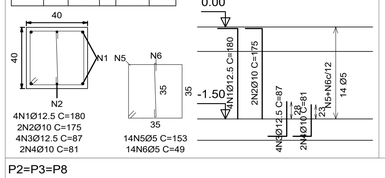
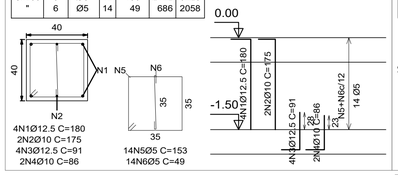
P1

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	87	348
"	4	Ø10	2	81	162
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



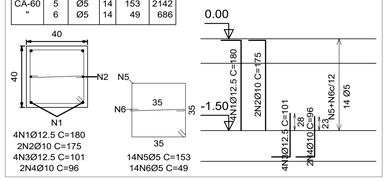
P2=P3=P8

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 3 (cm)
CA-50	1	Ø12.5	4	180	720	2160
"	2	Ø10	2	175	350	1050
"	3	Ø12.5	4	91	364	1092
"	4	Ø10	2	86	172	516
CA-60	5	Ø5	14	153	2142	6426
"	6	Ø5	14	49	686	2058



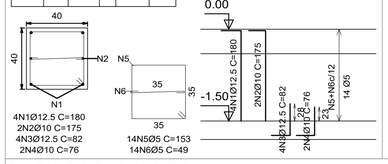
P5

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	101	404
"	4	Ø10	2	96	192
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



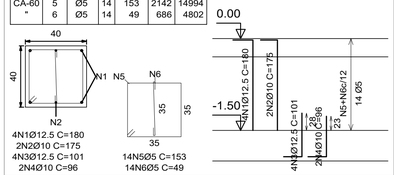
P10

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	82	328
"	4	Ø10	2	76	152
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



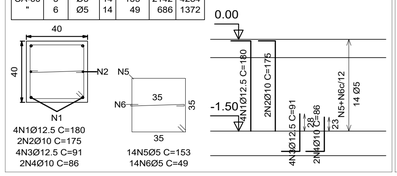
P13=P27=P66=P100=P103=P104
P108

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 7 (cm)
CA-50	1	Ø12.5	4	180	720	5040
"	2	Ø10	2	175	350	2450
"	3	Ø12.5	4	101	404	2828
"	4	Ø10	2	96	192	1344
CA-60	5	Ø5	14	153	2142	14994
"	6	Ø5	14	49	686	4802



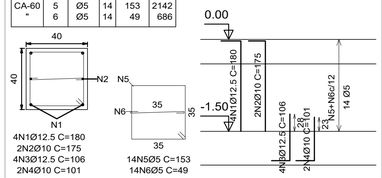
P106=P109

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
CA-50	1	Ø12.5	4	180	720	1440
"	2	Ø10	2	175	350	700
"	3	Ø12.5	4	91	364	728
"	4	Ø10	2	86	172	344
CA-60	5	Ø5	14	153	2142	4284
"	6	Ø5	14	49	686	1372



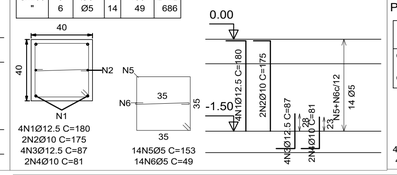
P4

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	106	424
"	4	Ø10	2	101	202
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



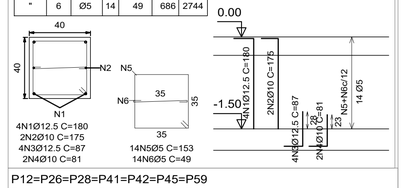
P7

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	87	348
"	4	Ø10	2	81	162
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



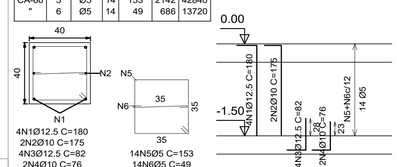
P14=P67=P107=P118

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 4 (cm)
CA-50	1	Ø12.5	4	180	720	2880
"	2	Ø10	2	175	350	1400
"	3	Ø12.5	4	87	348	1392
"	4	Ø10	2	81	162	648
CA-60	5	Ø5	14	153	2142	8568
"	6	Ø5	14	49	686	2744



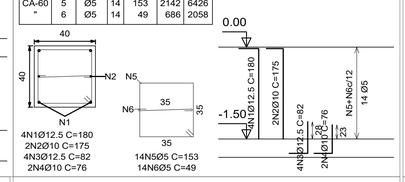
P12=P26=P28=P41=P42=P45=P59
P62=P68=P84=P87=P90=P93=P96
P102=P110=P112=P116=P117
P119

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 20 (cm)
CA-50	1	Ø12.5	4	180	720	14400
"	2	Ø10	2	175	350	7000
"	3	Ø12.5	4	82	328	6560
"	4	Ø10	2	76	152	3040
CA-60	5	Ø5	14	153	2142	42840
"	6	Ø5	14	49	686	13720



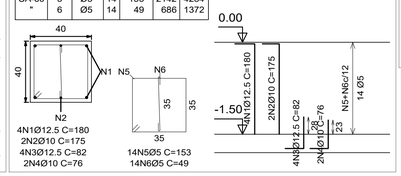
P34=P35=P36

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 3 (cm)
CA-50	1	Ø12.5	4	180	720	2160
"	2	Ø10	2	175	350	1050
"	3	Ø12.5	4	82	328	984
"	4	Ø10	2	76	152	456
CA-60	5	Ø5	14	153	2142	6426
"	6	Ø5	14	49	686	2058



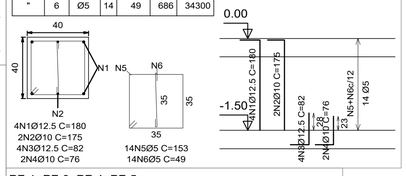
P33=P37

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
CA-50	1	Ø12.5	4	180	720	1440
"	2	Ø10	2	175	350	700
"	3	Ø12.5	4	82	328	656
"	4	Ø10	2	76	152	304
CA-60	5	Ø5	14	153	2142	4284
"	6	Ø5	14	49	686	1372



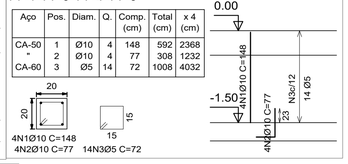
P11=P15=P32=P38=P40=P43=P44
P46=P47=P48=P49=P50=P51=P53
P54=P55=P56=P60=P61=P63=P64
P70=P71=P72=P73=P74=P75=P76
P77=P78=P79=P80=P81=P82=P83
P85=P86=P88=P89=P91=P92=P94
P95=P97=P98=P99=P111=P120
P121=P122

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 50 (cm)
CA-50	1	Ø12.5	4	180	720	36000
"	2	Ø10	2	175	350	17500
"	3	Ø12.5	4	82	328	16400
"	4	Ø10	2	76	152	7600
CA-60	5	Ø5	14	153	2142	107100
"	6	Ø5	14	49	686	34300



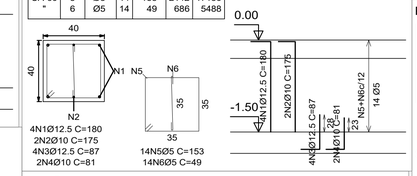
PF-1=PF-3=PF-4=PF-5

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 4 (cm)
CA-50	1	Ø10	4	148	592	2368
"	2	Ø10	4	77	308	1232
CA-60	3	Ø5	14	72	1008	4032



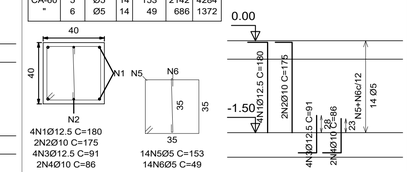
P39=P57=P58=P65=P101=P113
P114=P115

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 8 (cm)
CA-50	1	Ø12.5	4	180	720	5760
"	2	Ø10	2	175	350	2800
"	3	Ø12.5	4	87	348	2784
"	4	Ø10	2	81	162	1296
CA-60	5	Ø5	14	153	2142	17136
"	6	Ø5	14	49	686	5488



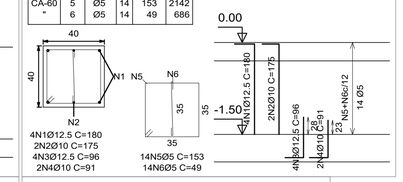
P52=P69

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
CA-50	1	Ø12.5	4	180	720	1440
"	2	Ø10	2	175	350	700
"	3	Ø12.5	4	91	364	728
"	4	Ø10	2	86	172	344
CA-60	5	Ø5	14	153	2142	4284
"	6	Ø5	14	49	686	1372



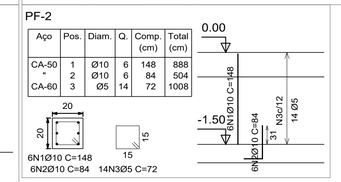
P105

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	96	384
"	4	Ø10	2	91	182
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



PF-2

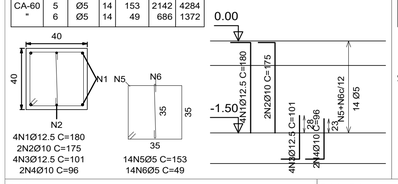
Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø10	6	148	888
"	2	Ø10	6	84	504
CA-60	3	Ø5	14	72	1008



Pilares que terminam em Baldrame - N. INF.
Concreto: C25, em geral
Aço: CA-50 e CA-60
Escala horizontal: 1:20
Escala vertical: 1:50

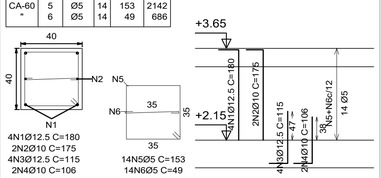
P6=P9

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
CA-50	1	Ø12.5	4	180	720	1440
"	2	Ø10	2	175	350	700
"	3	Ø12.5	4	101	404	808
"	4	Ø10	2	96	192	384
CA-60	5	Ø5	14	153	2142	4284
"	6	Ø5	14	49	686	1372



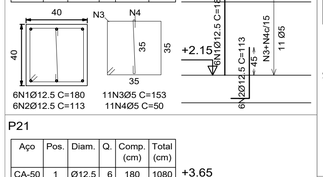
P16

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	115	460
"	4	Ø10	2	106	212
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



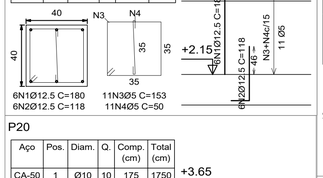
P22

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	6	180	1080
"	2	Ø10	2	113	678
CA-60	3	Ø5	11	153	1683
"	4	Ø5	11	50	550



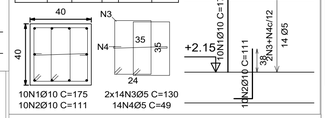
P21

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	6	180	1080
"	2	Ø12.5	6	118	708
CA-60	3	Ø5	11	153	1683
"	4	Ø5	11	50	550



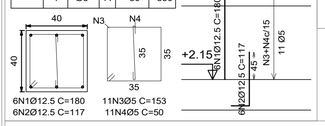
P20

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø10	10	175	1750
"	2	Ø10	10	111	1110
CA-60	3	Ø5	28	130	3640
"	4	Ø5	14	49	686



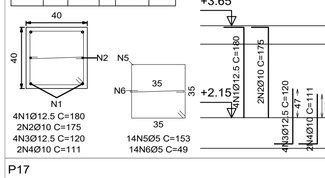
P19

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	6	180	1080
"	2	Ø12.5	6	117	702
CA-60	3	Ø5	11	153	1683
"	4	Ø5	11	50	550



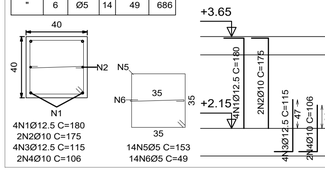
P18

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	120	480
"	4	Ø10	2	111	222
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



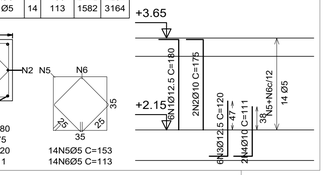
P17

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	180	720
"	2	Ø10	2	175	350
"	3	Ø12.5	4	115	460
"	4	Ø10	2	106	212
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



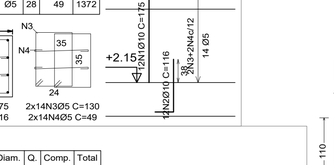
P23=P24

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 2 (cm)
CA-50	1	Ø12.5	6	180	1080	2160
"	2	Ø10	2	175	350	700
"	3	Ø12.5	6	120	720	1440
"	4	Ø10	2	111	222	444
CA-60	5	Ø5	14	153	2142	4284
"	6	Ø5	14	113	1582	3164



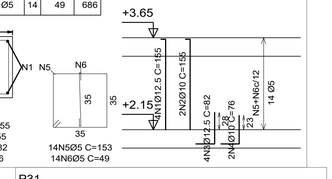
P25

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø10	12	175	2100
"	2	Ø10	12	116	1392
CA-60	3	Ø5	28	130	3640
"	4	Ø5	28	49	1372



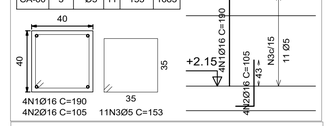
P29

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	4	155	620
"	2	Ø10	2	155	310
"	3	Ø12.5	4	82	328
"	4	Ø10	2	76	152
CA-60	5	Ø5	14	153	2142
"	6	Ø5	14	49	686



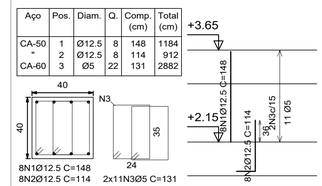
P31

Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø16	4	190	760
"	2	Ø16	4	105	420
CA-60	3	Ø5	11	153	1683



P30

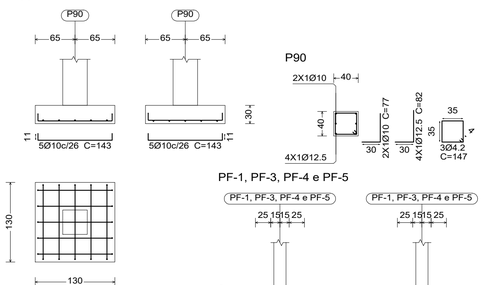
Aço	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
CA-50	1	Ø12.5	8	148	1184
"	2	Ø12.5	8	114	912
CA-60	3	Ø5	22	131	2882



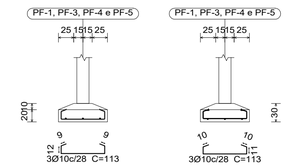
Resumo Aço Baldrame - N. INF. Pilares		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø10	604.7	410	
	Ø12.5	1156.8	1226	1636
CA-60	Ø5	3132.9	541	541
Total				2177

Resumo Aço Laje - N. INF/RADIER TERREO Pilares		Comp. total (m)	Peso+10% (kg)	Total
CA-50	Ø10	96.5	65	
	Ø12.5	155.3	165	
	Ø16	11.8	20	250
CA-60	Ø5	393.6	68	68
Total				318

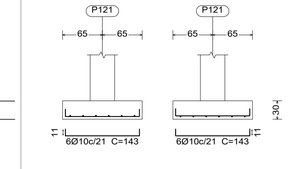
P90



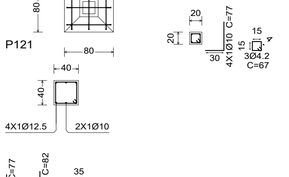
PF-1, PF-3, PF-4 e PF-5



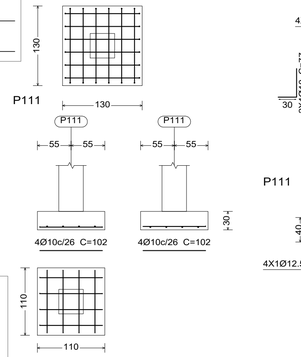
P121



PF-1, PF-3, PF-4 e PF-5



P111



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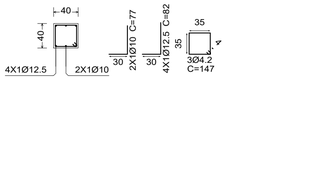

DESCRIÇÃO:

Projeto da estrutura mista (concreto armado e metálica) para construção de uma escola municipal com 25 salas de aula, localizada na Rua Luiz Pedro da Silva - loteamento Colorado, 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

Secretaria de Educação, Ciência e Tecnólogia
C.N.P.J.31.287.647/0001-70

NATUREZA:

Projeto estrutural (concreto - metálica)

PROPRIETÁRIO:

Secretaria de Educação, Ciência e Tecnólogia
C.N.P.J. 31.287.647/0001-70

DESENHOS:

- Pilaretes de concreto armado
- Planta de forma
- Armação da ferragem
- Detalhes construtivos

ENGENHARIA
ARQUITETURA - PROJETOS - OBRAS

ÁREAS GERAIS:

Área do terreno = 9.611,47 m²
Área de solo natural = 1.389,09m² 14,45%
Área de solo permeável = 1.389,09m² 14,45%
Área de solo impermeável = 8.222,38m² 85,55%
Área construída = 6.791,63m² 70,66%

ESCALA: 1/100,1/50 e 1/20

DATA: Abril de 2024

PRANCHA: 02/55