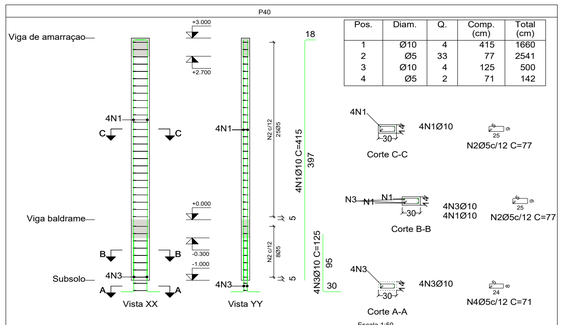
P40

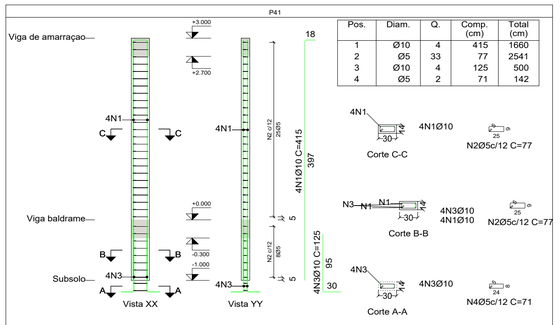


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	415	1660
2	Ø5	33	77	2541
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Vigas area de serviço	30x14	0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	10.2	1.0	12.3	266.67
Total		0.17	3.52	10.2	4.0	15.6	84.52

P41

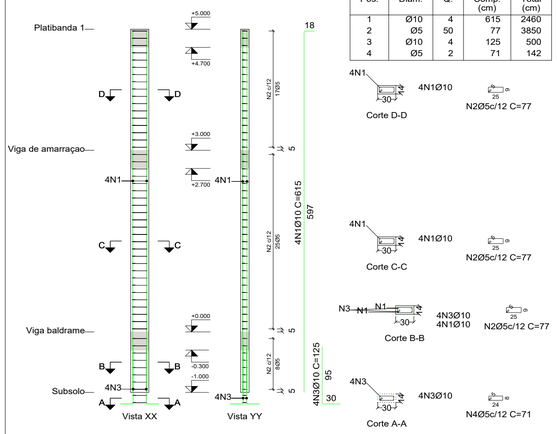


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	415	1660
2	Ø5	33	77	2541
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Vigas area de serviço	30x14	0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	10.2	1.0	12.3	266.67
Total		0.17	3.52	10.2	4.0	15.6	84.52

P42

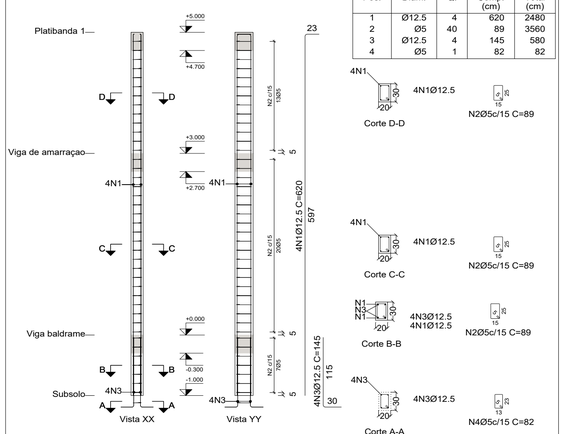


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	615	2460
2	Ø5	50	77	3850
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Platibanda 1	30x14	0.08	1.76	-	2.1	2.3	25.00
Vigas area de serviço		0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	15.2	1.0	17.8	385.71
Total		0.25	5.28	15.2	6.0	23.4	84.52

P43

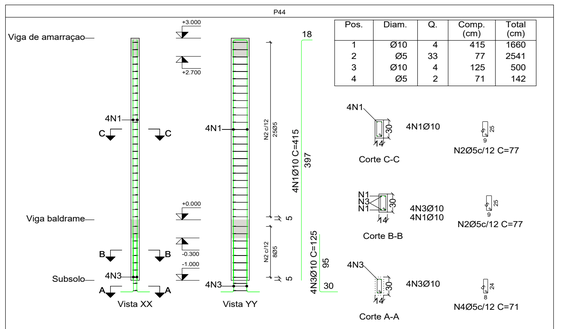


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø12.5	4	620	2480
2	Ø5	40	89	3560
3	Ø12.5	4	145	580
4	Ø5	1	82	82

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Platibanda 1	20x30	0.12	2.00	-	1.8	2.0	15.00
Vigas area de serviço		0.18	3.00	-	2.8	3.1	15.56
Viga baldrame		0.06	1.00	23.9	1.0	27.4	415.00
Total		0.36	6.00	23.9	5.6	32.5	81.94

P44

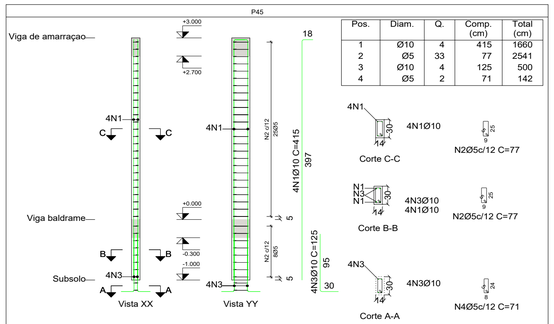


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	415	1660
2	Ø5	33	77	2541
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Vigas area de serviço	14x30	0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	10.2	1.0	12.3	266.67
Total		0.17	3.52	10.2	4.0	15.6	84.52

P45

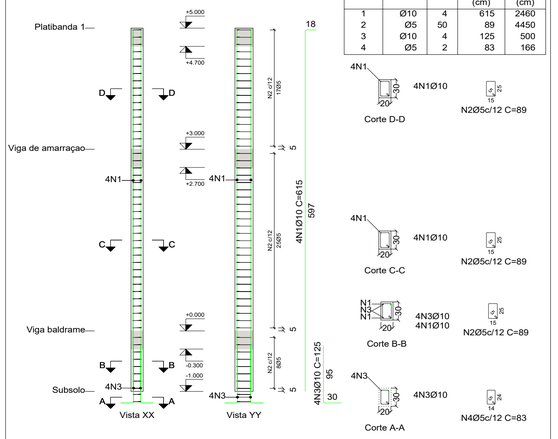


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	415	1660
2	Ø5	33	77	2541
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Vigas area de serviço	14x30	0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	10.2	1.0	12.3	266.67
Total		0.17	3.52	10.2	4.0	15.6	84.52

P46

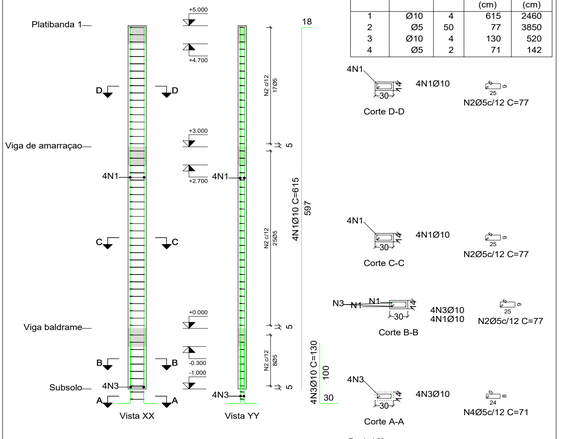


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	89	2460
2	Ø5	50	89	4450
3	Ø10	4	125	500
4	Ø5	2	83	166

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Platibanda 1	20x30	0.12	2.00	-	2.4	2.6	20.00
Vigas area de serviço		0.18	3.00	-	3.5	3.9	19.44
Viga baldrame		0.06	1.00	15.2	1.1	17.9	271.67
Total		0.36	6.00	15.2	7.0	24.4	61.67

P47

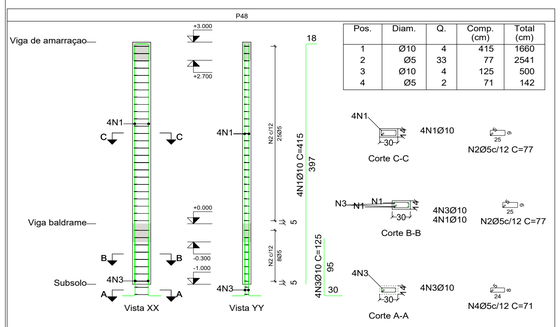


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	615	2460
2	Ø5	50	77	3850
3	Ø10	4	130	520
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Platibanda 1	30x14	0.08	1.76	-	2.1	2.3	25.00
Vigas area de serviço		0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	15.2	1.0	17.8	385.71
Total		0.25	5.28	15.2	6.0	23.4	84.52

P48

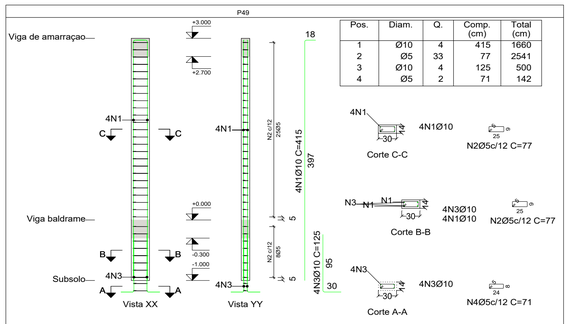


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	415	1660
2	Ø5	33	77	2541
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Vigas area de serviço	30x14	0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	10.2	1.0	12.3	266.67
Total		0.17	3.52	10.2	4.0	15.6	84.52

P49

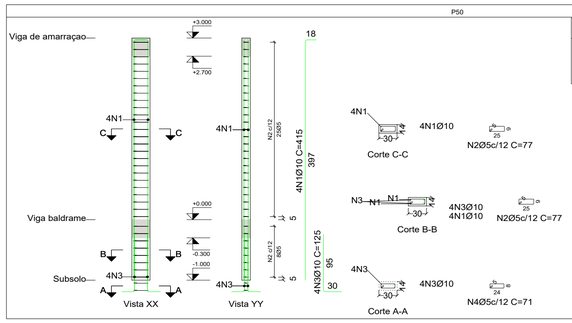


Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	415	1660
2	Ø5	33	77	2541
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Planta	Dimensão (cm)	Concreto		Armaduras CA-50 e CA-60			Taxa (kg/m3)
		Tipo: C25, em geral Cobrimento: 2.5 cm		Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
		Volume (m3)	Fôrmas (m2)				
Vigas area de serviço	30x14	0.13	2.64	-	3.0	3.3	23.81
Viga baldrame		0.04	0.88	10.2	1.0	12.3	266.67
Total		0.17	3.52	10.2	4.0	15.6	84.52

P50



Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	415	1660
2	Ø5	33	77	2541
3	Ø10	4	125	500
4	Ø5	2	71	142

Escala 1:50

Armaduras CA-50 e CA-60			Taxa (kg/m3)
Longitudinal (kg)	Estribos (kg)	Total +10 % (kg)	
-	3.0	3.3	23.81
10.2	1.0	12.3	266.67
10.2	4.0	15.6	84.52

Planta	Dimensão (cm)	Concreto	
		Tipo: C25, em geral Cobrimento: 2.5 cm	
		Volume (m3)	Fôrmas (m2)
Vigas area de serviço	30x14	0.13	2.64
Viga baldrame		0.04	0.88
Total		0.17	3.52

PROJETO ESTRUTURAL

Prancha **10/18**

FOLHA: **A1**

PROJETO INSTITUCIONAL

OBRA: ESCOLA MARIANOPOLIS - TO

CIDADE: PIUM - TO

PROPRIETÁRIO: PREFEITURA MUNICIPAL DE PIUM - TO

DATA: 12/12/2022

ENDEREÇO: ZONA RURAL

QUADRO DE AREAS

Proprietário: PREFEITURA MUNICIPAL DE PIUM

AUTOR DO PROJETO

ART. xxxxxxxxxxxxxxxxx

ALDO JÚNIOR MARTINS COELHO
Engenheiro Civil
Crea 317202D/TO

Revisão:	Descrisão Revisão:	Aprovado	Data

ESCALA INDICADA

CONTEÚDO:

- DETALHAMENTO DE PILARES P40 ao P50

APONTE A CAMERA DO CELULAR PARA VER A ESTRUTURA EM 3D

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aldojuniormartinscoelho@gmail.com