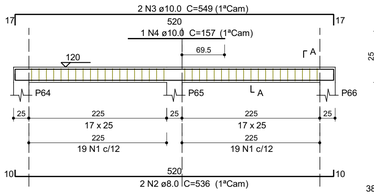
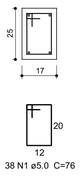
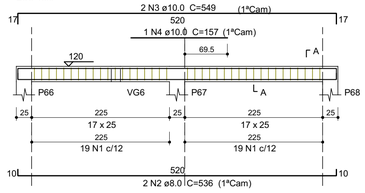
V229
ESC 1:50



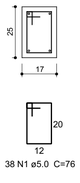
SEÇÃO A-A
ESC 1:15



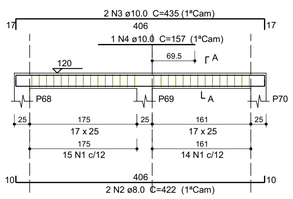
V230
ESC 1:50



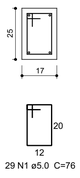
SEÇÃO A-A
ESC 1:15



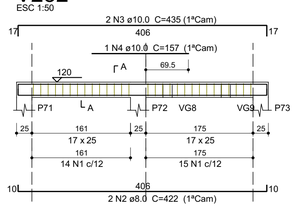
V231
ESC 1:50



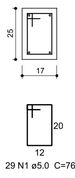
SEÇÃO A-A
ESC 1:15



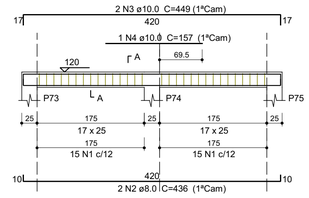
V232
ESC 1:50



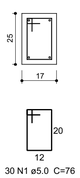
SEÇÃO A-A
ESC 1:15



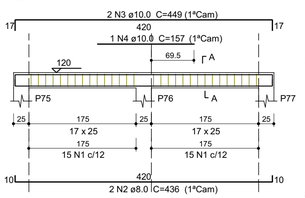
V233
ESC 1:50



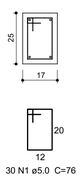
SEÇÃO A-A
ESC 1:15



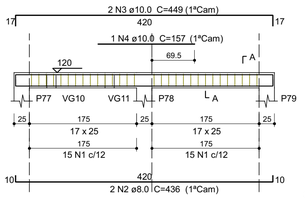
V234
ESC 1:50



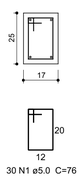
SEÇÃO A-A
ESC 1:15



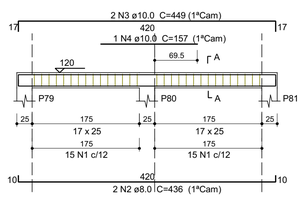
V235
ESC 1:50



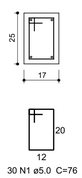
SEÇÃO A-A
ESC 1:15



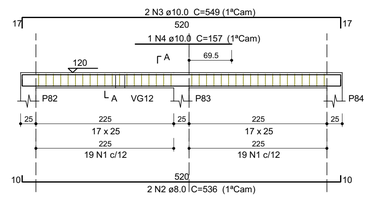
V236
ESC 1:50



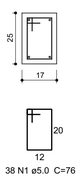
SEÇÃO A-A
ESC 1:15



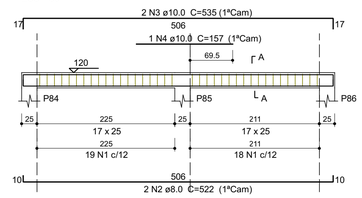
V237
ESC 1:50



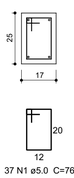
SEÇÃO A-A
ESC 1:15



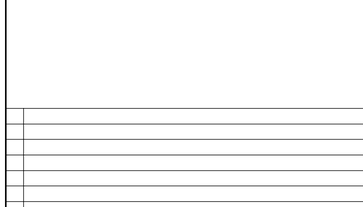
V238
ESC 1:50



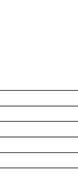
SEÇÃO A-A
ESC 1:15



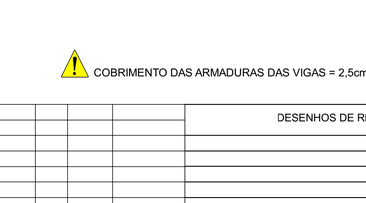
V239
ESC 1:50



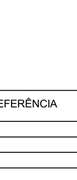
SEÇÃO A-A
ESC 1:15



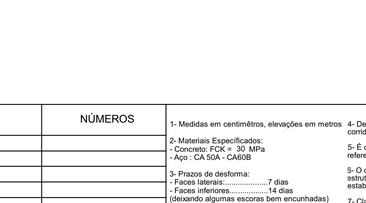
V240
ESC 1:50



SEÇÃO A-A
ESC 1:15

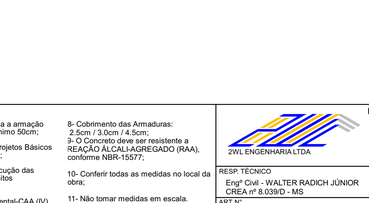


V241
ESC 1:50



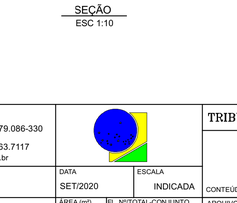
SEÇÃO A-A
ESC 1:15

V242
ESC 1:50



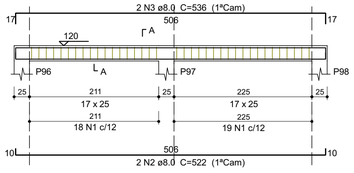
SEÇÃO A-A
ESC 1:15

V253
ESC 1:50

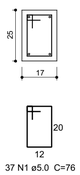


SEÇÃO A-A
ESC 1:15

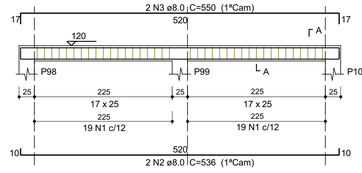
V243
ESC 1:50



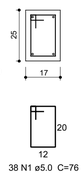
SEÇÃO A-A
ESC 1:15



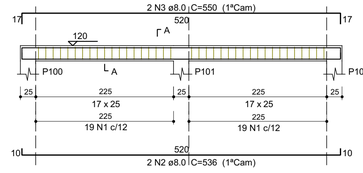
V244
ESC 1:50



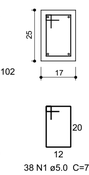
SEÇÃO A-A
ESC 1:15



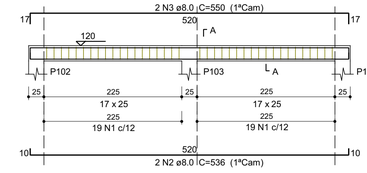
V245
ESC 1:50



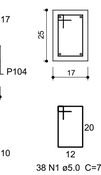
SEÇÃO A-A
ESC 1:15



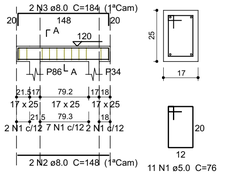
V246
ESC 1:50



SEÇÃO A-A
ESC 1:15

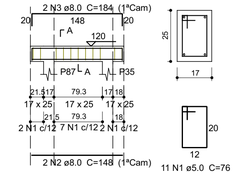


V254
ESC 1:50



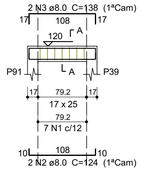
SEÇÃO A-A
ESC 1:15

V255
ESC 1:50

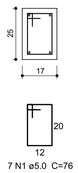


SEÇÃO A-A
ESC 1:15

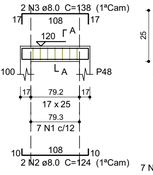
V256
ESC 1:50



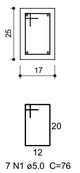
SEÇÃO A-A
ESC 1:15



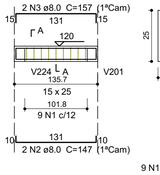
V259
ESC 1:50



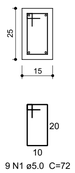
SEÇÃO A-A
ESC 1:15



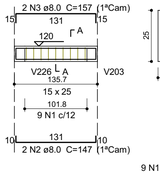
VG1
ESC 1:50



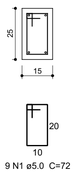
SEÇÃO A-A
ESC 1:15



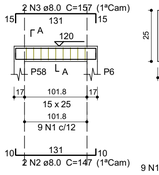
VG2
ESC 1:50



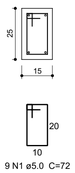
SEÇÃO A-A
ESC 1:15



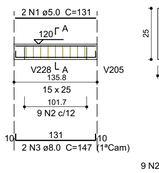
VG3
ESC 1:50



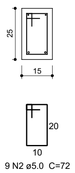
SEÇÃO A-A
ESC 1:15



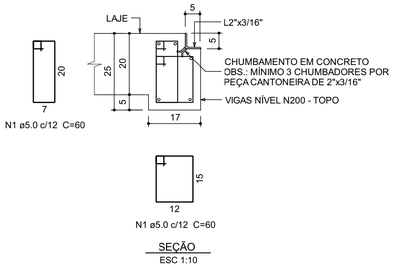
VG4
ESC 1:50



SEÇÃO A-A
ESC 1:15



DETALHE 02
TÍPICO PARA OS ESTRIBOS E FIXAÇÃO DAS CANTONEIRAS



SEÇÃO
ESC 1:10

COBRIMENTO DAS ARMADURAS DAS VIGAS = 2,5cm

Relação do aço

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
V229	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	10.0	2	549	1098
	CA50	4	10.0	1	157	157
V230	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	10.0	2	549	1098
	CA50	4	10.0	1	157	157
V231	CA60	1	5.0	29	76	2204
	CA50	2	8.0	2	422	844
	CA50	3	10.0	2	435	870
	CA50	4	10.0	1	157	157
V232	CA60	1	5.0	29	76	2204
	CA50	2	8.0	2	422	844
	CA50	3	10.0	2	435	870
	CA50	4	10.0	1	157	157
V233	CA60	1	5.0	30	76	2280
	CA50	2	8.0	2	436	872
	CA50	3	10.0	2	449	898
	CA50	4	10.0	1	157	157
V234	CA60	1	5.0	30	76	2280
	CA50	2	8.0	2	436	872
	CA50	3	10.0	2	449	898
	CA50	4	10.0	1	157	157
V235	CA60	1	5.0	30	76	2280
	CA50	2	8.0	2	436	872
	CA50	3	10.0	2	449	898
	CA50	4	10.0	1	157	157
V236	CA60	1	5.0	30	76	2280
	CA50	2	8.0	2	436	872
	CA50	3	10.0	2	449	898
	CA50	4	10.0	1	157	157
V237	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	10.0	2	549	1098
	CA50	4	10.0	1	157	157
V238	CA60	1	5.0	37	76	2812
	CA50	2	8.0	2	522	1044
	CA50	3	10.0	2	535	1070
	CA50	4	10.0	1	157	157
V239	CA60	1	5.0	37	76	2812
	CA50	2	8.0	2	522	1044
	CA50	3	10.0	2	535	1070
	CA50	4	10.0	1	157	157
V240	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	8.0	2	550	1100
V241	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	8.0	2	550	1100
V242	CA60	1	5.0	37	76	2812
	CA50	2	8.0	2	522	1044
	CA50	3	8.0	2	536	1072
V243	CA60	1	5.0	37	76	2812
	CA50	2	8.0	2	522	1044
	CA50	3	8.0	2	536	1072
V244	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	8.0	2	550	1100
V245	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	8.0	2	550	1100
V246	CA60	1	5.0	38	76	2888
	CA50	2	8.0	2	536	1072
	CA50	3	8.0	2	550	1100
V253	CA60	1	5.0	11	76	836
	CA50	2	8.0	2	149	298
	CA50	3	8.0	2	185	370
V254	CA60	1	5.0	11	76	836
	CA50	2	8.0	2	148	296
	CA50	3	8.0	2	184	368
V255	CA60	1	5.0	11	76	836
	CA50	2	8.0	2	148	296
	CA50	3	8.0	2	184	368
V256	CA60	1	5.0	7	76	532
	CA50	2	8.0	2	124	248
	CA50	3	8.0	2	138	276
V259	CA60	1	5.0	7	76	532
	CA50	2	8.0	2	124	248
	CA50	3	8.0	2	138	276
VG1	CA60	1	5.0	9	72	648
	CA50	2	8.0	2	147	294
	CA50	3	8.0	2	157	314
VG2	CA60	1	5.0	9	72	648
	CA50	2	8.0	2	147	294
	CA50	3	8.0	2	157	314
VG3	CA60	1	5.0	9	72	648
	CA50	2	8.0	2	147	294
	CA50	3	8.0	2	157	314
VG4	CA60	1	5.0	9	72	648
	CA50	2	5.0	9	72	648
	CA50	3	8.0	2	147	294
	CA60	1	5.0	3	60	180
	CA60	1	5.0	3	60	180

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	307.4	133.4
	10.0	125	84.7
CA60	5.0	546.7	92.7

PESO TOTAL (kg)	
CA50	218.1
CA60	92.7

Volume de concreto (C-30) = 4.22 m³
Área de forma = 66.86 m²

Nº	DISCRIMINAÇÃO DAS REVISÕES	DATA	APROV.	EXECUTADO

DESENHOS DE REFERÊNCIA

NÚMEROS

NOTAS:

1- Medidas em centímetros, elevações em metros

2- Materiais Especificados:
- Concreto: FCK = 30 MPa
- Aço : CA 50A - CA60B

3- Prazos de desforma:
- Faces laterais:.....7 dias
- Faces inferiores.....14 dias
(deixando algumas escoras bem encunhadas)
- Faces inferiores.....28 dias
(sem pontaletes p/ elementos escorados)

4- Deverá ser executado para toda a armação corrida, um transpasse de no mínimo 50cm;

5- É obrigatória a consulta dos Projetos Básicos referente a este projeto executivo;

5- O concreto empregado na execução das estruturas deve cumprir os requisitos estabelecidos na NBR 12655;

7- Classe de agressividade ambiental-CAA (IV)
Concreto deverá, possuir Fator Relação água/cimento (a/c) igual ou inferior a 0,45;

8- Cobrimento das Armaduras:
2.5cm / 3.0cm / 4.5cm;
9- O Concreto deve ser resistente a REAÇÃO ÁLCALI-AGREGADO (RAA), conforme NBR-15577;

10- Conferir todas as medidas no local da obra;

11- Não tomar medidas em escala.

FCK= 30 MPa

ELABORAÇÃO

2WL ENGENHARIA LTDA

Rua Jatal, 711, Guanandi - CEP 79.086-330
Campo Grande - MS
Fone: (67) 3042.9684 / 9.9163.7117
wrj@2wlengenharia.com.br

RESP. TÉCNICO
Engº Civil - WALTER RADICH JÚNIOR
CREA nº 8.039/D - MS

ART Nº
630128

APROVAÇÃO

VISTO

DATA
SET/2020

ESCALA
INDICADA

ÁREA (m²)
--

FL. Nº/TOTAL-CONJUNTO
9 / 11 - 1

TRIBUNAL REGIONAL ELEITORAL DE MATO GROSSO DO SUL

TRIBUNAL REGIONAL ELEITORAL DE MATO GROSSO DO SUL
PROJETO EM CONCRETO ARMADO
VALETA DE INFILTRAÇÃO

CONTEÚDO: VIGAS DE TOPO ARMAÇÕES - PARTE 2

REV. 0

ARQUIVO
T|R|E|-|M|S|-|V|A|L|A|-|I|N|F|I|L|T|R|A|Ç|Ã|O|-|F|9|-|C|1|-|R|E|V|0|

Folha 9
Corp 1