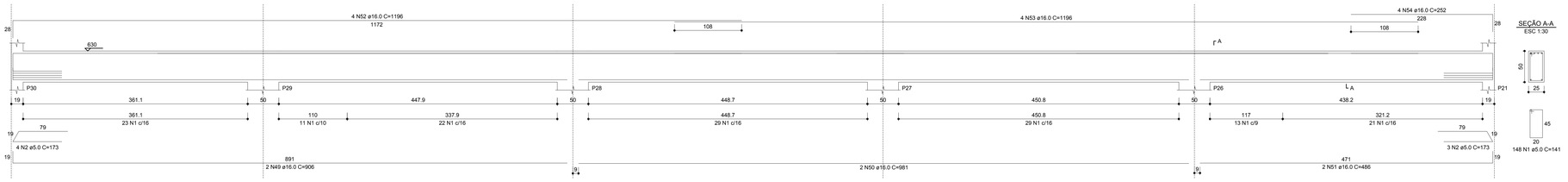
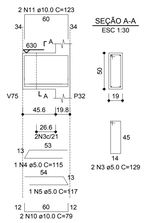
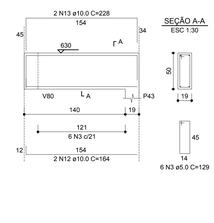
## V68
ESC 1:30



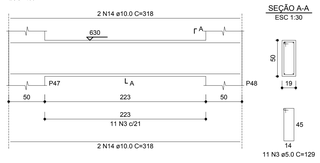

## V69
ESC 1:30



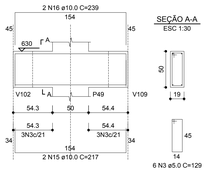

## V70
ESC 1:30



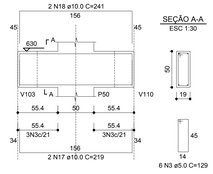

## V71
ESC 1:30



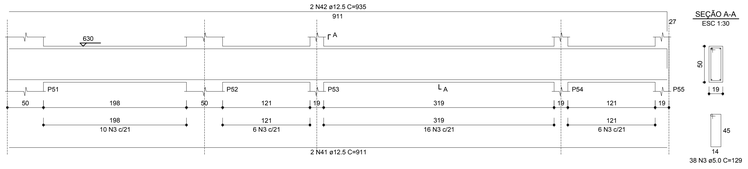

## V72
ESC 1:30



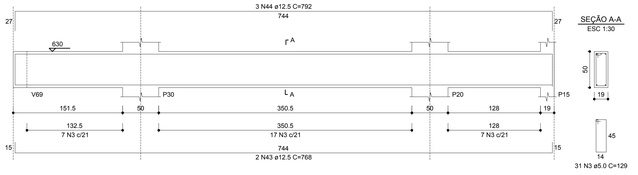

## V73
ESC 1:30



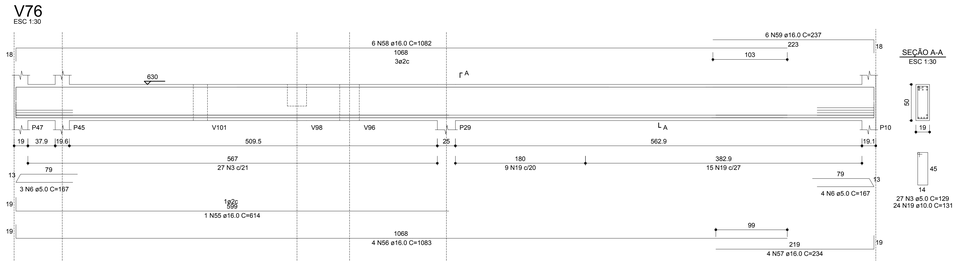

## V74
ESC 1:30



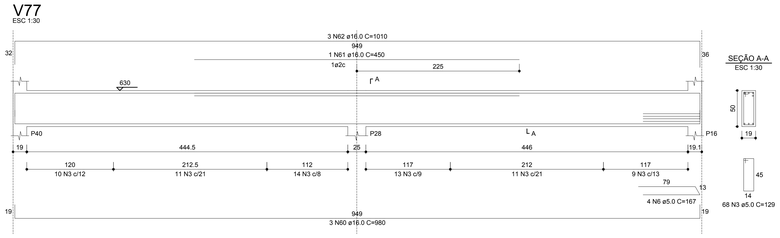

## V75
ESC 1:30



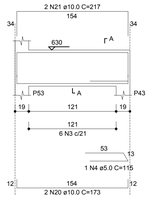

## V76
ESC 1:30



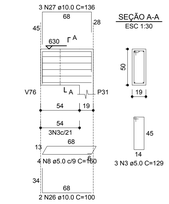

## V77
ESC 1:30




## V81
ESC 1:30




## V96
ESC 1:30




RELAÇÃO DO AÇO

| | | | |
|---|---|---|---|
| V68 | V69 | V70 | |
| V71 | V72 | V73 | |
| V74 | V75 | V76 | |
| V77 | V78 | V79 | |
| V80 | V81 | V82 | |
| V83 | V85 | V96 | |
| V97 | V98 | V100 | |
| V111 | V112 | V113 | |
| V115 | V116 | | |

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (m) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 148 | 141 | 20865 |
| | 2 | 5.0 | 1 | 129 | 1290 |
| | 3 | 5.0 | 460 | 129 | 59340 |
| | 4 | 5.0 | 4 | 115 | 460 |
| | 5 | 5.0 | 1 | 117 | 117 |
| | 6 | 5.0 | 22 | 167 | 3674 |
| | 7 | 5.0 | 10 | corr | 2700 |
| | 8 | 5.0 | 4 | 160 | 640 |
| | 9 | 5.0 | 98 | 89 | 8722 |
| | 10 | 10.0 | 2 | 79 | 158 |
| | 11 | 10.0 | 2 | 164 | 328 |
| | 12 | 10.0 | 2 | 164 | 328 |
| | 13 | 10.0 | 2 | 228 | 456 |
| | 14 | 10.0 | 4 | 318 | 1272 |
| | 15 | 10.0 | 2 | 217 | 434 |
| | 16 | 10.0 | 2 | 239 | 478 |
| | 17 | 10.0 | 2 | 219 | 438 |
| | 18 | 10.0 | 2 | 241 | 482 |
| | 19 | 10.0 | 24 | 131 | 3144 |
| | 20 | 10.0 | 2 | 217 | 434 |
| | 21 | 10.0 | 2 | 217 | 434 |
| | 22 | 10.0 | 2 | 310 | 620 |
| | 23 | 10.0 | 2 | 354 | 708 |
| | 24 | 10.0 | 2 | 280 | 560 |
| | 25 | 10.0 | 2 | 303 | 606 |
| | 26 | 10.0 | 2 | 100 | 200 |
| | 27 | 10.0 | 2 | 192 | 384 |
| | 28 | 10.0 | 2 | 229 | 458 |
| | 29 | 10.0 | 2 | 152 | 304 |
| | 30 | 10.0 | 2 | 193 | 386 |
| | 31 | 10.0 | 2 | 189 | 378 |
| | 32 | 10.0 | 2 | 226 | 452 |
| | 33 | 10.0 | 2 | 166 | 332 |
| | 34 | 10.0 | 2 | 203 | 406 |
| | 35 | 10.0 | 2 | 253 | 506 |
| | 36 | 10.0 | 2 | 173 | 346 |
| | 37 | 10.0 | 2 | 182 | 364 |
| | 38 | 10.0 | 2 | 215 | 430 |
| | 39 | 10.0 | 2 | 243 | 486 |
| | 40 | 10.0 | 2 | 311 | 1822 |
| | 41 | 12.5 | 2 | 935 | 1870 |
| | 42 | 12.5 | 2 | 768 | 1536 |
| | 43 | 12.5 | 3 | 792 | 2376 |
| | 44 | 12.5 | 2 | 744 | 1488 |
| | 45 | 12.5 | 2 | 483 | 966 |
| | 46 | 12.5 | 3 | 440 | 1320 |
| | 47 | 12.5 | 4 | 497 | 994 |
| | 48 | 12.5 | 2 | 906 | 1812 |
| | 49 | 16.0 | 2 | 981 | 1962 |
| | 50 | 16.0 | 2 | 486 | 972 |
| | 51 | 16.0 | 2 | 1196 | 4784 |
| | 52 | 16.0 | 4 | 1196 | 4784 |
| | 53 | 16.0 | 2 | 1140 | 4560 |
| | 54 | 16.0 | 1 | 814 | 814 |
| | 55 | 16.0 | 4 | 1083 | 4332 |
| | 56 | 16.0 | 4 | 234 | 936 |
| | 57 | 16.0 | 4 | 1082 | 6492 |
| | 58 | 16.0 | 6 | 237 | 1422 |
| | 59 | 16.0 | 6 | 237 | 1422 |
| | 60 | 16.0 | 3 | 980 | 2940 |
| | 61 | 16.0 | 3 | 1010 | 3030 |
| | 62 | 16.0 | 3 | 1035 | 3105 |
| | 63 | 16.0 | 3 | 1035 | 3105 |
| | 64 | 16.0 | 1 | 500 | 500 |
| | 65 | 16.0 | 3 | 1068 | 3204 |
| | 66 | 16.0 | 3 | 1090 | 3270 |
| | 67 | 16.0 | 2 | 490 | 980 |
| | 68 | 16.0 | 3 | 1140 | 3420 |
| | 69 | 16.0 | 3 | 1103 | 3309 |
| | 70 | 16.0 | 3 | 333 | 999 |
| | 71 | 16.0 | 3 | 333 | 999 |
| | 72 | 16.0 | 1 | 635 | 635 |
| | 73 | 16.0 | 3 | 1196 | 3588 |
| | 74 | 16.0 | 3 | 365 | 1095 |

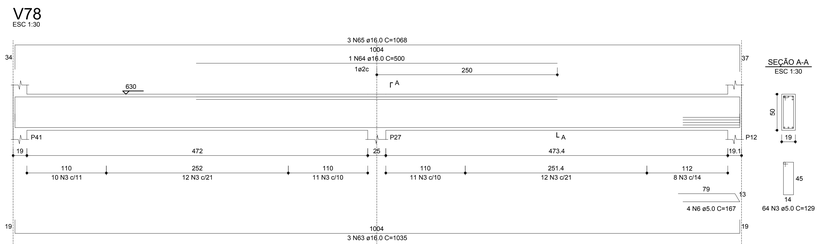
RESUMO DO AÇO

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10% (kg) |
|---|---|---|---|
| CA50 | 10.0 | 166.6 | 113 |
| | 12.5 | 117.8 | 124.8 |
| | 16.0 | 601.1 | 1043.7 |
| CA60 | 5.0 | 977.3 | 165.7 |

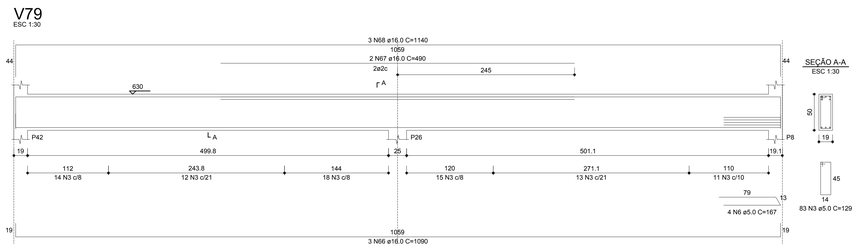
| PESO TOTAL (kg) | |
|---|---|
| CA50 | 1281.5 |
| CA60 | 165.7 |

Volume de concreto (C-25) = 12,89 m³
Área de forma = 155,18 m²

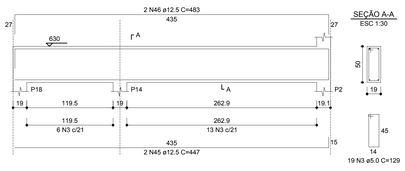
## V78
ESC 1:30



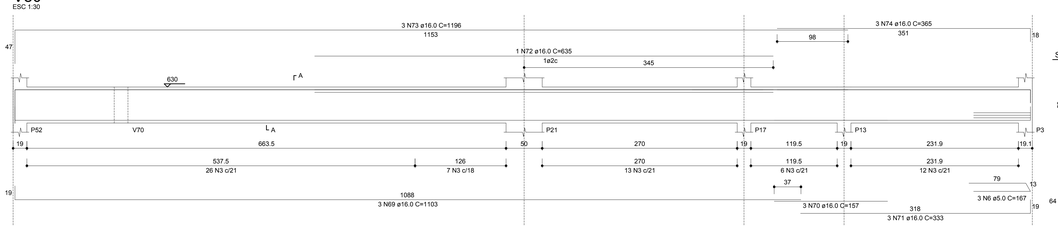

## V79
ESC 1:30



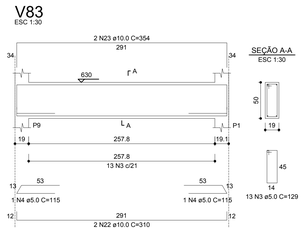

## V82
ESC 1:30



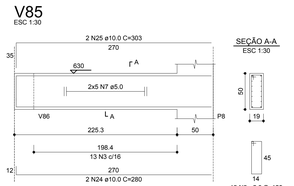

## V80
ESC 1:30



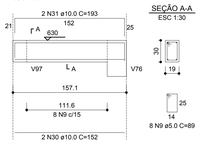

## V83
ESC 1:30



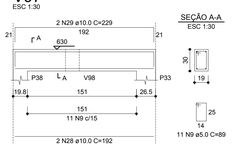

## V85
ESC 1:30



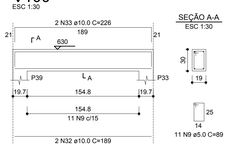

## V98
ESC 1:30



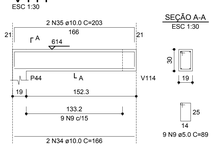

## V97
ESC 1:30



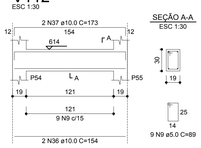

## V100
ESC 1:30



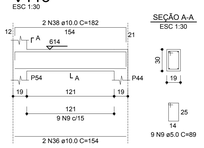

## V111
ESC 1:30



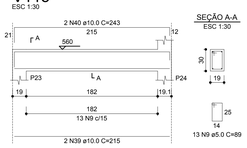

## V112
ESC 1:30



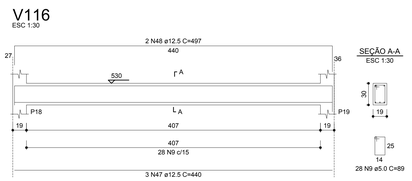

## V113
ESC 1:30




## V115
ESC 1:30




## V116
ESC 1:30




PREFEITURA MUNICIPAL DE DIVINO MG

| | | | |
|---|---|---|---|
| 0 | 21.01.2022 | ARQ. CLÁUDIO | PROJETO BÁSICO |
| Nº | DATA | RESPONSÁVEL | DESCRIÇÃO DA REVISÃO |

FASE: PROJETO ESTRUTURAL

PROPRIETÁRIO: PREFEITURA MUNICIPAL DE DIVINO MG

CONTEÚDO: Detalhes das Vigas 2 Pavimento (V2)

ENDEREÇO: RUA ATRATINO VITOR DE OLIVEIRA ESQUINA COM RUA ADRIANO CAMPOS PEREIRA

OBS.: 06.114.272/0001-66

CTUS ARQUITETURA
CAU: A66611-2 | CEA: 2000 | ctusarquitetura@gmail.com

TÍTULO: CENTRODE REFERENCIA DE EDUCAÇÃO E CULTURA

AUTOR PROJETO ARQUITETÔNICO / RT.: CLÁUDIO DE MELO ROCHA CAU/BR 01.190-3

DETALHAMENTO: AÇO: CA-50 e CA-60 CONCRETO: Fck = 25,0 Mpa

VERSÃO: VERSÃO 1 DATA: 10/06/2022 AUTOCAD:

FOLHA: 29/32

ARQUIVO: BASE GERAL/ CIC DIVINO MG

NBR10068/DIN6771

100 mm