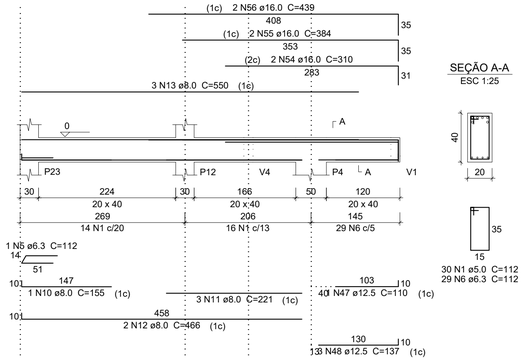
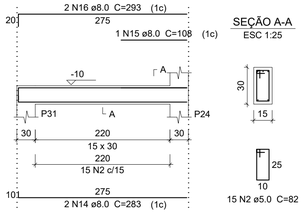
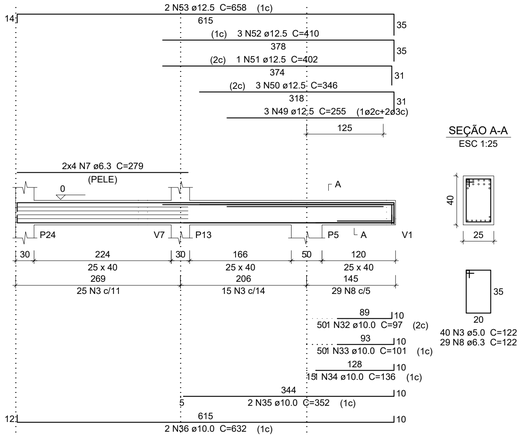
## V16
ESC 1:50



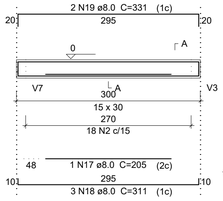

## V17
ESC 1:50



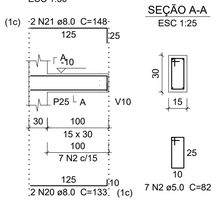

## V18
ESC 1:50



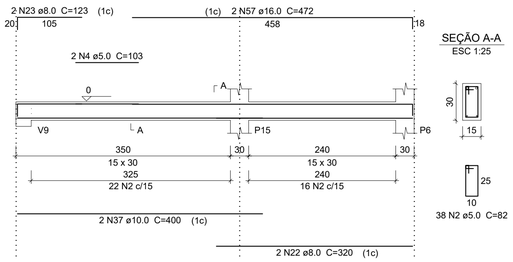

## V19
ESC 1:50



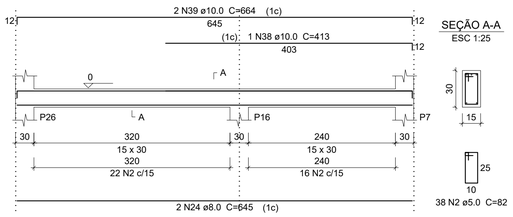

## V20
ESC 1:50



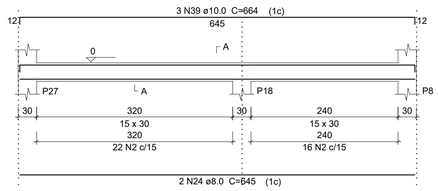

## V21
ESC 1:50



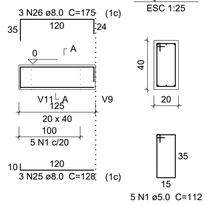

## V22
ESC 1:50



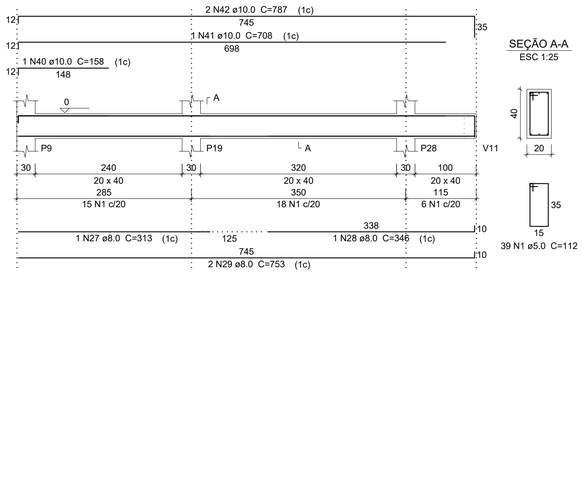

## V23
ESC 1:50



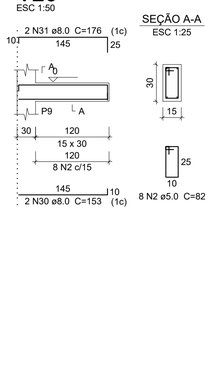

## V24
ESC 1:50



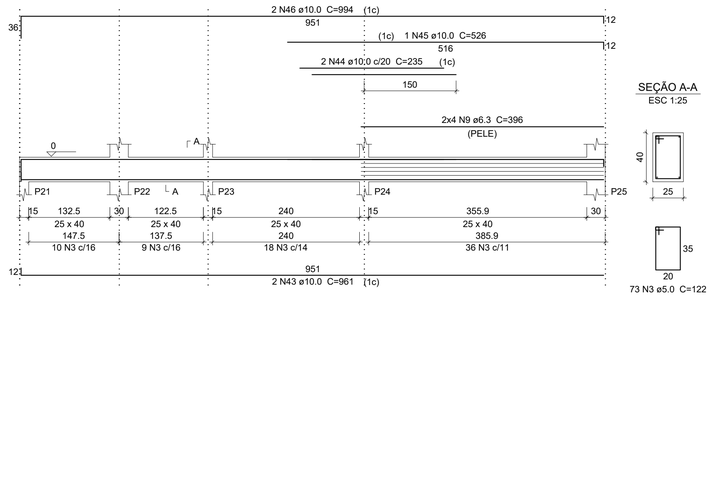

## V25
ESC 1:50




## V26
ESC 1:50




## V27
ESC 1:50




### Relação do aço

| | | |
|---|---|---|
| V16 | V17 | V18 |
| V19 | V20 | V21 |
| V22 | V23 | V24 |
| V25 | V26 | V27 |

| AÇO | N | DIAM (mm) | QUANT (Barras) | UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 74 | 112 | 8288 |
| | 2 | 5.0 | 162 | 82 | 13284 |
| | 3 | 5.0 | 113 | 122 | 13786 |
| | 4 | 5.0 | 2 | 103 | 206 |
| CA50 | 5 | 6.3 | 1 | 112 | 112 |
| | 6 | 6.3 | 29 | 112 | 3248 |
| | 7 | 6.3 | 8 | 279 | 2232 |
| | 8 | 6.3 | 29 | 122 | 3538 |
| | 9 | 6.3 | 8 | 396 | 3168 |
| | 10 | 8.0 | 1 | 155 | 155 |
| | 11 | 8.0 | 3 | 221 | 663 |
| | 12 | 8.0 | 2 | 466 | 932 |
| | 13 | 8.0 | 3 | 550 | 1650 |
| | 14 | 8.0 | 2 | 283 | 566 |
| | 15 | 8.0 | 1 | 108 | 108 |
| | 16 | 8.0 | 2 | 293 | 586 |
| | 17 | 8.0 | 1 | 205 | 205 |
| | 18 | 8.0 | 3 | 311 | 933 |
| | 19 | 8.0 | 2 | 331 | 662 |
| | 20 | 8.0 | 2 | 133 | 266 |
| | 21 | 8.0 | 2 | 148 | 296 |
| | 22 | 8.0 | 2 | 320 | 640 |
| | 23 | 8.0 | 2 | 123 | 246 |
| | 24 | 8.0 | 4 | 645 | 2580 |
| | 25 | 8.0 | 3 | 128 | 384 |
| | 26 | 8.0 | 3 | 175 | 525 |
| | 27 | 8.0 | 1 | 313 | 313 |
| | 28 | 8.0 | 1 | 346 | 346 |
| | 29 | 8.0 | 2 | 753 | 1506 |
| | 30 | 8.0 | 2 | 153 | 306 |
| | 31 | 8.0 | 2 | 176 | 352 |
| | 32 | 10.0 | 1 | 97 | 97 |
| | 33 | 10.0 | 1 | 101 | 101 |
| | 34 | 10.0 | 1 | 136 | 136 |
| | 35 | 10.0 | 2 | 352 | 704 |
| | 36 | 10.0 | 2 | 632 | 1264 |
| | 37 | 10.0 | 2 | 400 | 800 |
| | 38 | 10.0 | 1 | 413 | 413 |
| | 39 | 10.0 | 5 | 664 | 3320 |
| | 40 | 10.0 | 1 | 158 | 158 |
| | 41 | 10.0 | 1 | 708 | 708 |
| | 42 | 10.0 | 2 | 787 | 1574 |
| | 43 | 10.0 | 2 | 961 | 1922 |
| | 44 | 10.0 | 2 | 235 | 470 |
| | 45 | 10.0 | 1 | 526 | 526 |
| | 46 | 10.0 | 2 | 994 | 1988 |
| | 47 | 12.5 | 1 | 110 | 110 |
| | 48 | 12.5 | 3 | 137 | 411 |
| | 49 | 12.5 | 3 | 255 | 765 |
| | 50 | 12.5 | 3 | 346 | 1038 |
| | 51 | 12.5 | 1 | 402 | 402 |
| | 52 | 12.5 | 3 | 410 | 1230 |
| | 53 | 12.5 | 2 | 658 | 1316 |
| | 54 | 16.0 | 2 | 310 | 620 |
| | 55 | 16.0 | 2 | 384 | 768 |
| | 56 | 16.0 | 2 | 439 | 878 |
| | 57 | 16.0 | 2 | 472 | 944 |

### Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|---|---|---|---|
| CA50 | 6.3 | 123 | 33.1 |
| | 8.0 | 142.2 | 61.7 |
| | 10.0 | 141.9 | 96.2 |
| | 12.5 | 52.8 | 55.9 |
| | 16.0 | 32.1 | 55.7 |
| CA60 | 5.0 | 355.7 | 60.3 |

| PESO TOTAL (kg) | |
|---|---|
| CA50 | 302.6 |
| CA60 | 60.3 |

Volume de concreto (C-25) = 4.04 m³
Área de forma = 52.57 m²

DIREITOS AUTORAIS RESERVADOS, CONFORME LEI FEDERAL Nº 9.610/98

Fábio Ernani Zortéa
ENGENHARIA
Engenheiro Civil - CREA/SC 133170-7
R. Coronel Farrapo, 1141 - 1° andar - Campos Novos - (49) 3544.2463

Título: ESTRUTURAL

Descrição: VIGAS DO PAVIMENTO TÉRREO - 02

Resp. Técnico: Fabio Ernani Zortéa - CREA/SC 133170-7

Proprietário: SAMAE-Serviço Autônomo Municipal de Água e Esgoto
CNPJ: 83.158.105/0001-09

Localização da Obra: Rua Padre Alfredo Trincheiro, Bairro Santo Antônio, CAMPOS NOVOS - SC

Indices Urbanísticos:

Áreas:

Prancha: 20/20

Data: Outubro / 2016 | Arquivo: Projetos_ SAMAE_estrutural | Escala: Indicada | Desenhista: Céli Mecabô