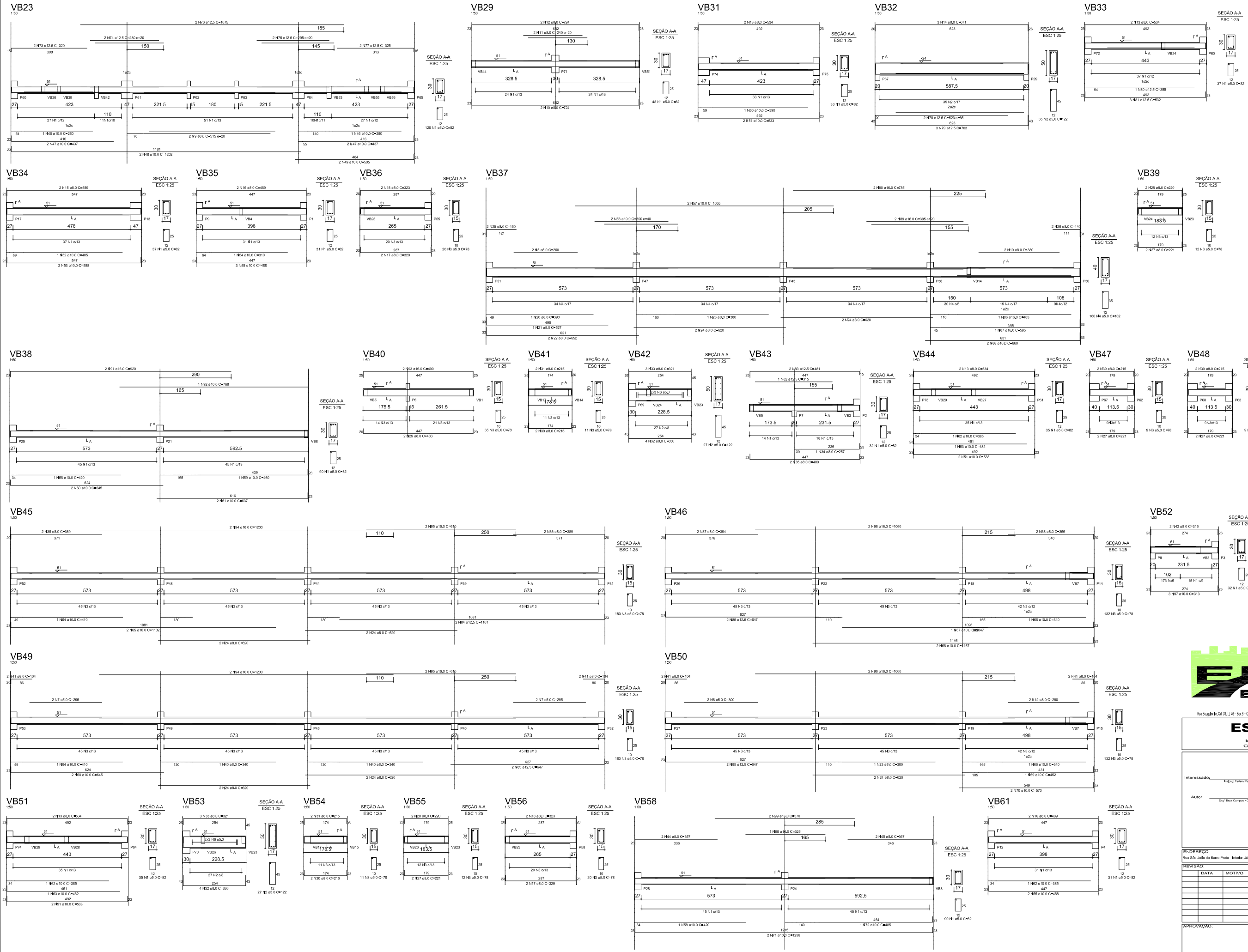


RELAÇÃO DO AÇO

| | | |
|---|---|---|
| VB23 | VB29 | VB31 |
| VB32 | VB33 | VB34 |
| VB35 | VB36 | VB37 |
| VB38 | VB39 | VB40 |
| VB41 | VB42 | VB43 |
| VB44 | VB45 | VB46 |
| VB47 | VB48 | VB49 |
| VB50 | VB51 | VB52 |
| VB53 | VB54 | VB55 |
| VB56 | VB58 | VB61 |

| AÇO | N | DIAM. | Q | UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| 50 | 1 | 5,0 | 657 | 82 | 53874 |
| | 2 | 5,0 | 89 | 122 | 10858 |
| | 3 | 5,0 | 763 | 78 | 59514 |
| | 4 | 5,0 | 162 | 102 | 16520 |
| | 5 | 5,0 | 2 | 260 | 520 |
| | 6 | 5,0 | 12 | corr | 3108 |
| | 7 | 5,0 | 4 | 295 | 1180 |
| | 8 | 5,0 | 2 | 300 | 600 |
| | 9 | 8,0 | 2 | 515 | 1030 |
| | 10 | 8,0 | 2 | 724 | 1448 |
| | 11 | 8,0 | 2 | 240 | 480 |
| | 12 | 8,0 | 2 | 724 | 1448 |
| | 13 | 8,0 | 8 | 534 | 4272 |
| | 14 | 8,0 | 3 | 671 | 2013 |
| | 15 | 8,0 | 2 | 589 | 1178 |
| | 16 | 8,0 | 4 | 489 | 1956 |
| | 17 | 8,0 | 4 | 329 | 1316 |
| | 18 | 8,0 | 4 | 323 | 1292 |
| | 19 | 8,0 | 2 | 330 | 660 |
| | 20 | 8,0 | 1 | 390 | 390 |
| | 21 | 8,0 | 1 | 527 | 527 |
| | 22 | 8,0 | 2 | 652 | 1304 |
| | 23 | 8,0 | 2 | 380 | 760 |
| | 24 | 8,0 | 14 | 620 | 8680 |
| | 25 | 8,0 | 2 | 150 | 300 |
| | 26 | 8,0 | 2 | 140 | 280 |
| | 27 | 8,0 | 8 | 221 | 1768 |
| | 28 | 8,0 | 4 | 220 | 880 |
| | 29 | 8,0 | 2 | 483 | 966 |
| | 30 | 8,0 | 4 | 216 | 864 |
| | 31 | 8,0 | 4 | 215 | 860 |
| | 32 | 8,0 | 8 | 336 | 2688 |
| | 33 | 8,0 | 6 | 321 | 1926 |
| | 34 | 8,0 | 1 | 257 | 257 |
| | 35 | 8,0 | 2 | 489 | 978 |
| | 36 | 8,0 | 4 | 389 | 1556 |
| | 37 | 8,0 | 2 | 394 | 788 |
| | 38 | 8,0 | 2 | 366 | 732 |
| | 39 | 8,0 | 4 | 215 | 860 |
| | 40 | 8,0 | 2 | 340 | 680 |
| | 41 | 8,0 | 8 | 104 | 832 |
| | 42 | 8,0 | 2 | 290 | 580 |
| | 43 | 8,0 | 2 | 316 | 632 |
| | 44 | 8,0 | 2 | 357 | 714 |
| | 45 | 8,0 | 2 | 367 | 734 |
| | 46 | 10,0 | 2 | 280 | 560 |
| | 47 | 10,0 | 4 | 437 | 1748 |
| | 48 | 10,0 | 2 | 1202 | 2404 |
| | 49 | 10,0 | 2 | 505 | 1010 |
| | 50 | 10,0 | 1 | 390 | 390 |
| | 51 | 10,0 | 6 | 533 | 3198 |
| | 52 | 10,0 | 1 | 405 | 405 |
| | 53 | 10,0 | 3 | 598 | 1794 |
| | 54 | 10,0 | 1 | 310 | 310 |
| | 55 | 10,0 | 5 | 488 | 2440 |
| | 56 | 10,0 | 2 | 300 | 600 |
| | 57 | 10,0 | 2 | 1055 | 2110 |
| | 58 | 10,0 | 2 | 420 | 840 |
| | 59 | 10,0 | 1 | 460 | 460 |
| | 60 | 10,0 | 4 | 646 | 2580 |
| | 61 | 10,0 | 2 | 637 | 1274 |
| | 62 | 10,0 | 3 | 386 | 1158 |
| | 63 | 10,0 | 2 | 482 | 964 |
| | 64 | 10,0 | 2 | 410 | 820 |
| | 65 | 10,0 | 2 | 1102 | 2204 |
| | 66 | 10,0 | 2 | 340 | 680 |
| | 67 | 10,0 | 1 | 1047 | 1047 |
| | 68 | 10,0 | 2 | 1167 | 2334 |
| | 69 | 10,0 | 1 | 452 | 452 |
| | 70 | 10,0 | 2 | 570 | 1140 |
| | 71 | 10,0 | 2 | 1256 | 2512 |
| | 72 | 10,0 | 1 | 485 | 485 |
| | 73 | 12,5 | 2 | 320 | 640 |
| | 74 | 12,5 | 2 | 280 | 560 |
| | 75 | 12,5 | 2 | 295 | 590 |
| | 76 | 12,5 | 2 | 1075 | 2150 |
| | 77 | 12,5 | 2 | 325 | 650 |
| | 78 | 12,5 | 2 | 523 | 1046 |
| | 79 | 12,5 | 3 | 703 | 2109 |
| | 80 | 12,5 | 1 | 355 | 355 |
| | 81 | 12,5 | 3 | 532 | 1596 |
| | 82 | 12,5 | 1 | 315 | 315 |
| | 83 | 12,5 | 2 | 481 | 962 |
| | 84 | 12,5 | 2 | 1101 | 2202 |
| | 85 | 12,5 | 2 | 1101 | 2202 |
| | 86 | 16,0 | 1 | 445 | 445 |
| | 87 | 16,0 | 1 | 595 | 595 |
| | 88 | 16,0 | 2 | 660 | 1320 |
| | 89 | 16,0 | 2 | 395 | 790 |
| | 90 | 16,0 | 2 | 785 | 1570 |
| | 91 | 16,0 | 2 | 920 | 1840 |
| | 92 | 16,0 | 1 | 768 | 768 |
| | 93 | 16,0 | 2 | 490 | 980 |
| | 94 | 16,0 | 2 | 1200 | 4800 |
| | 95 | 16,0 | 4 | 610 | 2440 |
| | 96 | 16,0 | 4 | 990 | 4240 |
| | 97 | 16,0 | 3 | 313 | 939 |
| | 98 | 16,0 | 1 | 325 | 325 |
| | 99 | 16,0 | 2 | 570 | 1140 |

RESUMO DO AÇO

| AÇO | DIAM. | C.TOTAL (m) | PESO+10% (kg) |
|---|---|---|---|
| CA50 | 5,0 | 1468,0 | 248,6 |
| | 8,0 | 488,6 | 211,5 |
| | 10,0 | 358,9 | 243,4 |
| | 12,5 | 170,6 | 180,9 |
| | 16,0 | 222,1 | 386,0 |
| PESO TOTAL | | | |
| CA50 | 1270,5 | | |

Vol. de concreto total=11,9 m³
Área de forma total= 184,47 m²

ELITE ENGENHARIA

Rua Sougiba Nº, Qd. 03, Lt. 46 – Box 5 – Conjunto Sabiá, Senador Canedo/GO – e-mail: brazcampos@uol.com.br – Fones: (62) 3541-6806 / (62) 9971-6693

# ESTRUTURAL

Instituto Federal Farroupilha
Campus de Jóão de Castilho

Interessado: Instituto Federal Farroupilha - RS

Autor: Eng° Braz Campos - CREA 7944/D - GO

ARQUIVO: IFF - RS - João de Castilho - Administrativo - Construtural - 13.12.11.dwg

ÁREA DO TERRENO: -

ÁREA PERMEÁVEL: -

Nº PAVIMENTOS: 02 (Dois)

ÁREA CONSTRUÍDA: Área Total : 1914,83 m²

CONTEÚDO: Vigas Baldrames

DESENHISTA: Paulo Borges

FOLHA: 11/17

ENDEREÇO: Rua São João do Barro Preto - Interior, João de Castilhos, RS

DATA: Dezembro/2011

REVISÃO:

| DATA | MOTIVO | REVISOR |
|---|---|---|
| | | |

APROVAÇÃO:

www.brazcampos.com.br