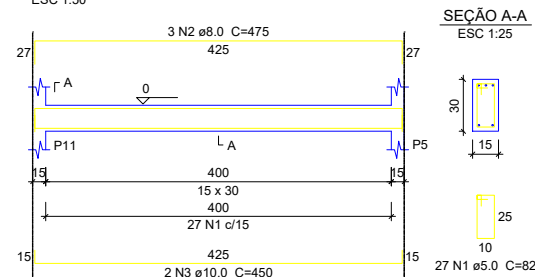
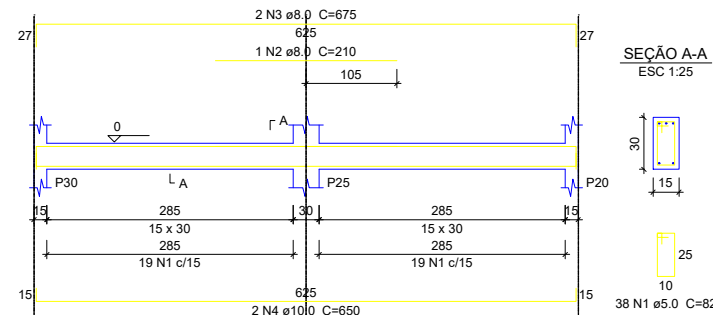


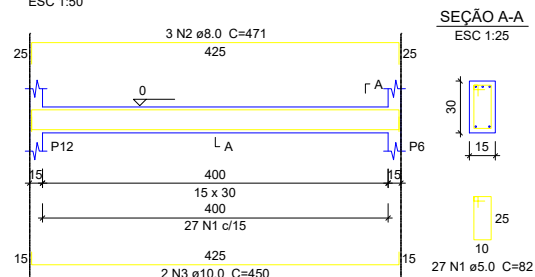
**VB12**  
ESC 1:50



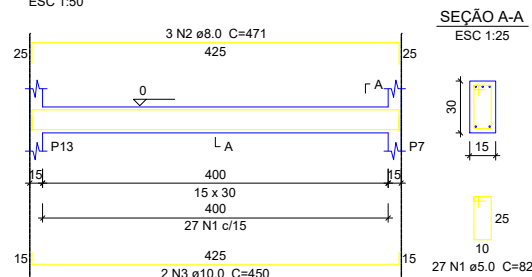
**VB13**  
ESC 1:50



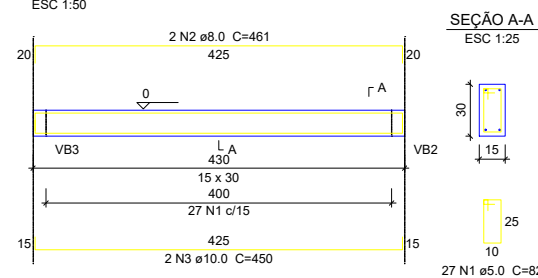
**VB14**  
ESC 1:50



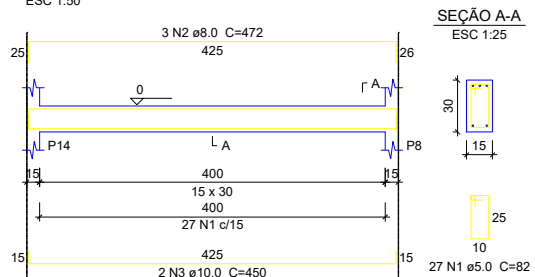
**VB15**  
ESC 1:50



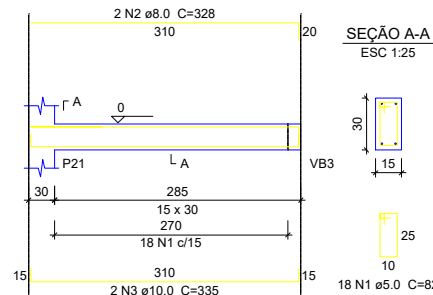
**VB16**  
ESC 1:50



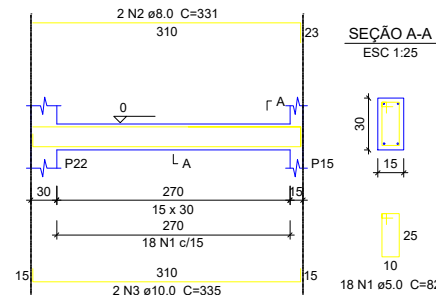
**VB17**  
ESC 1:50



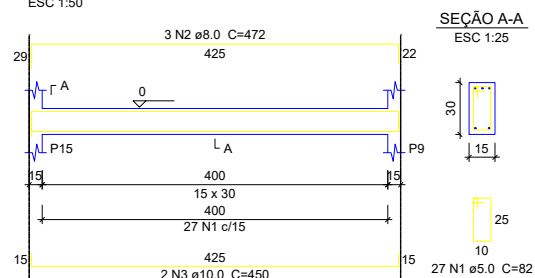
**VB18**  
ESC 1:50



**VB19**  
ESC 1:50



**VB20**  
ESC 1:50



Relação do aço

ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
VB1	CA60	1	5.0	96	82	7872
	CA50	2	8.0	2	1200	2400
	CA50	3	8.0	2	426	852
	CA50	4	10.0	2	1163	2326
	CA50	5	10.0	2	418	836
VB2	CA60	1	5.0	90	82	7380
	CA50	2	8.0	1	590	590
	CA50	3	8.0	2	1200	2400
	CA50	4	8.0	2	313	626
	CA50	5	10.0	2	1123	2246
VB3	CA60	1	5.0	90	82	7380
	CA50	2	8.0	1	600	600
	CA50	3	8.0	2	1200	2400
	CA50	4	8.0	2	331	662
	CA50	5	10.0	2	1123	2246
VB4	CA60	1	5.0	14	82	1148
	CA50	2	8.0	2	261	522
	CA50	3	10.0	2	250	500
	CA60	1	5.0	100	82	8200
	CA50	2	8.0	2	1198	2396
VB5	CA60	1	5.0	100	82	8200
	CA50	2	8.0	2	516	1032
	CA50	4	10.0	4	828	3312
	CA60	1	5.0	100	82	8200
	CA50	2	8.0	2	1198	2396
VB6	CA60	1	5.0	100	82	8200
	CA50	2	8.0	2	514	1028
	CA50	4	10.0	4	828	3312
	CA60	1	5.0	84	82	6888
	CA60	2	5.0	84	80	6720
VB7	CA60	1	5.0	84	82	6888
	CA60	2	5.0	84	80	6720
	CA50	3	8.0	2	166	332
	CA50	4	8.0	2	1200	2400
	CA50	5	8.0	2	1174	2348
VB8	CA60	1	5.0	82	164	342
	CA50	7	8.0	2	82	164
	CA50	8	10.0	4	352	1408
	CA50	9	10.0	12	332	3984
	CA60	1	5.0	19	82	1558
VB9	CA60	1	5.0	82	1558	592
	CA50	2	8.0	2	341	682
	CA50	3	10.0	2	335	670
	CA60	1	5.0	38	82	3116
	CA50	2	8.0	2	669	1338
VB10	CA50	3	10.0	2	650	1300
	CA60	1	5.0	47	82	3854
	CA50	2	8.0	1	175	175
	CA50	3	8.0	2	791	1582
	CA50	4	10.0	2	765	1530
VB11	CA60	1	5.0	38	82	3116
	CA50	2	8.0	1	200	200
	CA50	3	8.0	2	669	1338
	CA50	4	10.0	2	650	1300
	CA60	1	5.0	27	82	2214
VB12	CA50	2	8.0	3	475	1425
	CA50	3	10.0	2	450	900
	CA60	1	5.0	38	82	3116
	CA50	2	8.0	1	210	210
	CA50	3	8.0	2	675	1350
VB13	CA50	4	10.0	2	650	1300
	CA60	1	5.0	27	82	2214
	CA50	2	8.0	3	471	1413
	CA50	3	10.0	2	450	900
	CA60	1	5.0	27	82	2214
VB14	CA50	2	8.0	3	471	1413
	CA50	2	8.0	3	471	1413
	CA50	3	10.0	2	450	900
	CA60	1	5.0	27	82	2214
	CA50	2	8.0	3	471	1413
VB15	CA50	2	8.0	3	471	1413
	CA50	3	10.0	2	450	900
	CA60	1	5.0	27	82	2214
	CA50	2	8.0	3	471	1413
	CA50	3	10.0	2	450	900
VB16	CA60	1	5.0	27	82	2214
	CA50	2	8.0	2	461	922
	CA50	3	10.0	2	450	900
	CA60	1	5.0	27	82	2214
	CA50	2	8.0	3	472	1416
VB17	CA50	3	10.0	2	450	900
	CA60	1	5.0	18	82	1476
	CA50	2	8.0	2	328	656
	CA50	3	10.0	2	335	670
	CA60	1	5.0	18	82	1476
VB18	CA50	2	8.0	2	335	670
	CA50	3	10.0	2	335	670
	CA50	2	8.0	2	335	670
	CA50	3	10.0	2	335	670
	CA50	2	8.0	3	472	1416
VB19	CA60	1	5.0	27	82	2214
	CA50	2	8.0	3	472	1416
	CA50	3	10.0	2	450	900
	CA60	1	5.0	27	82	2214
	CA50	2	8.0	3	472	1416
VB20	CA50	3	10.0	2	450	900

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8.0	396.9	156.6
CA60	10.0	344.3	212.2
CA60	5.0	847.9	130.7
PESO TOTAL			
CA50	368.8		
CA60	130.7		

Vol. de concreto total (C-25) = 7.54 m³  
Área de forma total = 126.28 m²

**01 VIGA BALDRAME**  
ESC: 1/175



PREFEITURA MUNICIPAL DE  
**VÁRZEA GRANDE**  
Mais por Você. Mais por Várzea Grande.

**PREFEITURA MUNICIPAL DE VÁRZEA GRANDE**

Av. Castelo Branco, Espaço Municipal, 2500 - Centro Sul, Várzea Grande/MT CEP 78125-700 - Fone/Fax: 65 3688 8000

PROJETO:

**PROJETO ESTRUTURAL**

OBRA:

**REFORMA E AMPLIAÇÃO  
EMEB ANTONIA FELIPA DE CAMPOS MARTINS**

LOCALIZAÇÃO:

**RUA SD, S/Nº, QUADRA 100, BR 163  
BAIRRO: JARDIM NOVO MUNDO**

AUTOR DO PROJETO:

**PEDRO HENRIQUE FRANÇA ROCHA**  
ENGENHEIRO CIVIL CREA-MT 046214

UNIDADE:

**METRO**

ESCALA:

**Indicada**

DATA:

**JUNHO/2022**

FOLHA N°

**03/13**