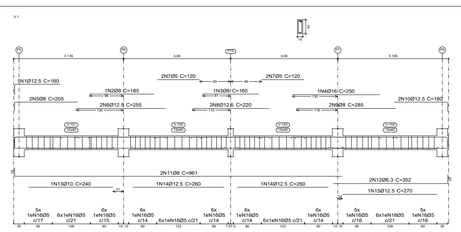
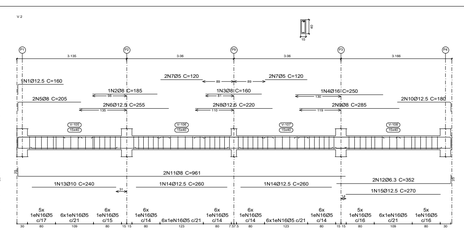
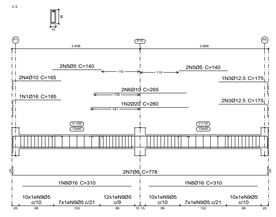
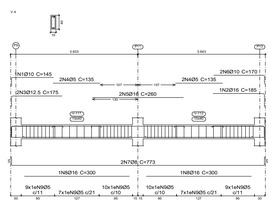
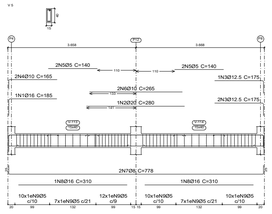








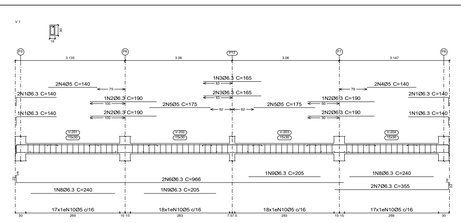


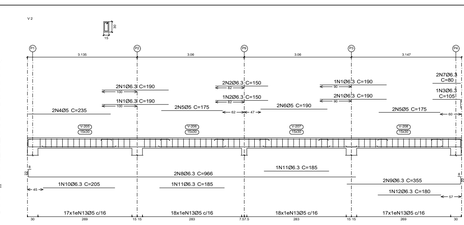
VIGA BALDRAME
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:50
Escala aberturas 1:50

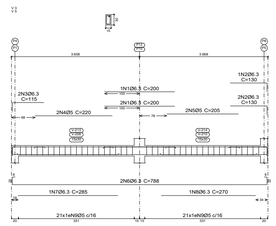
Resumo Aço Desenho de vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø6.3	14.1	4	
	Ø8	111.5	48	
	Ø10	26.9	18	
	Ø12.5	59.2	63	
	Ø16	34.2	59	
	Ø20	5.6	15	207
CA-60	Ø5	322.2	56	56
Total				263

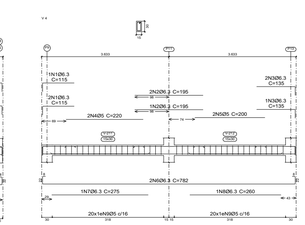
Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	Ø12.5	1	12 130	160	160	1.5	
	2	Ø8	1	185	185	185	0.7	
	3	Ø8	1	160	160	160	0.6	
	4	Ø16	1	250	250	250	3.9	
	5	Ø8	2	12 130	205	410	1.6	
	6	Ø12.5	2	255	255	510	4.9	
	7	Ø5	4	120	120	480		0.8
	8	Ø12.5	2	220	220	440	4.2	
	9	Ø8	2	285	285	570	2.3	
	10	Ø12.5	2	180	180	360	3.5	
	11	Ø8	2	6 938	961	1922	7.6	
	12	Ø6.3	2	6 327	352	704	1.7	
	13	Ø10	1	240	240	240	1.5	
	14	Ø12.5	2	260	260	520	5.0	
	15	Ø12.5	1	270	270	270	2.6	
	16	Ø5	69	12 98	98	6762		10.6
					Total+10%		45.8	12.5
V 2	1	Ø12.5	1	12 130	160	160	1.5	
	2	Ø8	1	185	185	185	0.7	
	3	Ø8	1	160	160	160	0.6	
	4	Ø16	1	250	250	250	3.9	
	5	Ø8	2	12 130	205	410	1.6	
	6	Ø12.5	2	255	255	510	4.9	
	7	Ø5	4	120	120	480		0.8
	8	Ø12.5	2	220	220	440	4.2	
	9	Ø8	2	285	285	570	2.3	
	10	Ø12.5	2	180	180	360	3.5	
	11	Ø8	2	6 938	961	1922	7.6	
	12	Ø6.3	2	6 327	352	704	1.7	
	13	Ø10	1	240	240	240	1.5	
	14	Ø12.5	2	260	260	520	5.0	
	15	Ø12.5	1	270	270	270	2.6	
	16	Ø5	69	12 98	98	6762		10.6
					Total+10%		45.8	12.5
V 3	1	Ø16	1	12 130	185	185	2.9	
	2	Ø20	1	280	280	280	6.9	
	3	Ø12.5	3	158 175	175	525	5.1	
	4	Ø10	2	12 130	165	330	2.0	
	5	Ø5	4	140	140	560		0.9
	6	Ø10	2	265	265	530	3.3	
	7	Ø8	2	6 158 778	778	1556	6.1	
	8	Ø16	2	310	310	620	9.8	
	9	Ø5	56	12 98	98	5488		8.6
					Total+10%		39.7	10.5
V 4	1	Ø10	1	12 130	145	145	0.9	
	2	Ø16	1	167	185	185	2.9	
	3	Ø12.5	2	12 194	175	350	3.4	
	4	Ø5	4	135	135	540		0.8
	5	Ø16	2	260	260	520	8.2	
	6	Ø10	2	6 170	170	340	2.1	
	7	Ø8	2	6 733	773	1546	6.1	
	8	Ø16	2	300	300	600	9.5	
	9	Ø5	52	12 98	98	5096		8.0
					Total+10%		36.4	9.7
V 5	1	Ø16	1	12 130	185	185	2.9	
	2	Ø20	1	280	280	280	6.9	
	3	Ø12.5	3	158 175	175	525	5.1	
	4	Ø10	2	12 130	165	330	2.0	
	5	Ø5	4	140	140	560		0.9
	6	Ø10	2	265	265	530	3.3	
	7	Ø8	2	6 158 778	778	1556	6.1	
	8	Ø16	2	310	310	620	9.8	
	9	Ø5	56	12 98	98	5488		8.6
					Total+10%		39.7	10.5

Ø5:	0.0	55.7
Ø6.3:	3.8	0.0
Ø8:	48.3	0.0
Ø10:	18.3	0.0
Ø12.5:	62.7	0.0
Ø16:	59.1	0.0
Ø20:	15.2	0.0
Total:	207.4	55.7









VIGA SUPERIOR
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:50
Escala aberturas 1:50

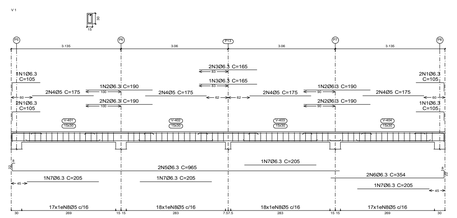
Resumo Aço Desenho de vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø6.3	214.0	58	58
CA-60	Ø5	259.4	45	45
Total				103

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	Ø6.3	6	12 130	140	840	2.1	
	2	Ø6.3	6	190	190	1140	2.8	
	3	Ø6.3	3	165	165	495	1.2	
	4	Ø5	4	140	140	560		0.9
	5	Ø5	4	175	175	700		1.1
	6	Ø6.3	2	12 938	966	1932	4.7	
	7	Ø6.3	2	6 355	355	710	1.7	
	8	Ø6.3	2	240	240	480	1.2	
	9	Ø6.3	2	205	205	410	1.0	
	10	Ø5	70	12 98	78	5460		8.6
					Total+10%		16.2	11.7
V 2	1	Ø6.3	6	190	190	1140	2.8	
	2	Ø6.3	3	150	150	450	1.1	
	3	Ø6.3	1	80 105	105	105	0.3	
	4	Ø5	2	235	235	470		0.7
	5	Ø5	4	175	175	700		1.1
	6	Ø5	2	190	190	380		0.6
	7	Ø6.3	2	80	80	160	0.4	
	8	Ø6.3	2	12 938	966	1932	4.7	
	9	Ø6.3	2	355	355	710	1.7	
	10	Ø6.3	1	205	205	205	0.5	
	11	Ø6.3	2	185	185	370	0.9	
	12	Ø6.3	1	180	180	180	0.4	
	13	Ø5	70	12 98	78	5460		8.6
					Total+10%		14.1	12.1
V 3=V 5	1	Ø6.3	3	200	200	600	1.5	
	2	Ø6.3	3	130	130	390	1.0	
	3	Ø6.3	2	80 115	115	230	0.6	
	4	Ø5	2	220	220	440		0.7
	5	Ø5	2	205	205	410		0.6
	6	Ø6.3	2	12 728 788	788	1576	3.9	
	7	Ø6.3	1	285	285	285	0.7	
	8	Ø6.3	1	270	270	270	0.7	
	9	Ø5	42	12 78	78	3276		5.1
					Total+10% (kG)		9.2 18.4	7.0 14.0
V 4	1	Ø6.3	3	80 115	115	345	0.8	
	2	Ø6.3	3	180	195	585	1.4	
	3	Ø6.3	3	12 135	135	405	1.0	
	4	Ø5	2	220	220	440		0.7
	5	Ø5	2	200	200	400		0.6
	6	Ø6.3	2	12 733 782	782	1564	3.8	
	7	Ø6.3	1	275	275	275	0.7	
	8	Ø6.3	1	260	260	260	0.6	
	9	Ø5	40	12 78	78	3120		4.9
					Total+10%		9.1	6.8

Ø5:	0.0	44.6
Ø6.3:	57.8	0.0
Total:	57.8	44.6

Piso 4
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:50
Escala aberturas 1:50

Resumo Aço Desenho de vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø6.3	57.2	15	15
CA-60	Ø5	68.6	12	12
Total				27



Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	Ø6.3	6	40 105	105	630	1.5	
	2	Ø6.3	6	190	190	1140	2.8	
	3	Ø6.3	3	165	165	495	1.2	
	4	Ø5	8	175	175	1400		2.2
	5	Ø6.3	2	12 938	965	1930	4.7	
	6	Ø6.3	2	354	354	708	1.7	
	7	Ø6.3	4	205	205	820	2.0	
	8	Ø5	70	12 98	78	5460		8.6
					Total+10%		15.3	11.9
					Ø5:	0.0		11.9
					Ø6.3:	15.3		0.0
					Total:	15.3		11.9

obra:
Salas de aula Escola Municipal do Costa

local:
Campo Largo do Piauí

proprietário:
Prefeitura Municipal de Campo Largo do Piauí

projeto:

arquiteta colaboradora:

desenhista: | data: | rubrica:

prancha:
04/04

desenho:
Detalhamento das vigas

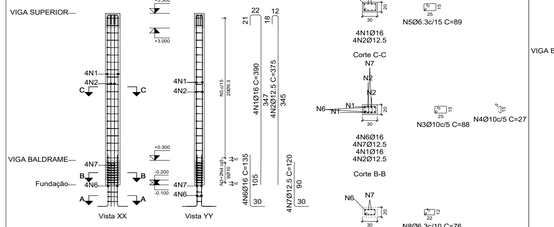
planta modificada/atualizada em:

Resumo Aço Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50 Ø6.3	339.6	91	
Ø10	48.3	33	
Ø12.5	318.0	337	
Ø16	85.6	149	610

Pilares que nascem em VIGA BALDRAME e chegam em Piso 4
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60

P1

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø16	4	390	1560
2	Ø12.5	4	375	1500
3	Ø10	9	88	792
4	Ø10	18	27	486
5	Ø6.3	20	89	1780
6	Ø16	4	135	540
7	Ø12.5	4	120	480
8	Ø6.3	3	76	228

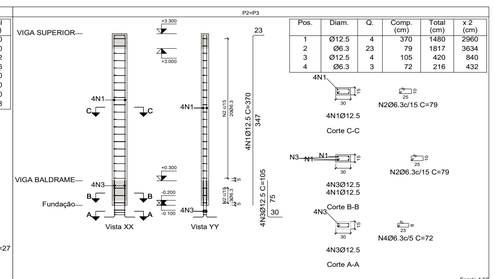


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
VIGA SUPERIOR	30x20	0.18	3.00	-	4.4	4.8	24.44
VIGA BALDRAME		0.03	0.50	39.1	7.0	50.7	1536.67
Total		0.21	3.50	39.1	11.4	55.5	240.48

P2=P3

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
1	Ø12.5	4	370	1480	2960
2	Ø6.3	23	79	1817	3634
3	Ø12.5	4	105	420	840
4	Ø6.3	3	72	216	432

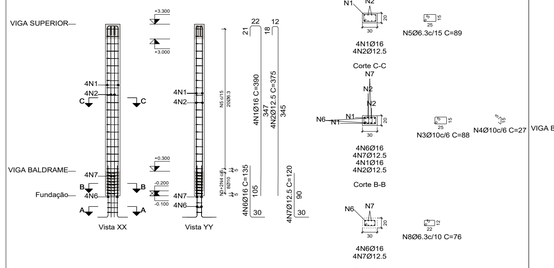


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
VIGA SUPERIOR	30x15	0.27	2.70	-	3.9	4.3	14.44
VIGA BALDRAME		0.05	0.45	14.3	0.6	16.4	331.11
Total (x2)		0.63	6.30	28.5	8.9	41.4	59.68

P4

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø16	4	390	1560
2	Ø12.5	4	375	1500
3	Ø10	8	88	704
4	Ø10	16	27	432
5	Ø6.3	20	89	1780
6	Ø16	4	135	540
7	Ø12.5	4	120	480
8	Ø6.3	3	76	228

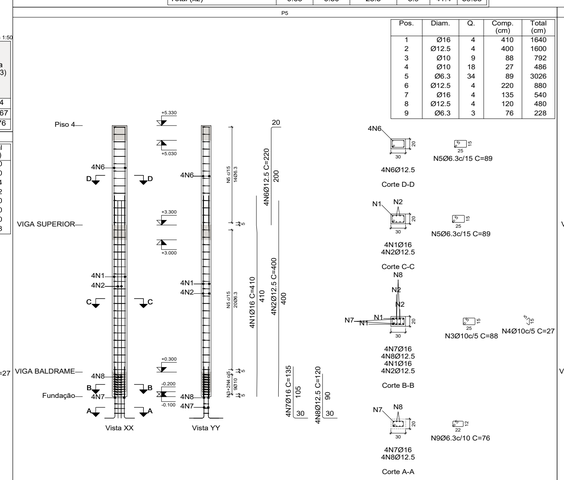


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
VIGA SUPERIOR	30x20	0.18	3.00	-	4.4	4.8	24.44
VIGA BALDRAME		0.03	0.50	39.1	7.0	50.7	1536.67
Total		0.21	3.50	39.1	11.4	55.5	244.76

P5

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø16	4	410	1640
2	Ø12.5	4	400	1600
3	Ø10	9	88	792
4	Ø10	18	27	486
5	Ø6.3	34	89	3026
6	Ø12.5	4	220	880
7	Ø16	4	135	540
8	Ø12.5	4	120	480
9	Ø6.3	3	76	228

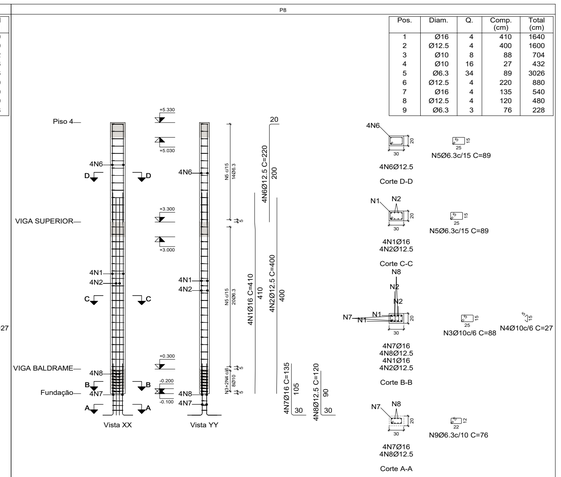


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
Piso 3	30x20	0.12	2.03	8.5	3.1	12.8	95.24
VIGA SUPERIOR		0.18	3.00	-	4.4	4.8	24.44
VIGA BALDRAME		0.03	0.50	41.3	7.9	54.1	1640.00
Total		0.33	5.53	49.8	15.3	71.7	196.50

P8

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø16	4	410	1640
2	Ø12.5	4	400	1600
3	Ø10	8	88	704
4	Ø10	16	27	432
5	Ø6.3	34	89	3026
6	Ø12.5	4	220	880
7	Ø16	4	135	540
8	Ø12.5	4	120	480
9	Ø6.3	3	76	228

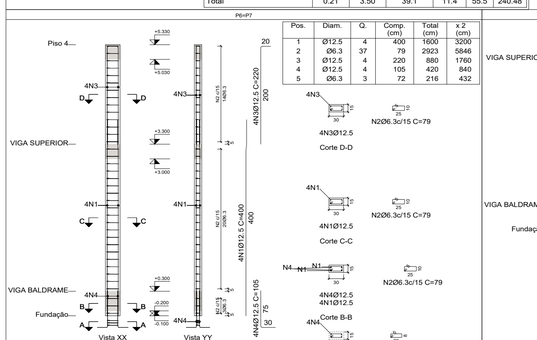


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
Piso 3	30x20	0.12	2.03	8.5	3.1	12.8	95.24
VIGA SUPERIOR		0.18	3.00	-	4.4	4.8	24.44
VIGA BALDRAME		0.03	0.50	41.3	7.0	53.1	1610.00
Total		0.33	5.53	49.8	14.4	70.7	193.79

P6=P7

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
1	Ø12.5	4	400	1600	3200
2	Ø6.3	37	79	2923	5846
3	Ø12.5	4	220	880	1760
4	Ø12.5	4	105	420	840
5	Ø6.3	3	72	216	432

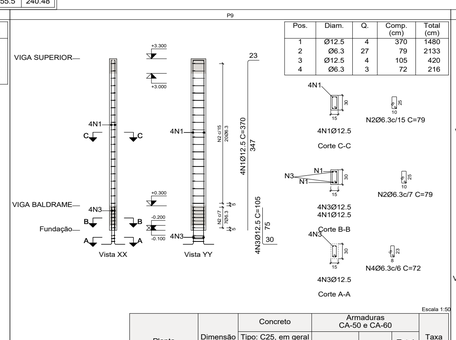


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
Piso 3	30x15	0.18	1.83	8.5	2.7	12.3	61.30
VIGA SUPERIOR		0.27	2.70	-	3.9	4.3	14.44
VIGA BALDRAME		0.05	0.45	15.4	0.6	17.6	355.56
Total (x2)		1.00	9.95	47.8	14.3	68.4	62.49

P9

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø12.5	4	370	1480
2	Ø6.3	27	79	2133
3	Ø12.5	4	105	420
4	Ø6.3	3	72	216

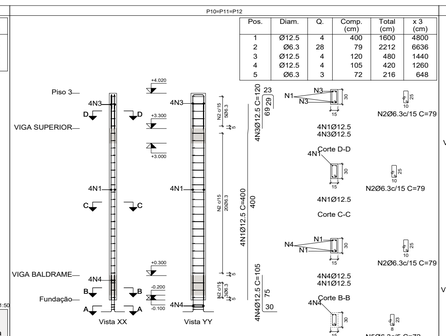


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
VIGA SUPERIOR	15x30	0.14	2.70	-	3.9	4.3	28.89
VIGA BALDRAME		0.02	0.45	14.3	1.4	17.3	697.78
Total		0.16	3.15	14.3	5.2	21.6	124.44

P10=P11=P12

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 3 (cm)
1	Ø12.5	4	400	1600	4800
2	Ø6.3	28	79	2212	6636
3	Ø12.5	4	120	480	1440
4	Ø12.5	4	105	420	1260
5	Ø6.3	3	72	216	648

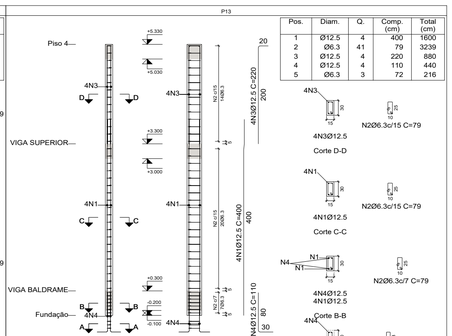


Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
Piso 3	15x30	0.10	0.65	4.6	1.0	6.2	57.61
VIGA SUPERIOR		0.41	2.70	-	3.9	4.3	9.63
VIGA BALDRAME		0.07	0.45	15.4	0.6	17.6	237.04
Total (x3)		1.71	11.39	60.1	16.3	84.3	44.76

P13

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø12.5	4	400	1600
2	Ø6.3	41	79	3239
3	Ø12.5	4	220	880
4	Ø12.5	4	110	440
5	Ø6.3	3	72	216



Escala 1:50

Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
Piso 3	15x30	0.09	1.83	8.5	2.7	12.3	122.61
VIGA SUPERIOR		0.14	2.70	-	3.9	4.3	28.89
VIGA BALDRAME		0.02	0.45	15.4	1.4	18.5	746.67
Total		0.25	4.98	23.9	7.9	35.1	128.19

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P1	1	Ø16	4	Consultar o desenho	390	1560	24.6	
	2	Ø12.5	4	Consultar o desenho	375	1500	14.4	
	3	Ø10	9	25 / 88 / 25	88	792	4.9	
	4	Ø10	18	15 / 27	27	486	3.0	
	5	Ø6.3	20	25 / 25 / 89	89	1780	4.4	
	6	Ø16	4	105 / 135	135	540	8.5	
	7	Ø12.5	4	90 / 120	120	480	4.6	
	8	Ø6.3	3	25 / 25 / 22 / 76	76	228	0.6	
				Total+10%:	71.5			
P2=P3	1	Ø12.5	4	347 / 370	370	1480	14.3	
	2	Ø6.3	23	25 / 25 / 79	79	1817	4.5	
	3	Ø12.5	4	75 / 105	105	420	4.0	
	4	Ø6.3	3	25 / 25 / 23 / 72	72	216	0.5	
				Total+10%: (x2):	25.6 51.2			
P4	1	Ø16	4	Consultar o desenho	390	1560	24.6	
	2	Ø12.5	4	Consultar o desenho	375	1500	14.4	
	3	Ø10	8	25 / 88	88	704	4.3	
	4	Ø10	16	15 / 27	27	432	2.7	
	5	Ø6.3	20	25 / 25 / 89	89	1780	4.4	
	6	Ø16	4	105 / 135	135	540	8.5	
	7	Ø12.5	4	90 / 120	120	480	4.6	
	8	Ø6.3	3	25 / 25 / 22 / 76	76	228	0.6	
				Total+10%:	70.5			
P5	1	Ø16	4	6016 / 284 / 680	410	1640	25.9	
	2	Ø12.5	4	180 / 390	400	1600	15.4	
	3	Ø10	9	25 / 88	88	792	4.9	
	4	Ø10	18	15 / 27	27	486	3.0	
	5	Ø6.3	34	25 / 25 / 89	89	3026	7.4	
	6	Ø12.5	4	200 / 220	220	880	8.5	
	7	Ø16	4	105 / 135	135	540	8.5	
	8	Ø12.5	4	90 / 120	120	480	4.6	
	9	Ø6.3	3	25 / 25 / 22 / 76	76	228	0.6	
				Total+10%:	86.7			
P6=P7	1	Ø12.5	4	338 / 1180	400	1600	15.4	
	2	Ø6.3	37	25 / 25 / 79	79	2923	7.2	
	3	Ø12.5	4	200 / 220	220	880	8.5	
	4	Ø12.5	4	75 / 105	105	420	4.0	
	5	Ø6.3	3	25 / 25 / 23 / 72	72	216	0.5	
				Total+10%: (x2):	39.2 78.4			
				Ø6.3:	47.8		0.0	
				Ø10:	25.1		0.0	
				Ø12.5:	174.8		0.0	
				Ø16:	110.6		0.0	
				Total:	358.3		0.0	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P8	1	Ø16	4	6016 / 284 / 680	410	1640	25.9	
	2	Ø12.5	4	180 / 390	400	1600	15.4	
	3	Ø10	8	25 / 88	88	704	4.3	
	4	Ø10	16	15 / 27	27	432	2.7	
	5	Ø6.3	34	25 / 25 / 89	89	3026	7.4	
	6	Ø12.5	4	200 / 220	220	880	8.5	
	7	Ø16	4	105 / 135	135	540	8.5	
	8	Ø12.5	4	90 / 120	120	480	4.6	
	9	Ø6.3	3	25 / 25 / 22 / 76	76	228	0.6	
				Total+10%:	85.7			
P9	1	Ø12.5	4	347 / 370	370	1480	14.3	
	2	Ø6.3	27	25 / 25 / 79	79	2133	5.2	
	3	Ø12.5	4	75 / 105	105	420	4.0	
	4	Ø6.3	3	25 / 25 / 23 / 72	72	216	0.5	
				Total+10%:	26.4			
P10=P11=P12	1	Ø12.5	4	338 / 1180	400	1600	15.4	
	2	Ø6.3	28	25 / 25 / 79	79	2212	5.4	
	3	Ø12.5	4	120	120	480	4.6	
	4	Ø12.5	4	75 / 105	105	420	4.0	
	5	Ø6.3	3	25 / 25 / 23 / 72	72	216	0.5	
				Total+10%: (x3):	32.9 98.7			
P13	1	Ø12.5	4	338 / 1180	400	1600	15.4	
	2	Ø6.3	41	25 / 25 / 79	79	3239	7.9	
	3	Ø12.5	4	200 / 220	220	880	8.5	
	4	Ø12.5	4	90 / 110	110	440	4.2	
	5	Ø6.3	3	25 / 25 / 23 / 72	72	216	0.5	
				Total+10%:	40.2			
				Ø6.3:	43.9		0.0	
				Ø10:	7.7		0.0	
				Ø12.5:	161.6		0.0	
				Ø16:	37.8		0.0	
				Total:	251.0		0.0	

obra:
Salas de aula Escola Municipal do Costa

local:
Costa/Campo Largo do Plaui

proprietário:
Prefeitural Municipal de Campo Largo do Plaui

projeto:

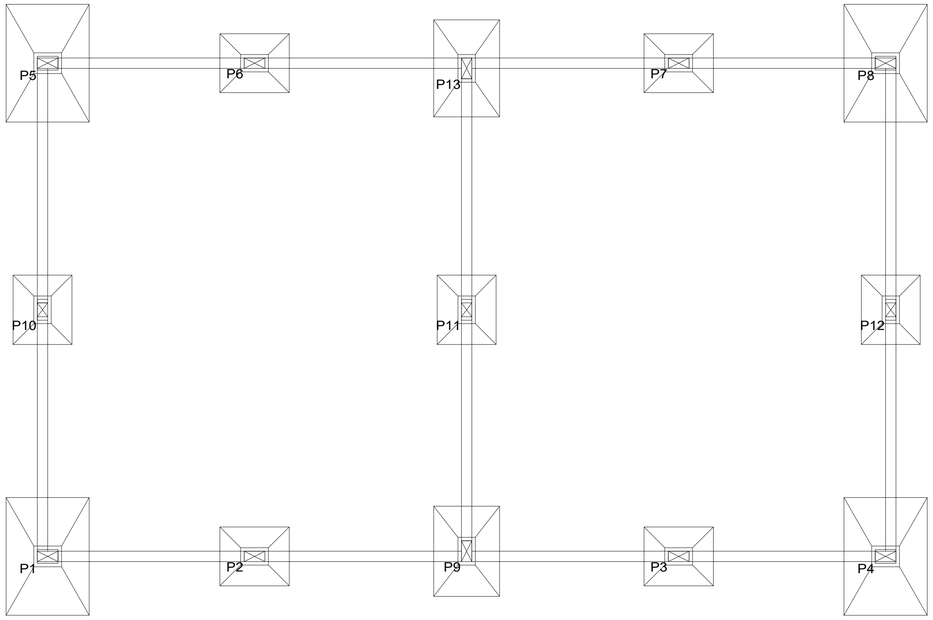
arquiteta colaboradora:

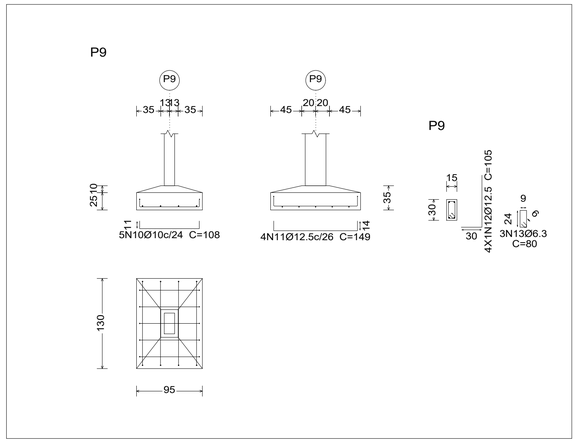
desenhista: | data: | rubrica:

prancha:
03/04

desenho:
fachadas

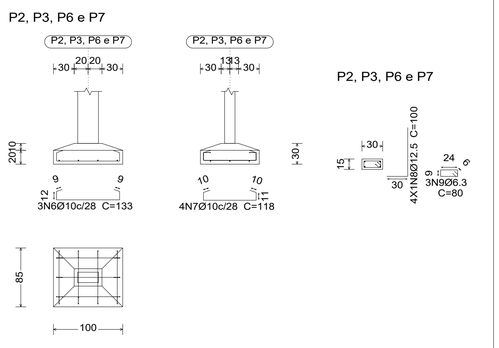
planta modificada/atualizada em:

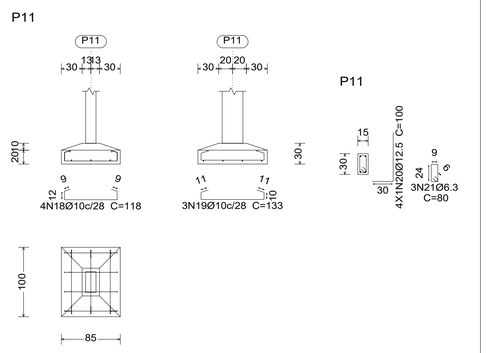


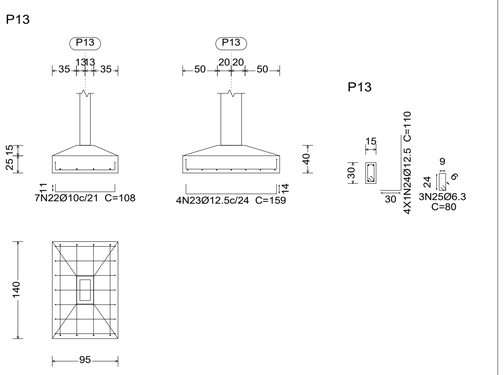


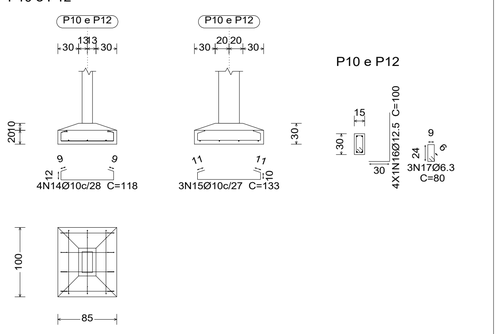
Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P1=P4=P5=P8	1	Ø12.5	6	14	111	14	139	834	8.0	
	2	Ø10	7		162		162	1134	7.0	
	3	Ø12.5	4	30	90		120	480	4.6	
	4	Ø16	4	30	103		133	532	8.4	
	5	Ø6.3	3		90		90	270	0.7	
							Total+10%: (x4):	31.6 126.4		
P2=P3=P6=P7	6	Ø10	3	9	115	9	133	399	2.5	
	7	Ø10	4		118		118	472	2.9	
	8	Ø12.5	4	30	70		100	400	3.9	
	9	Ø6.3	3		80		80	240	0.6	
							Total+10%: (x4):	10.9 43.6		
P9	10	Ø10	5	11	86	11	108	540	3.3	
	11	Ø12.5	4	14	121	14	149	596	5.7	
	12	Ø12.5	4	30	75		105	420	4.0	
	13	Ø6.3	3		80		80	240	0.6	
							Total+10%:	15.0		
P10=P12	14	Ø10	4		118		118	472	2.9	
	15	Ø10	3	11	111	11	133	399	2.5	
	16	Ø12.5	4	30	70		100	400	3.9	
	17	Ø6.3	3		80		80	240	0.6	
							Total+10%: (x2):	10.9 21.8		
P11	18	Ø10	4		118		118	472	2.9	
	19	Ø10	3	11	111	11	133	399	2.5	
	20	Ø12.5	4	30	70		100	400	3.9	
	21	Ø6.3	3		80		80	240	0.6	
							Total+10%:	10.9		
P13	22	Ø10	7	11	86	11	108	756	4.7	
	23	Ø12.5	4	14	131	14	159	636	6.1	
	24	Ø12.5	4	30	80		110	440	4.2	
	25	Ø6.3	3		80		80	240	0.6	
							Total+10%:	17.2		
							Ø6.3:	9.5	0.0	
							Ø10:	80.9	0.0	
							Ø12.5:	107.7	0.0	
							Ø16:	36.8	0.0	
							Total:	234.9	0.0	

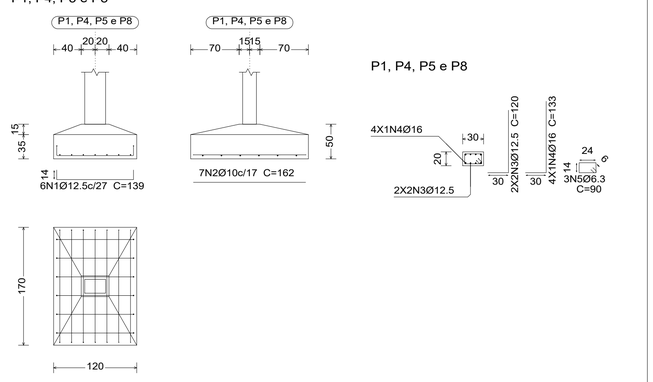
Resumo Aço Fundação Detalhamento fundação		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø6.3	32.4	9	
	Ø10	119.3	81	
	Ø12.5	101.5	108	
	Ø16	21.3	37	235











Fundação
Detalhamento fundação
Concreto: C25, em geral
Escala: 1:50

obra:
Salas de aula Escola Municipal do Costa

local:
Campo Largo do Piauí

proprietário:
Prefeitura Municipal de Campo Largo do Piauí

projeto:

arquiteta colaboradora:

desenhista: | data: | rubrica:

prancha:
02/04

desenho:
Detalhamento fundações

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