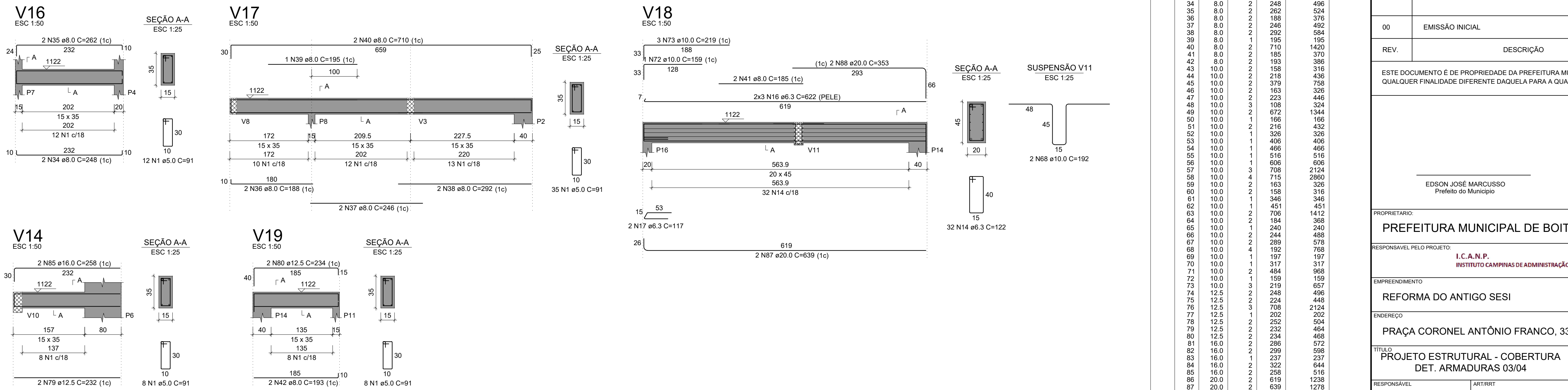




| RELÇÃO DO AÇO |      |           |       |             |              |
|---------------|------|-----------|-------|-------------|--------------|
|               |      | V3        | V4    |             |              |
|               |      | V8        | V9    |             |              |
| V6            | V11  | V12       |       |             |              |
| V10           | V13  | V15       |       |             |              |
| V16           | V17  |           |       |             |              |
| V19           |      |           |       |             |              |
| AÇO           | N    | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
| CA60          | 1    | 5,0       | 196   | 91          | 17836        |
|               | 2    | 5,0       | 2     | 159         | 319          |
|               | 3    | 5,0       | 2     | 157         | 312          |
|               | 4    | 5,0       | 2     | 164         | 322          |
|               | 5    | 5,0       | 104   | 121         | 12584        |
|               | 7    | 5,0       | 229   | 82          | 456          |
|               | 8    | 5,0       | 39    | 131         | 5109         |
|               | 9    | 5,0       | 2     | 456         | 912          |
|               | 10   | 5,0       | 2     | 346         | 692          |
|               | 11   | 5,0       | 2     | 219         | 438          |
| CA50          | 12   | 6,3       | 2     | 124         | 248          |
|               | 13   | 6,3       | 1     | 74          | 74           |
|               | 14   | 6,3       | 808   | 122         | 7808         |
|               | 15   | 6,3       | 6     | 619         | 3712         |
|               | 16   | 6,3       | 6     | 622         | 3734         |
|               | 17   | 6,3       | 2     | 117         | 234          |
|               | 18   | 8,0       | 3     | 374         | 1122         |
|               | 19   | 8,0       | 5     | 336         | 1680         |
|               | 20   | 8,0       | 2     | 103         | 206          |
|               | 21   | 8,0       | 2     | 219         | 438          |
|               | 22   | 8,0       | 2     | 204         | 408          |
|               | 23   | 8,0       | 2     | 378         | 756          |
|               | 24   | 8,0       | 2     | 148         | 296          |
|               | 25   | 8,0       | 2     | 522         | 1044         |
|               | 26   | 8,0       | 2     | 320         | 640          |
|               | 27   | 8,0       | 1     | 112         | 112          |
|               | 28   | 8,0       | 1     | 111         | 111          |
|               | 29   | 8,0       | 2     | 357         | 713          |
|               | 30   | 8,0       | 1     | 123         | 123          |
|               | 31   | 8,0       | 3     | 163         | 549          |
|               | 32   | 8,0       | 2     | 135         | 270          |
|               | 33   | 8,0       | 2     | 142         | 426          |
|               | 34   | 8,0       | 3     | 166         | 498          |
|               | 35   | 8,0       | 2     | 262         | 524          |
|               | 36   | 8,0       | 2     | 188         | 376          |
|               | 37   | 8,0       | 2     | 246         | 492          |
|               | 38   | 8,0       | 2     | 292         | 584          |
|               | 39   | 8,0       | 1     | 195         | 195          |
|               | 40   | 8,0       | 2     | 185         | 370          |
|               | 41   | 8,0       | 2     | 193         | 386          |
|               | 42   | 8,0       | 2     | 158         | 316          |
|               | 43   | 10,0      | 2     | 357         | 713          |
|               | 44   | 10,0      | 2     | 185         | 370          |
|               | 45   | 10,0      | 2     | 219         | 438          |
| 46            | 10,0 | 2         | 163   | 326         |              |
| 47            | 10,0 | 2         | 142   | 284         |              |
| 48            | 10,0 | 3         | 108   | 324         |              |
| 49            | 10,0 | 2         | 1672  | 1344        |              |
| 50            | 10,0 | 1         | 676   | 676         |              |
| 51            | 10,0 | 1         | 432   | 432         |              |
| 52            | 10,0 | 1         | 426   | 426         |              |
| 53            | 10,0 | 1         | 306   | 306         |              |
| 54            | 10,0 | 1         | 466   | 466         |              |
| 55            | 10,0 | 1         | 616   | 616         |              |
| 56            | 10,0 | 1         | 606   | 606         |              |
| 57            | 10,0 | 1         | 708   | 708         |              |
| 58            | 10,0 | 4         | 715   | 2860        |              |
| 59            | 10,0 | 2         | 163   | 326         |              |
| 60            | 10,0 | 1         | 158   | 158         |              |
| 61            | 10,0 | 1         | 346   | 346         |              |
| 62            | 10,0 | 1         | 451   | 451         |              |
| 63            | 10,0 | 2         | 706   | 1412        |              |
| 64            | 10,0 | 2         | 184   | 368         |              |
| 65            | 10,0 | 1         | 240   | 240         |              |
| 66            | 10,0 | 2         | 144   | 488         |              |
| 67            | 10,0 | 2         | 289   | 578         |              |
| 68            | 10,0 | 4         | 292   | 1168        |              |
| 69            | 10,0 | 1         | 197   | 197         |              |
| 70            | 10,0 | 1         | 317   | 317         |              |
| 71            | 10,0 | 2         | 484   | 968         |              |
| 72            | 10,0 | 1         | 159   | 159         |              |
| 73            | 10,0 | 1         | 159   | 159         |              |
| 74            | 12,5 | 2         | 202   | 402         |              |
| 75            | 12,5 | 2         | 224   | 448         |              |
| 76            | 12,5 | 3         | 208   | 624         |              |
| 77            | 12,5 | 1         | 202   | 202         |              |
| 78            | 12,5 | 2         | 252   | 504         |              |
| 79            | 12,5 | 2         | 232   | 464         |              |
| 80            | 12,5 | 1         | 234   | 234         |              |
| 81            | 16,0 | 2         | 286   | 572         |              |
| 82            | 16,0 | 2         | 289   | 578         |              |
| 83            | 16,0 | 1         | 237   | 237         |              |
| 84            | 16,0 | 1         | 232   | 232         |              |
| 85            | 16,0 | 2         | 258   | 516         |              |
| 86            | 20,0 | 2         | 319   | 638         |              |
| 87            | 20,0 | 2         | 319   | 638         |              |
| 88            | 20,0 | 2         | 653   | 1306        |              |

|                  |                                                     |                  |           |
|------------------|-----------------------------------------------------|------------------|-----------|
| RESPONSÁVEL      | ART/RRT                                             | DESENHO          | APROV.    |
| VIRMONDES JUNIOR | 28027230220672601                                   | VIRMONDES JUNIOR |           |
| ESCALA           | Nº DO PT                                            | VISTO            | FOLHA     |
| INDICADA         |                                                     |                  | D - 04/05 |
| DATA             | ARQUIVO                                             | REV.             |           |
| 30/04/2022       | BTV - PROJ. ESTRUTURAL - COBERTURA - FLS D-01 A D-5 | 00               |           |