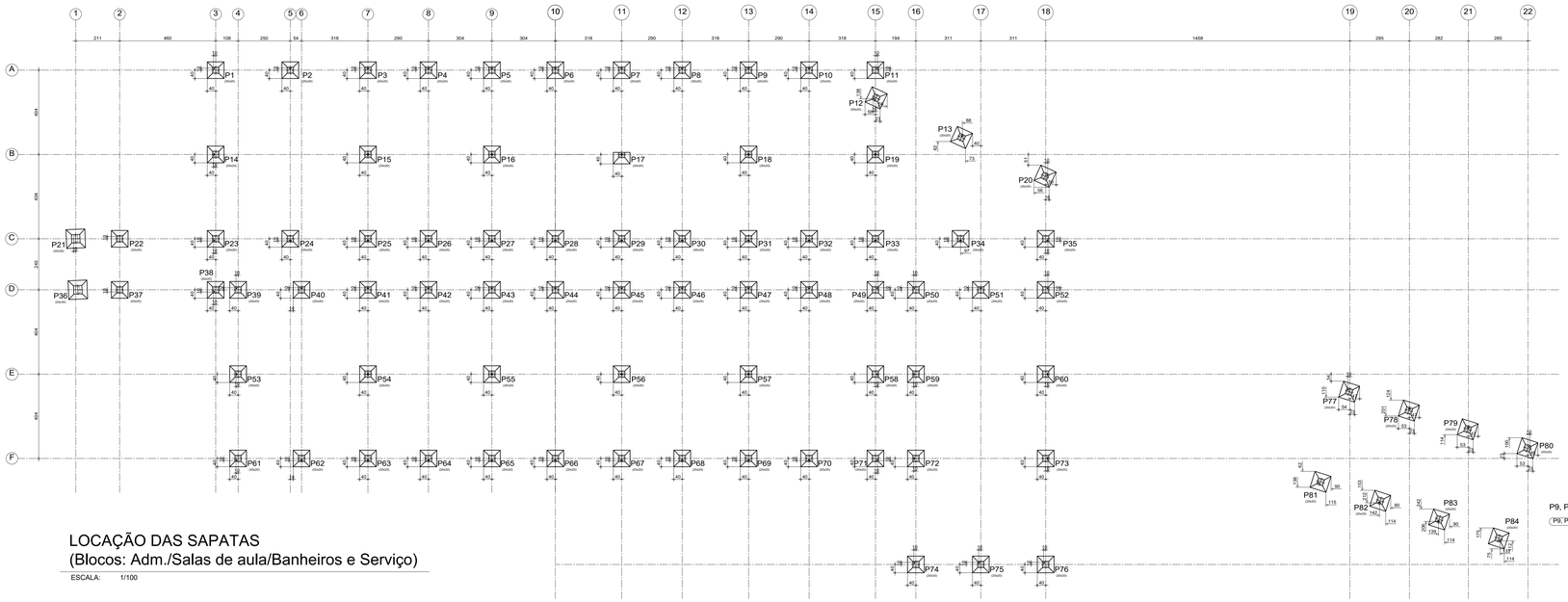
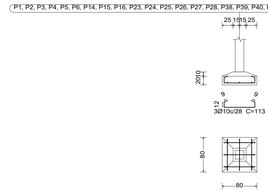


LOCAÇÃO DAS SAPATAS
(Blocos: Adm./Salas de aula/Banheiros e Serviço)

ESCALA: 1/100

P1, P2, P3, P4, P5, P6, P14, P15, P16, P23, P24, P25, P26, P27, P28, P38, P39, P40, P41, P42, P43, P44, P53, P54, P55, P61, P62, P63, P64, P65 e P66



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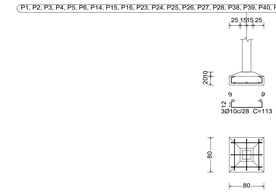

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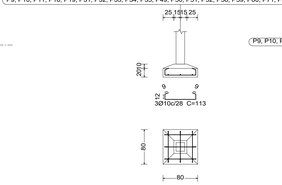
P9, P10, P11, P18, P19, P31, P32, P33, P34, P35, P49, P50, P51, P52, P58, P59, P60, P71, P72, P73, P74, P75 e P76



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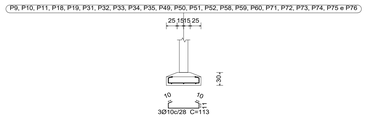

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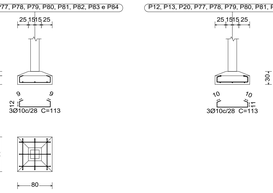
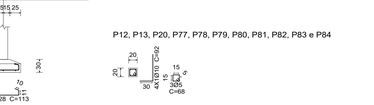
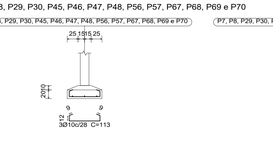


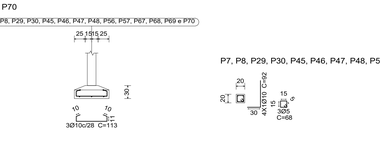
P12, P13, P20, P77, P78, P79, P80, P81, P82, P83 e P84



P12, P13, P20, P77, P78, P79, P80, P81, P82, P83 e P84



P7, P8, P29, P30, P45, P46, P47, P48, P56, P57, P67, P68, P69 e P70



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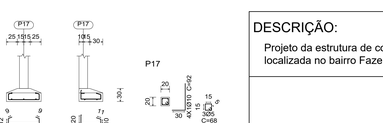
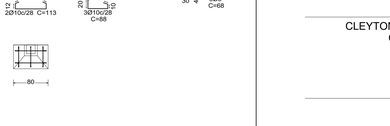
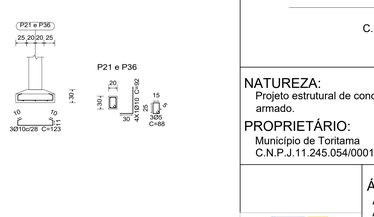


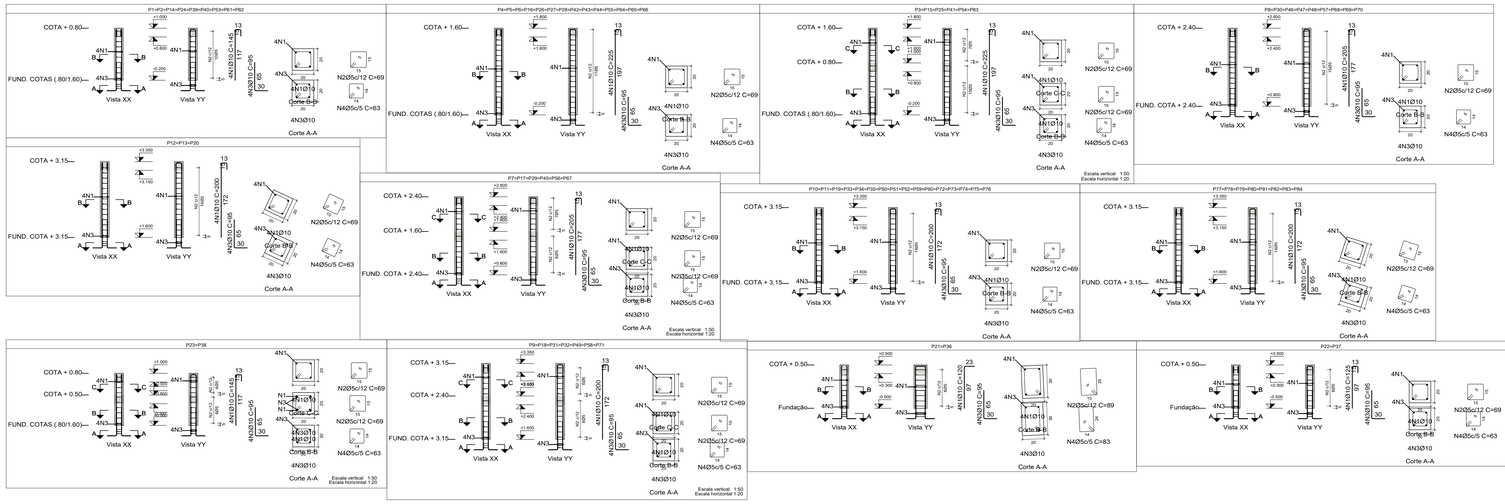
P17



P22 e P37

P21 e P36





Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P1=P2=P14=P24 P39=P40=P53=P61 P62	1	Ø10	4	117 / 13	145	580	3.6	
	2	Ø5	10	25 / 15 / 15 / 25	69	690		1.1
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x9):	6.5 58.5	1.5 13.5	
P3=P15=P25=P41 P54=P63	1	Ø10	4	197 / 13	225	900	5.5	
	2	Ø5	17	25 / 15 / 15 / 25	69	1173		1.8
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x6):	8.6 51.6	2.3 13.8	
P4=P5=P6=P16=P26 P27=P28=P42=P43 P44=P55=P64=P65 P66	1	Ø10	4	197 / 13	225	900	5.5	
	2	Ø5	17	25 / 15 / 15 / 25	69	1173		1.8
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x14):	8.6 120.4	2.3 32.2	
P7=P17=P29=P45 P56=P67	1	Ø10	4	177 / 13	205	820	5.1	
	2	Ø5	15	25 / 15 / 15 / 25	69	1035		1.6
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x6):	8.1 48.6	2.1 12.6	
P8=P30=P46=P47 P48=P57=P68=P69 P70	1	Ø10	4	177 / 13	205	820	5.1	
	2	Ø5	15	25 / 15 / 15 / 25	69	1035		1.6
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x9):	8.1 72.9	2.1 18.9	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P9=P18=P31=P32 P49=P58=P71	1	Ø10	4	172 / 13	200	800	4.9	
	2	Ø5	14	25 / 15 / 15 / 25	69	966		1.5
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x7):	7.9 55.3	2.0 14.0	
P10=P11=P19=P33 P34=P35=P50=P51 P52=P59=P60=P72 P73=P74=P75=P76	1	Ø10	4	172 / 13	200	800	4.9	
	2	Ø5	14	25 / 15 / 15 / 25	69	966		1.5
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x16):	7.9 126.4	2.0 32.0	
P12=P13=P20	1	Ø10	4	172 / 13	200	800	4.9	
	2	Ø5	14	25 / 15 / 15 / 25	69	966		1.5
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x3):	7.9 23.7	2.0 6.0	
P77=P78=P79=P80 P81=P82=P83=P84	1	Ø10	4	172 / 13	200	800	4.9	
	2	Ø5	14	25 / 15 / 15 / 25	69	966		1.5
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x8):	7.9 63.2	2.0 16.0	
P21=P36	1	Ø10	4	87 / 13	120	480	3.0	
	2	Ø5	8	25 / 15 / 15 / 25	89	712		1.1
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	24 / 14 / 24	83	249		0.4
					Total+10% (x2):	5.8 11.6	1.7 3.4	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P22=P37	1	Ø10	4	90 / 13	125	500	3.1	
	2	Ø5	8	25 / 15 / 15 / 25	69	552		0.9
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x2):	5.9 11.8	1.3 2.6	
P23=P38	1	Ø10	4	117 / 13	145	580	3.6	
	2	Ø5	10	25 / 15 / 15 / 25	69	690		1.1
	3	Ø10	4	80	95	380	2.3	
	4	Ø5	3	14 / 14 / 14	63	189		0.3
					Total+10% (x2):	6.5 13.0	1.5 3.0	
					Ø5:	0.0	168.0	
					Ø10:	657.0	0.0	
					Total:	657.0	168.0	

QUADRO DE ELEMENTOS DE FUNDAÇÃO

Referências	Dimensões (cm)	Altura (cm)	Armadura inf. X	Armadura inf. Y
P1, P2, P3, P4, P5, P6, P14, P15, P16, P23, P24, P25, P26, P27, P28, P38, P39, P40, P41, P42, P43, P44, P53, P54, P55, P61, P62, P63, P64, P65 e P66	80x80	30 / 20	3Ø10c/28	3Ø10c/28

QUADRO DE ELEMENTOS DE FUNDAÇÃO

Referências	Dimensões (cm)	Altura (cm)	Armadura inf. X	Armadura inf. Y
P9, P10, P11, P12, P13, P18, P19, P20, P31, P32, P33, P34, P35, P49, P50, P51, P52, P58, P59, P60, P71, P72, P73, P74, P75, P76, P77, P78, P79, P80, P81, P82, P83 e P84	80x80	30 / 20	3Ø10c/28	3Ø10c/28

QUADRO DE ELEMENTOS DE FUNDAÇÃO

Referências	Dimensões (cm)	Altura (cm)	Armadura inf. X	Armadura inf. Y
P7, P8, P29, P30, P45, P46, P47, P48, P56, P57, P67, P68, P69 e P70	80x80	30 / 20	3Ø10c/28	3Ø10c/28
P17	80x55	30 / 20	2Ø10c/28	3Ø10c/28

QUADRO DE ELEMENTOS DE FUNDAÇÃO

Referências	Dimensões (cm)	Altura (cm)	Armadura inf. X	Armadura inf. Y
P21 e P36	90x90	30 / 20	3Ø10c/28	3Ø10c/28
P22 e P37	80x80	30 / 20	3Ø10c/28	3Ø10c/28

Resumo Aço Pilares		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø10	977.6	663	663
CA-60	Ø5	979.4	169	169
Total				832

DESCRIÇÃO:

Projeto da estrutura de concreto armado para construção de uma escola localizada no bairro Fazenda Velha, no município de Toritama - PE.

CLEYTON DA SILVA ENGENHARIA - EIRELI
CNPJ: 27.928.441/0001-04
CREA 598860 - PE

Cleyton da Silva
Engenheiro Civil
CREA 12814477 D/PE

Município de Toritama
C.N.P.J.11.245.054/0001-39

NATUREZA:
Projeto estrutural de concreto armado.

PROPRIETÁRIO:
Município de Toritama
C.N.P.J.11.245.054/0001-39

DESENHOS:
- Locação das sapatas (LOCAL DAS LAJES RADIER)
- Armação de pilares

ENGENHARIA
ARQUITETURA - PROJETOS - OBRAS

ÁREAS GERAIS:
Área do terreno = 1.798,69m²
Área de solo natural = 162,58m² 9%
Área de solo permeável = 107,76m² 6%
Área de solo impermeável = 1.501,45m² 83,5%
Área construída = 1.334,25m² 74,2%

ESCALA: 1/75 e 1/25

DATA: Dezembro de 2020

PRANCHA: 01/05