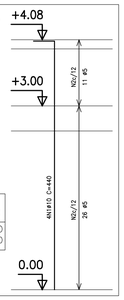
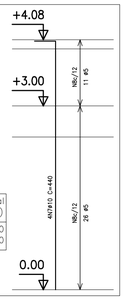
P8=P13=P18=P20=P24=P26 P27=P28=P29



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 9 (cm)
CA-50-A	1	ø10	4	440	1760	15840
CA-60-B	2	ø5	37	70	2590	23310

4N1ø10 C=440 37N2ø5 C=70

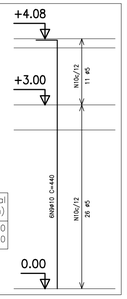
P17



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)
CA-50-A	7	ø10	4	440	1760
CA-60-B	8	ø5	37	70	2590

4N7ø10 C=440 37N8ø5 C=70

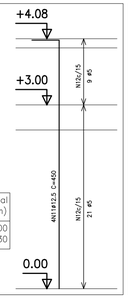
P19



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)
CA-50-A	9	ø10	6	440	2640
CA-60-B	10	ø5	37	70	2590

6N9ø10 C=440 37N10ø5 C=70

P21



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)
CA-50-A	11	ø12.5	4	450	1800
CA-60-B	12	ø5	30	71	2130

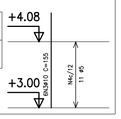
4N11ø12.5 C=450 30N12ø5 C=71

P25

Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)
CA-50-A	13	ø10	6	440	2640
CA-60-B	14	ø5	37	70	2590

6N13ø10 C=440 37N14ø5 C=70

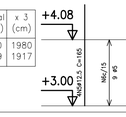
P10=P15



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
CA-50-A	3	ø10	6	155	930	1860
CA-60-B	4	ø5	11	70	770	1540

6N3ø10 C=155 11N4ø5 C=70

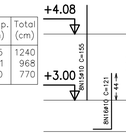
P11=P31=P32



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 3 (cm)
CA-50-A	5	ø12.5	4	165	660	1980
CA-60-B	6	ø5	9	71	639	1917

4N5ø12.5 C=165 9N6ø5 C=71

P35



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)
CA-50-A	15	ø10	8	155	1240
"	16	ø10	8	121	968
CA-60-B	17	ø5	11	70	770

8N15ø10 C=155 8N16ø10 C=121 11N17ø5 C=70

Pilares que terminam em Viga platibanda

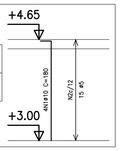
Betão: C20, em geral
Aço: CA-50-A e CA-60-B
Escala: 1:50

Resumo Aço Viga platibanda Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A ø10	269.5	186	
ø12.5	37.8	41	227
CA-60-B ø5	374.4	65	65
Total			292

VOLUME DE CONCRETO: 1,96m3

Elemento	Pos.	Diâm.	Q.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
P8=P13=P18=P20 P24=P26=P27=P28 P29	1	ø10	4	35	405		440	1760	11.1	
	2	ø5	37		70		70	2590		4.1
								Total+10%:	12.2	4.5
								(x9):	109.8	40.5
P10=P15	3	ø10	6		155		155	930	5.8	
	4	ø5	11		70		70	770		1.2
								Total+10%:	6.4	1.3
								(x2):	12.8	2.6
P11=P31=P32	5	ø12.5	4		165		165	660	6.5	
	6	ø5	9		71		71	639		1.0
								Total+10%:	7.2	1.1
								(x3):	21.6	3.3
P17	7	ø10	4	35	405		440	1760	11.1	
	8	ø5	37		70		70	2590		4.1
								Total+10%:	12.2	4.5
P19	9	ø10	6	35	405		440	2640	16.6	
	10	ø5	37		70		70	2590		4.1
								Total+10%:	18.3	4.5
P21	11	ø12.5	4	45	405		450	1800	17.7	
	12	ø5	30		71		71	2130		3.3
								Total+10%:	19.5	3.6
P25	13	ø10	6	35	405		440	2640	16.6	
	14	ø5	37		70		70	2590		4.1
								Total+10%:	18.3	4.5
P35	15	ø10	8		155		155	1240	7.8	
	16	ø10	8	30	91		121	968	6.1	
	17	ø5	11		70		70	770		1.2
								Total+10%:	15.3	1.3
								ø5:	0.0	64.8
								ø10:	186.7	0.0
								ø12.5:	41.1	0.0
								Total:	227.8	64.8

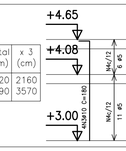
P1=P4=P5=P6=P7=P33



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 6 (cm)
CA-50-A	1	ø10	4	180	720	4320
CA-60-B	2	ø5	15	70	1050	6300

4N1ø10 C=180 15N2ø5 C=70

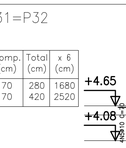
P2=P3=P23



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 3 (cm)
CA-50-A	3	ø10	4	180	720	2160
CA-60-B	4	ø5	17	70	1190	3570

4N3ø10 C=180 17N4ø5 C=70

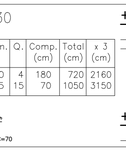
P10=P11=P15=P31=P32 P35



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 6 (cm)
CA-50-A	5	ø10	4	70	280	1680
CA-60-B	6	ø5	6	70	420	2520

4N5ø10 C=70 6N6ø5 C=70

P14=P22=P30



Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 3 (cm)
CA-50-A	7	ø10	4	180	720	2160
CA-60-B	8	ø5	15	70	1050	3150

4N7ø10 C=180 15N8ø5 C=70

P34=P36=P37

Aço	Pos.	Diâm.	Q.	Comp. (cm)	Total (cm)	x 3 (cm)
CA-50-A	9	ø10	4	180	720	2160
"	10	ø10	4	121	484	1452
CA-60-B	11	ø5	15	70	1050	3150

4N9ø10 C=180 4N10ø10 C=121 11N11ø5 C=70

Elemento	Pos.	Diâm.	Q.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
P1=P4=P5=P6=P7 P33	1	ø10	4	17	163		180	720	4.5	
	2	ø5	15		70		70	1050		1.6
								Total+10%:	5.0	1.8
								(x6):	30.0	10.8
P2=P3=P23	3	ø10	4	17	163		180	720	4.5	
	4	ø5	17		70		70	1190		1.9
								Total+10%:	5.0	2.1
								(x3):	15.0	6.3
P10=P11=P15=P31 P32=P35	5	ø10	4	15	55		70	280	1.8	
	6	ø5	6		70		70	420		0.7
								Total+10%:	2.0	0.8
								(x6):	12.0	4.8
P14=P22=P30	7	ø10	4	17	163		180	720	4.5	
	8	ø5	15		70		70	1050		1.6
								Total+10%:	5.0	1.8
								(x3):	15.0	5.4
P34=P36=P37	9	ø10	4	17	163		180	720	4.5	
	10	ø10	4	30	91		121	484	3.0	
	11	ø5	15		70		70	1050		1.6
								Total+10%:	8.3	1.8
								(x3):	24.9	5.4
								ø5:	0.0	32.7
								ø10:	96.9	0.0
								Total:	96.9	32.7

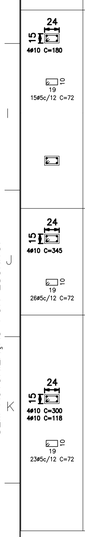
Resumo Aço Viga plat. 2 Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50-Aø10	139.3	96	96
CA-60-Bø5	186.9	32	32
Total			128

VOLUME DE CONCRETO: 0,90m3

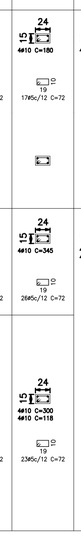
Pilares que terminam em Viga plat. 2

Betão: C20, em geral
Aço: CA-50-A e CA-60-B
Escala: 1:50

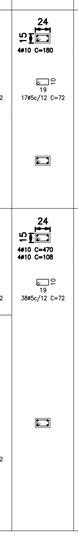
P1



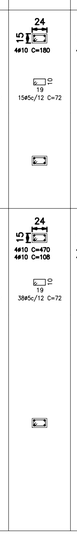
P2=P23



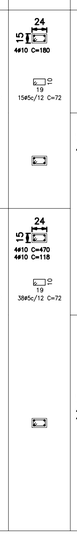
P3



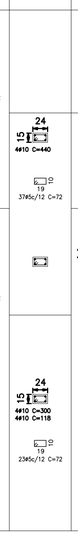
P4=P5 P6



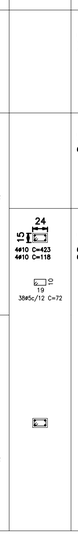
P7



P8=P13 P24



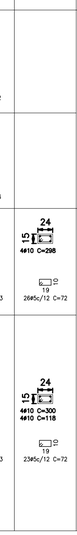
P9



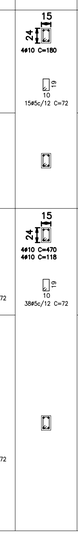
P10

P11

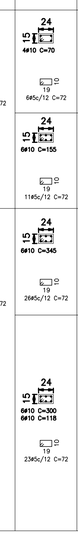
P12



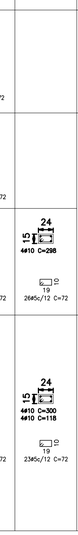
P14=P30



P15



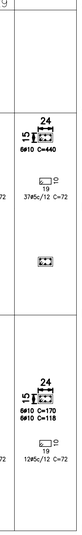
P16



P17

P18=P20 P26=P27 P28=P29

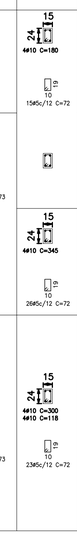
P19



Viga plat. 2
Viga platibanda
Laje de forro
Baldrame
Fundação

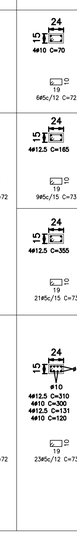
P21

P22

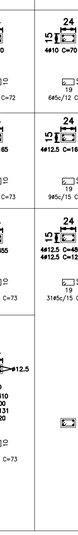


P25

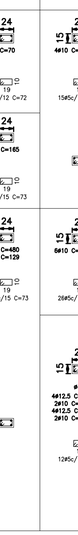
P31



P32



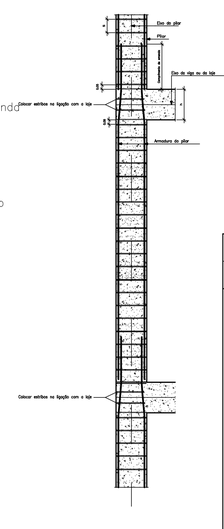
P33



P34=P36 P37

P35

Viga plat. 2
Viga platibanda
Laje de forro
Baldrame
Fundação



DETALHE TÍPICO
SEM ESCALA

Resumo Aço Pisos 1 ate 4 Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A ø10	1075.5	743	
ø12.5	150.5	162	905
CA-60-B ø5	1331.8	230	230
Total			1135

Quadro de pilares

Betão: C20, em geral
Aço: CA-50-A e CA-60-B
Escala: 1:50

REVISÃO	DESCRIÇÃO	PROJETADO	DESENHO	DATA
0	EMISSÃO INICIAL	VICENTE/MARLON	MARLON	12/08/2022

PREFEITURA MUNICIPAL DE BRAÚNA
RUA SÃO BENTO, Nº 401, CENTRO

PARA USO DO REQUERENTE

RESPONSAVEL TECNICO: VICENTE ALVES GUEDES — CREA-MG: 88.862/D
PROPRIETARIO: PREFEITURA MUNICIPAL DE BRAÚNAS — CPF / CNPJ.: 18.307.389/0001-88
RUA/AV./COMPLEMENTO: RUA SÃO BENTO — NUMERO DA UNIDADE:
BAIRRO: CENTRO – BRAÚNA/MG — C.E.P.: 35.189-000
SETOR: — QUADRA: — LOTES: — AREA DO TERRENO: — — —

PROJETO
TÍTULO DO PROJETO: PROJETO ESTRUTURAL — DESENHO: Marlon
USO: COMERCIAL — DATA: 26/08/2022
CONTEUDO: ARMAÇÃO DOS PILARES — FOLHA: 2/2

ATENÇÃO
ESTE DESENHO É PROPRIEDADE DA ********* E DO CONTRATANTE
NÃO PODERÁ SER ALTERADO,COPIADO OU USADO SOB NENHUM PRETEXTO
SEM AUTORIZAÇÃO POR ESCRITO.