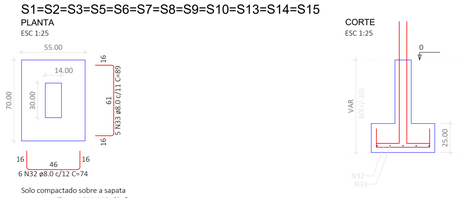
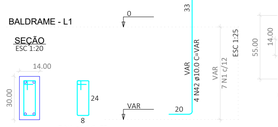
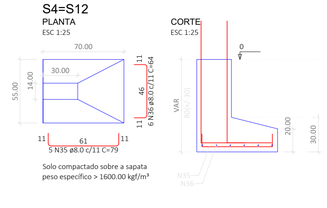
S1=S2=S3=S5=S6=S7=S8=S9=S10=S13=S14=S15



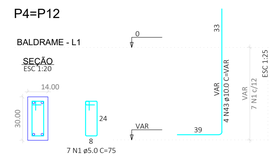
P1=P2=P3=P5=P6=P7=P8=P9=P10=P13=P14=P15



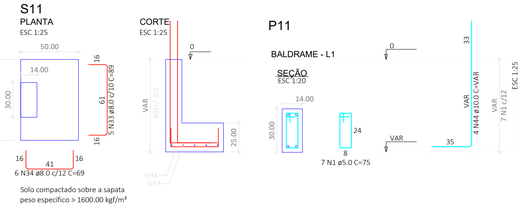
S4=S12



P4=P12



S11



P11

RELAÇÃO DO AÇO

12xP1	2xP4	P11
12xS1	S11	2xS12
V9	V10	VB1
VB2	VB3	VB4
VB5	VB6	VB7
VB8		

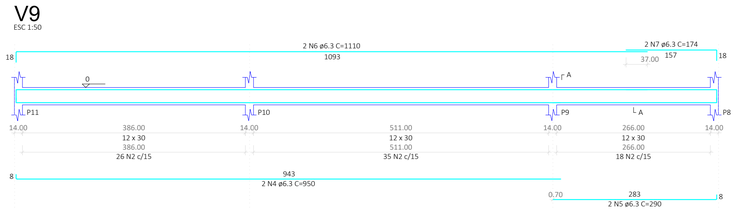
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	105	75	7875
	2	5.0	448	71	31808
	3	5.0	2	225	450
CA50	4	6.3	2	950	1900
	5	6.3	4	290	1160
	6	6.3	2	1110	2220
	7	6.3	2	174	348
	8	6.3	2	190	380
	9	6.3	2	210	420
	10	6.3	4	949	3796
	11	6.3	4	97	388
	12	6.3	2	175	350
	13	6.3	7	66	462
	14	6.3	2	419	838
	15	6.3	2	921	1842
	16	6.3	2	276	552
	17	6.3	1	77	77
	18	6.3	3	155	465
	19	6.3	2	575	1150
	20	6.3	2	160	320
	21	6.3	2	435	870
	22	6.3	2	536	1072
	23	6.3	1	125	125
	24	6.3	2	556	1112
	25	6.3	2	191	382
	26	6.3	2	211	422
	27	6.3	4	531	2124
	28	6.3	1	130	130
	29	6.3	4	541	2164
	30	6.3	2	706	1412
	31	6.3	2	726	1452
	32	8.0	72	74	5328
	33	8.0	65	89	5785
	34	8.0	6	69	414
	35	8.0	10	79	790
	36	8.0	12	64	768
	37	8.0	2	527	1054
	38	8.0	1	135	135
	39	8.0	1	140	140
	40	8.0	2	1094	2188
	41	8.0	2	181	362
	42	10.0	48	VAR	VAR
	43	10.0	8	VAR	VAR
	44	10.0	4	VAR	VAR

RESUMO DO AÇO

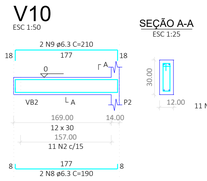
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	279.3	68.4
	8.0	169.6	66.9
	10.0	78.3	48.3
CA60	5.0	401.3	61.9
PESO TOTAL (kg)			
CA50	183.6		
CA60	61.9		

Volume de concreto (C-30) = 4.55 m³
Área de forma = 72.10 m²

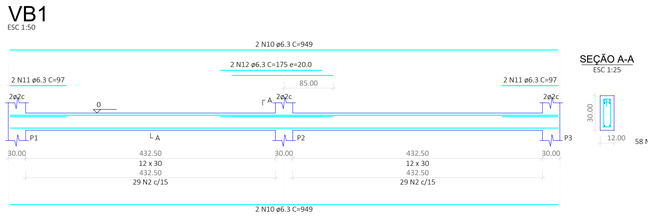
V9



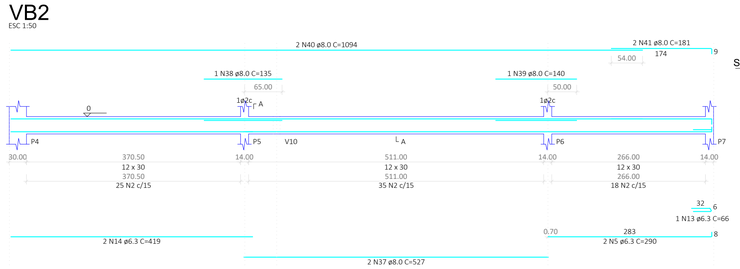
V10



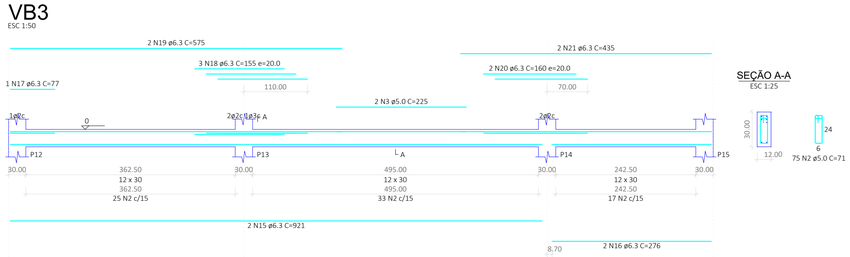
VB1



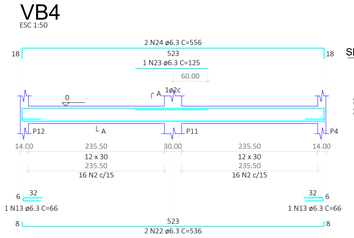
VB2



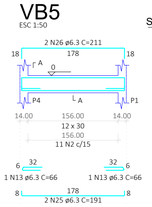
VB3



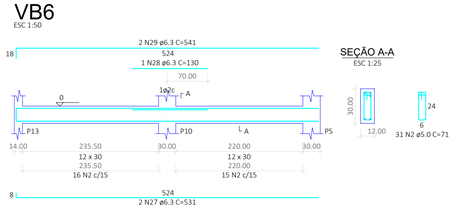
VB4



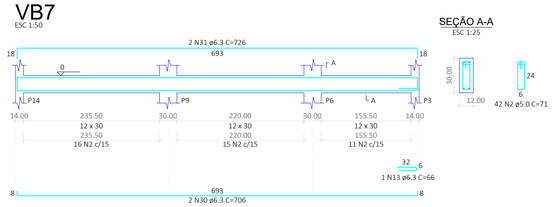
VB5



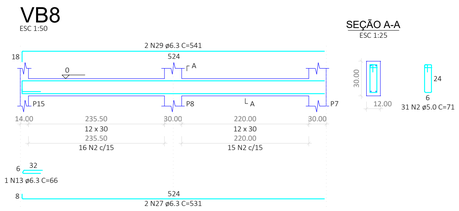
VB6



VB7



VB8



CONVÊNIO :

PROJETO ESTRUTURA DE CONCRETO

OBRA :
AMPLIAÇÃO E REFORMA DA ESCOLA SANTA CLARA

ENDEREÇO DA OBRA :
AV. BARONEZA, S/N, PA SANTA CLARA, ARAGUACEMA – TO

QUADRO DE ÁREAS :
VER PROJETO ARQUITETÔNICO

PROPRIETÁRIO :
FUNDO MUNICIPAL DE EDUCAÇÃO DE ARAGUACEMA CNPJ: 30.834.887/0001-84

MARCIONE NUNES COELHO:27016625168
Assinado de forma digital por MARCIONE NUNES COELHO:27016625168
Dados: 2026.02.05 23:04:10 -03'00'

AUTOR DO PROJETO :
MARCIONE NUNES COELHO
ENG. CIVIL CREA - GO 5096/D

M & G Engenharia
Q. 103 Sul, Rua 90-TL, nº 20, Lote 13, Palmas - TO.
Fone: (63) 9648-8107 e 9647-6688
E-mail: marcionelcoelho@hotmail.com

ESCALA	DATA	RESP. DESENHO
INDICA	FEVEREIRO / 2026	GUILHERME (63) 9 8474-3686

CONTEÚDO :
DETALHES VIGAS BALDRAME, DETALHES FUNDAÇÃO

PRANCHA :
02 / 03