
Total (x3)		1.42	9.45	25.7	11.3	40.8	26.24

P22=P23=P24=P25=P26



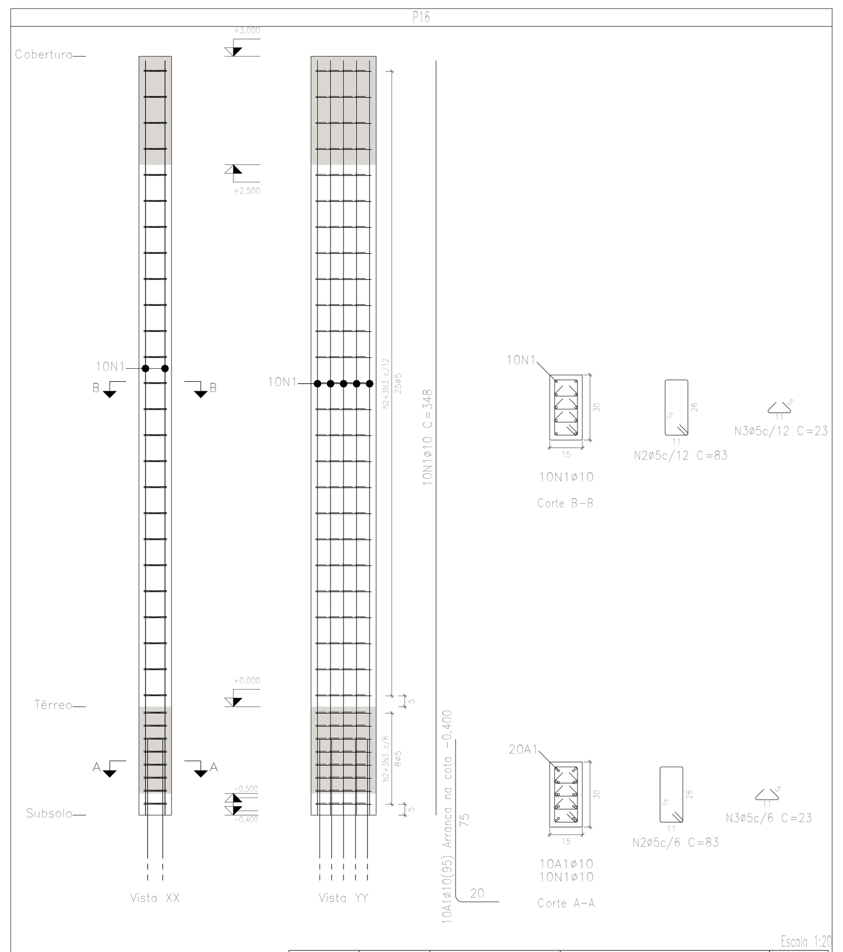
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.68	2.70	-	3.3	3.6	4.89
Térreo		0.11	0.45	8.6	0.5	10.0	80.89
Total (x5)		3.94	15.75	42.9	18.9	68.0	15.75

P20=P21=P34=P38=P39



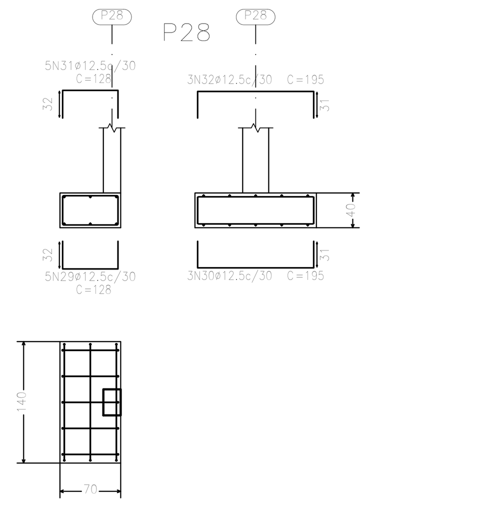
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.68	2.70	-	3.3	3.6	4.89
Térreo		0.11	0.45	8.6	0.5	10.0	80.89
Total (x5)		3.94	15.75	42.9	18.9	68.0	15.75

P16

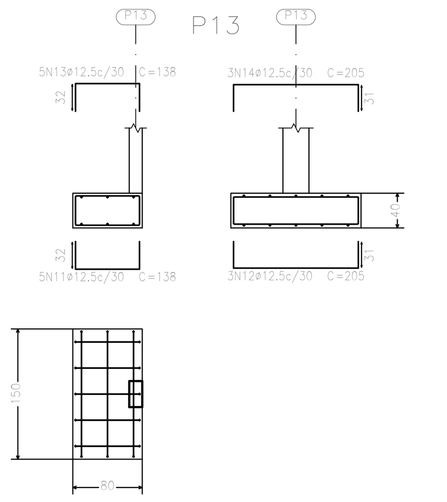


Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.14	2.70	-	6.0	6.6	44.44
Térreo		0.02	0.45	21.4	1.9	25.6	1035.56
Total		0.16	3.15	21.4	7.9	32.2	186.03

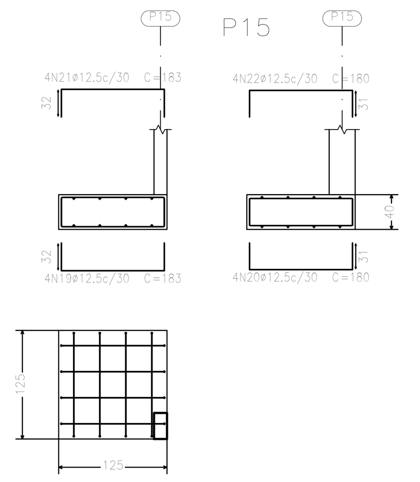
P28



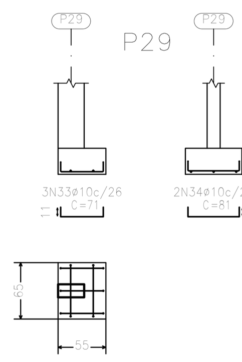
P13



P15



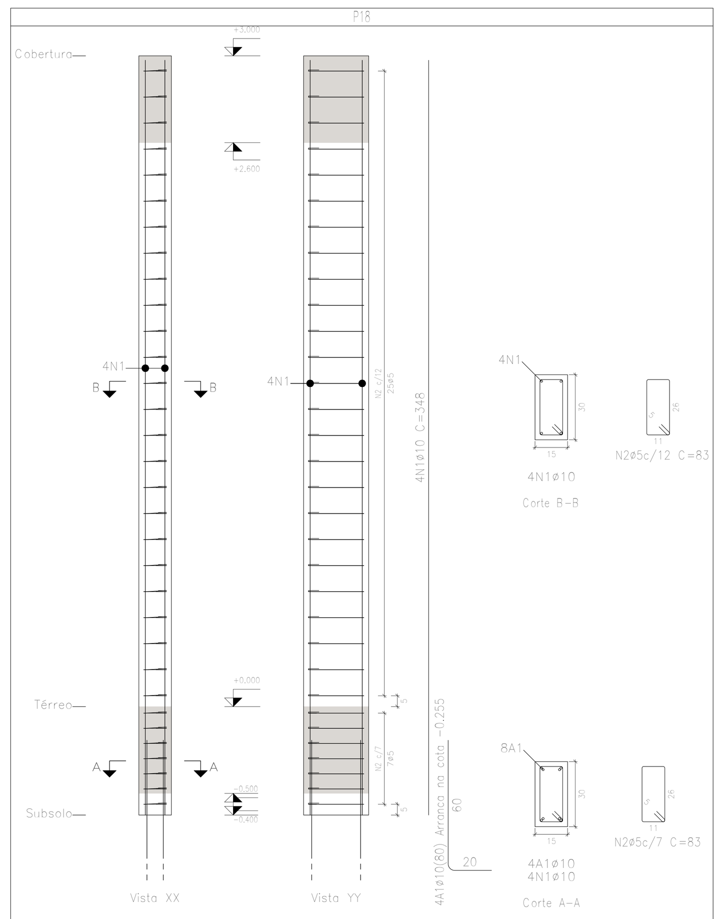
P29



BLOCOS DE FUNDAÇÃO – RESUMO GERAL DE AÇO

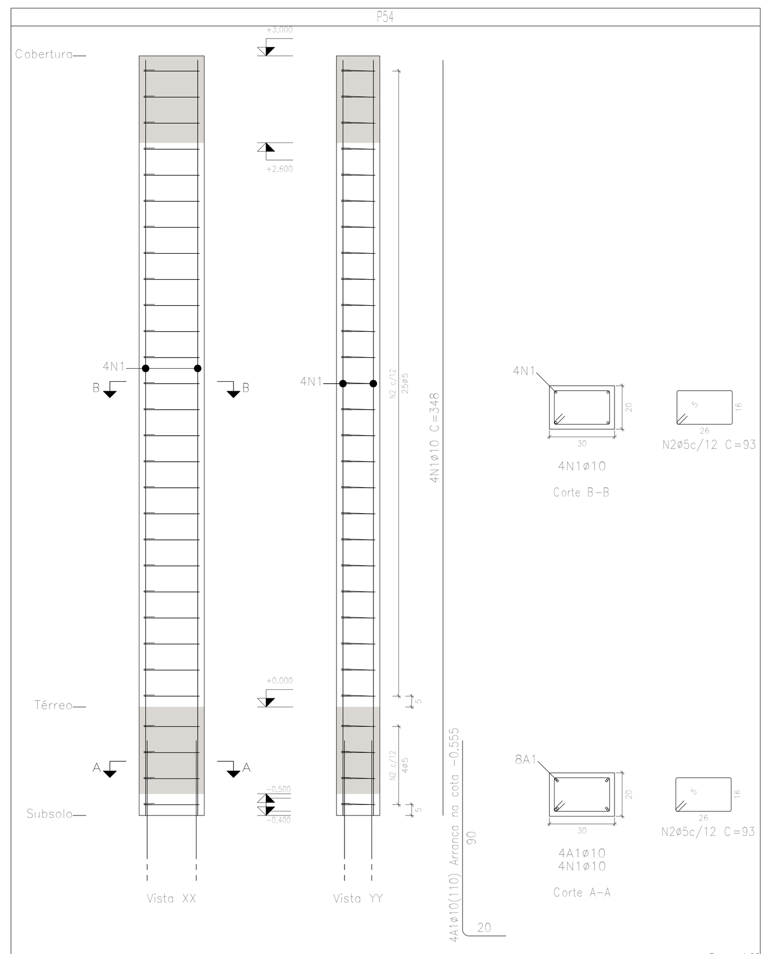
Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P7	1	ø12.5	6	37	79	37	153	918	8.8	
	2	ø12.5	3	36	153	36	225	675	6.5	
	3	ø12.5	6	37	79	37	153	918	8.8	
	4	ø12.5	3	36	153	36	225	675	6.5	
								Total+10%:	33.7	
P8=P9	5	ø10	15	53	93	53	199	2985	18.4	
	6	ø10	8	52	193	52	297	2376	14.6	
	7	ø10	15	53	93	53	199	2985	18.4	
	8	ø10	8	52	193	52	297	2376	14.6	
								Total+10%:	72.6	
								(x2):	145.2	
P12	9	ø10	4	11	49	11	71	284	1.8	
	10	ø10	2	11	104	11	126	252	1.6	
								Total+10%:	3.7	
P13	11	ø12.5	5	32	74	32	138	690	6.6	
	12	ø12.5	3	31	143	31	205	615	5.9	
	13	ø12.5	5	32	74	32	138	690	6.6	
	14	ø12.5	3	31	143	31	205	615	5.9	
								Total+10%:	27.5	
P14	15	ø12.5	5	32	69	32	133	665	6.4	
	16	ø12.5	3	31	143	31	205	615	5.9	
	17	ø12.5	5	32	69	32	133	665	6.4	
	18	ø12.5	3	31	143	31	205	615	5.9	
								Total+10%:	27.1	
P15	19	ø12.5	4	32	119	32	183	732	7.1	
	20	ø12.5	4	31	118	31	180	720	6.9	
	21	ø12.5	4	32	119	32	183	732	7.1	
	22	ø12.5	4	31	118	31	180	720	6.9	
								Total+10%:	30.8	
P17=P18=P20=P23 P24=P27=P30=P31 P32=P35=P36=P37 P40=P41=P42=P45 P46=P49=P50=P53 P56=P57=(P21–P22) (P25–P26)=(P33–P34) (P38–P39)=(P47–P48) (P51–P52)	23	ø10	4	15	74	15	104	416	2.6	
	24	ø10	4	11	74	11	96	384	2.4	
								Total+10%:	5.5	
								(x28):	154.0	
P19	25	ø12.5	5	32	69	32	133	665	6.4	
	26	ø12.5	3	31	143	31	205	615	5.9	
	27	ø12.5	5	32	69	32	133	665	6.4	
	28	ø12.5	3	31	143	31	205	615	5.9	
								Total+10%:	27.1	
P28	29	ø12.5	5	32	64	32	128	640	6.2	
	30	ø12.5	3	31	133	31	195	585	5.6	
	31	ø12.5	5	32	64	32	128	640	6.2	
	32	ø12.5	3	31	133	31	195	585	5.6	
								Total+10%:	26.0	
P29	33	ø10	3	11	49	11	71	213	1.3	
	34	ø10	2	11	59	11	81	162	1.0	
								Total+10%:	2.5	
								ø10:	305.4	0.0
								ø12.5:	172.2	0.0
								Total:	477.6	0.0

P18



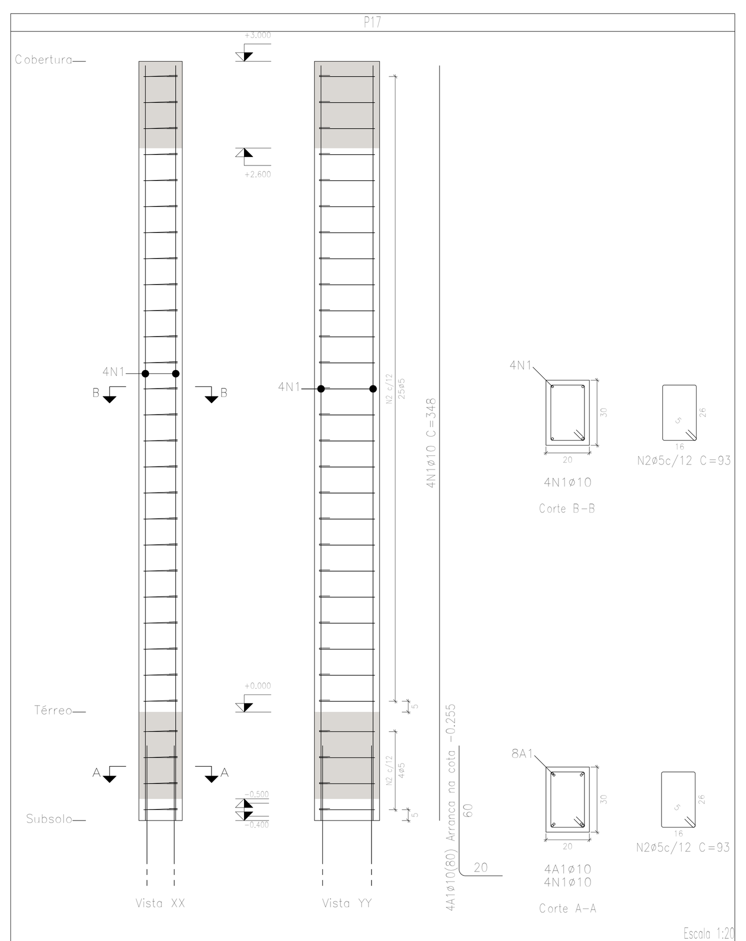
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	15x30	0.14	2.70	-	3.3	3.6	24.44
Térreo		0.02	0.45	8.6	0.9	10.5	422.22
Total		0.16	3.15	8.6	4.2	14.1	81.27

P54



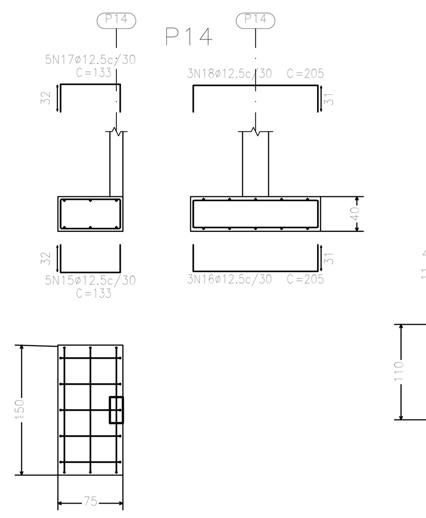
Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	30x20	0.18	3.00	-	3.7	4.1	20.56
Térreo		0.03	0.50	8.6	0.6	10.1	306.67
Total		0.21	3.50	8.6	4.2	14.2	61.43

P17

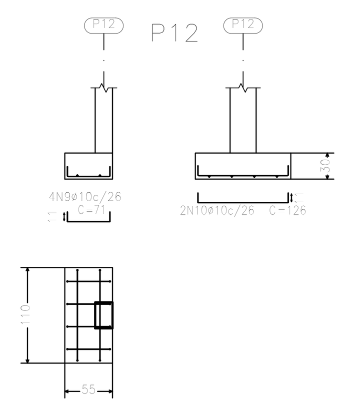


Planta	Dimensão (cm)	Concreto: Volume (m3)	Concreto: Fôrmas (m2)	Armaduras: Longitudinal CA-50 e CA-60 (kg)	Estribos CA-60 (kg)	Total +10 % (kg)	Taxa (kg/m3)
Cobertura	20x30	0.18	3.00	-	3.7	4.1	20.56
Térreo		0.03	0.50	8.6	0.6	10.1	306.67
Total		0.21	3.50	8.6	4.2	14.2	61.43

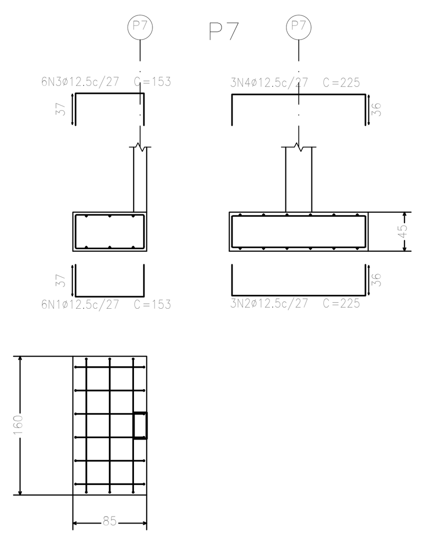
P14



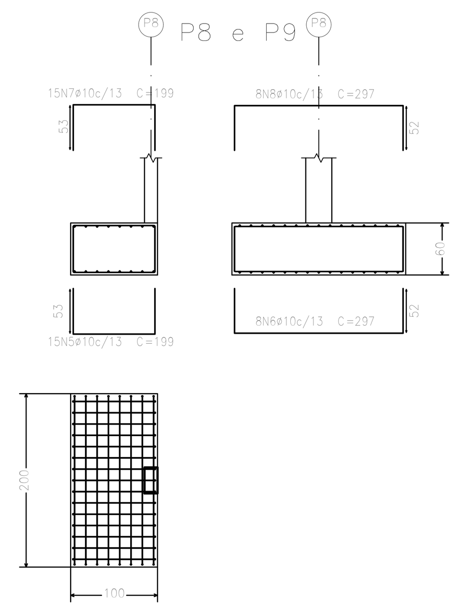
P12



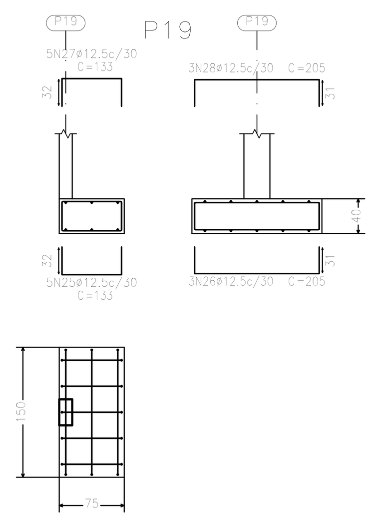
P7



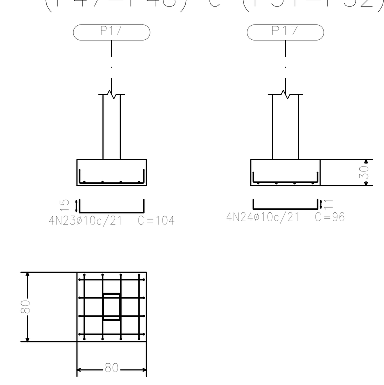
P8 e P9



P19



P17, P18, P20, P23, P24, P27, P30, P31, P32, P35, P36, P37, P40, P41, P42, P45, P46, P49, P50, P53, P56, P57, (P21–P22), (P25–P26), (P33–P34), (P38–P39), (P47–P48) e (P51–P52)



PREFEITURA MUNICIPAL DE ARAÚJOS
CNPJ 18.300.996/0001-16
ESTADO DE MINAS GERAIS
Av. 1º de janeiro, 1.748 – Centro
Araújos/MG – CEP: 35.603-000
Telefone: (37) 3288-3000.

TÍTULO:
AMPLIAÇÃO DA CRECHE CASA DA CRIANÇA SANTA TEREZINHA DO MENINO JESUS; MELHORIA NA ESCOLA MUNICIPAL PERCILIA LEONARDO E PINTURA DA ASSOCIAÇÃO DE PAIS E AMIGOS DOS EXEPCIONAIS - APAE

QUADRO DE ÁREAS

ÁREA DO TERRENO	-	COEFICIENTE APROVEITAMENTO	-
ÁREA EXISTENTE	-	TAXA DE OCUPAÇÃO	-
ÁREA A DEMOLIR	-	TAXA DE PERMEABILIDADE	-
ÁREA A CONSTRUIR	-		

PREFEITO MUNICIPAL:
FRANCISCO CLÉBER VIEIRA DE AQUINO
CPF: 712.709.656-20

SECRETÁRIO DE OBRAS:
IVAN LUÍS GONÇALVES DE LACERDA
CREA - MG 201311/D

R.T.
FERNANDA DE CÁSSIA TAVARES
CREA - MG 173223/D

TIPO DE USO: INSTITUCIONAL
ENDEREÇO: AVENIDA PARANÁ, 863 BAIRRO CIDADE NOVA ARAÚJOS - MG
LOTE: -
QUADRA: -

CONTEÚDO:
PROJETO ESTRUTURAL AMPLIAÇÃO CRECHE CASA DA CRIANÇA SANTA TERESINHA
DETALHAMENTO DOS PILARES E BLOCOS DE FUNDAÇÃO.

FOLHA:	DATA:	ESCALAS:	
06/17	01/07/2020	INDICADAS	ARQUIVO: MELHORIAS ESCOLAS 2020 - 02.DWG / COTAS EM CENTIMETROS

A0 - 118,9 x 84,1 cm