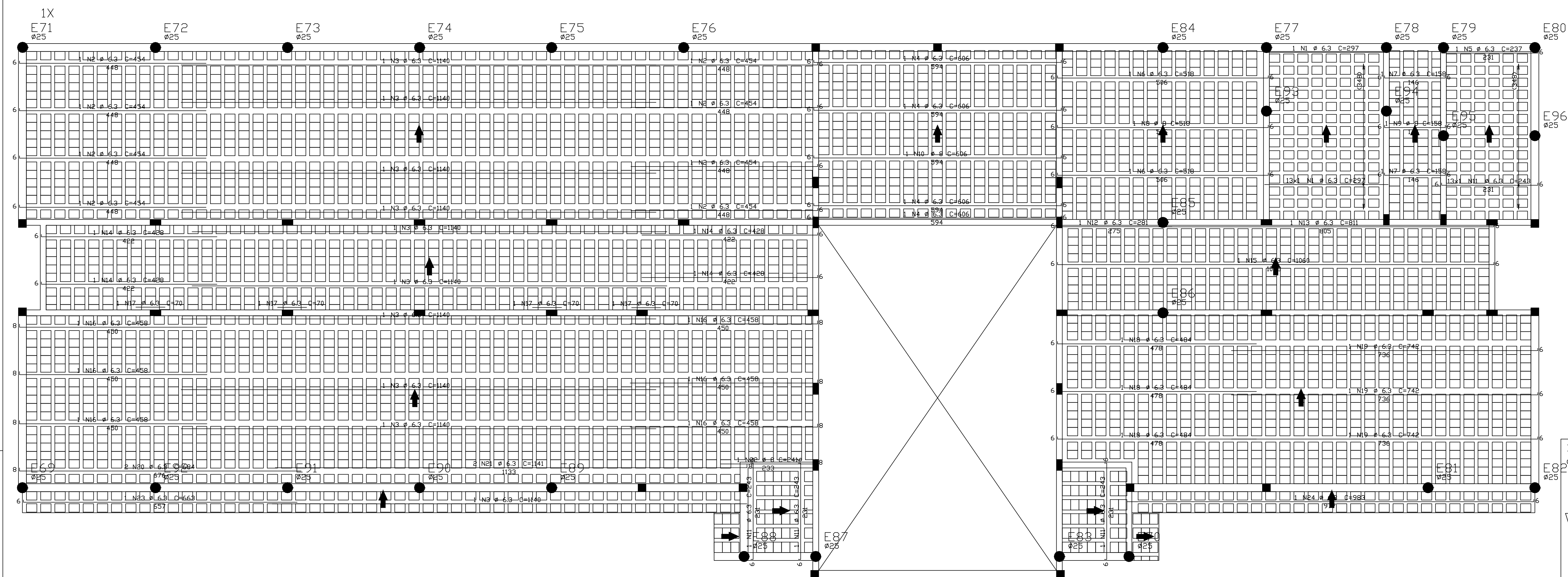


RESPALDO - Armadura positiva secundaria

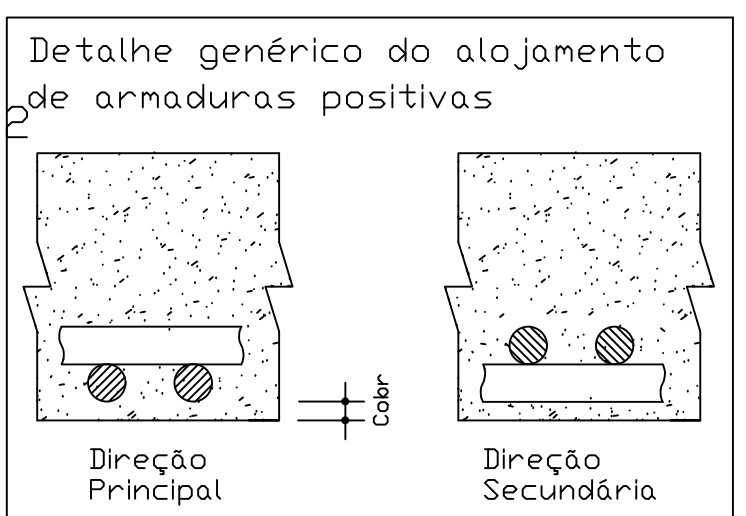
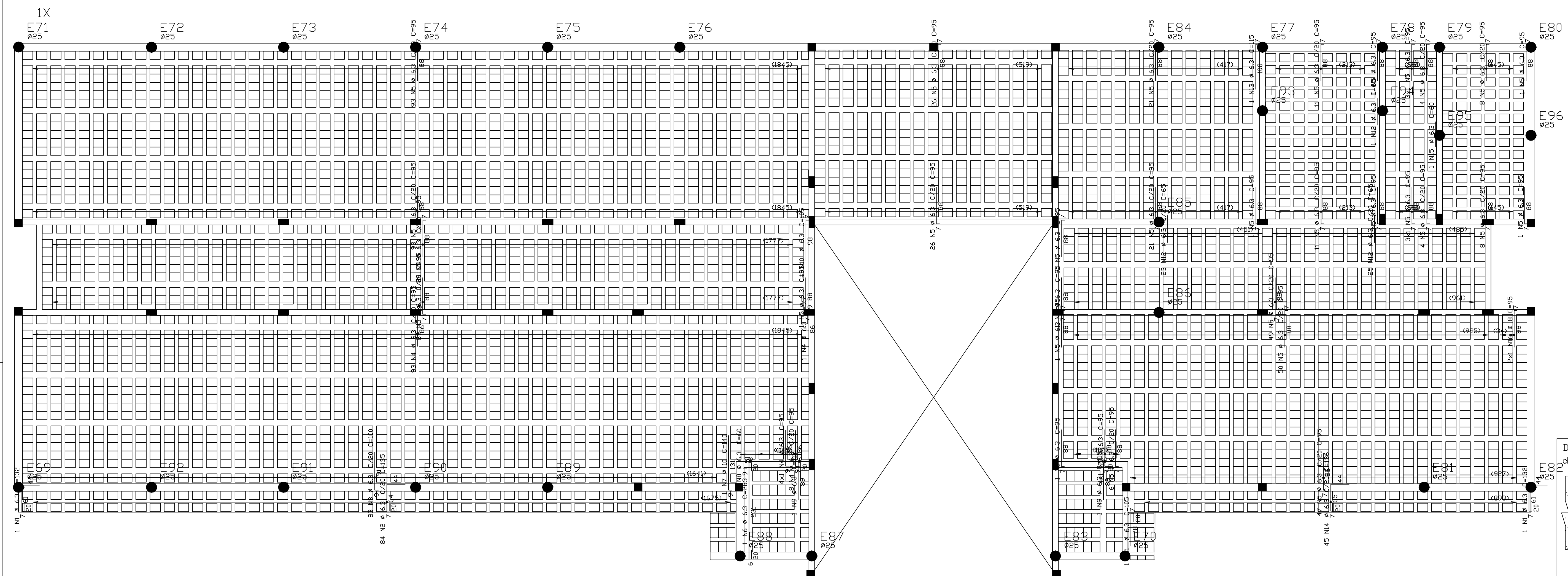


| ACQ  | POS | BIT  | QUANT | COMPONENT | UNIT  | TOTAL |
|--|-----|------|-------|-----------|-------|-------|
|  |     | (Cn) |       |           | (Cn)  |       |
| <b>RESPALDO - Armadura negativa secundaria</b> |     |      |       |           |       |       |
| SMA  | 1   | 6,3  | 8     | 132       | 264   |       |
| SMA  | 2   | 6,3  | 114   | 84        | 1008  |       |
| SMA  | 3   | 6,3  | 83    | 100       | 8300  |       |
| SMA  | 4   | 6,3  | 106   | 50        | 5300  |       |
| SMA  | 5   | 6,3  | 676   | 95        | 64220 |       |
| SMA  | 6   | 6,3  | 1     | 283       | 283   |       |
| SMA  | 10  | 10   | 1     | 140       | 140   |       |
| SMA  | 8   | 6,3  | 1     | 60        | 60    |       |
| SMA  | 9   | 6,3  | 2     | 115       | 230   |       |
| SMA  | 10  | 6,3  | 1     | 105       | 105   |       |
| SMA  | 11  | 6,3  | 1     | 105       | 105   |       |
| SMA  | 12  | 6,3  | 49    | 65        | 3185  |       |
| SMA  | 14  | 10,3 | 15    | 115       | 115   |       |
| SMA  | 15  | 6,3  | 1     | 60        | 60    |       |
| SMA  | 16  | 8    | 2     | 95        | 95    |       |
| <b>RESPALDO - Armadura positiva secundaria</b> |     |      |       |           |       |       |
| SMA  | 2   | 6,3  | 8     | 454       | 3632  |       |
| SMA  | 3   | 6,3  | 10    | 1140      | 1400  |       |
| SMA  | 4   | 6,3  | 606   | 243       | 24300 |       |
| SMA  | 5   | 6,3  | 1     | 237       | 237   |       |
| SMA  | 6   | 6,3  | 1     | 518       | 518   |       |
| SMA  | 7   | 6,3  | 2     | 158       | 316   |       |
| SMA  | 8   | 6,3  | 1     | 158       | 158   |       |
| SMA  | 9   | 6,3  | 1     | 158       | 158   |       |
| SMA  | 10  | 6,3  | 1     | 606       | 606   |       |
| SMA  | 11  | 6,3  | 16    | 243       | 3888  |       |
| SMA  | 12  | 6,3  | 1     | 281       | 281   |       |
| SMA  | 13  | 6,3  | 81    | 81        | 8100  |       |
| SMA  | 14  | 6,3  | 4     | 428       | 1712  |       |
| SMA  | 15  | 6,3  | 1060  | 1060      | 10600 |       |
| SMA  | 16  | 6,3  | 4     | 158       | 2748  |       |
| SMA  | 17  | 12   | 2     | 70        | 70    |       |
| SMA  | 18  | 6,3  | 3     | 484       | 1452  |       |
| SMA  | 19  | 6,3  | 2     | 742       | 1484  |       |
| SMA  | 20  | 6,3  | 2     | 684       | 1368  |       |
| SMA  | 21  | 6,3  | 2     | 1141      | 2282  |       |
| SMA  | 22  | 6,3  | 24    | 24        | 2400  |       |
| SMA  | 23  | 6,3  | 1     | 663       | 663   |       |
| SMA  | 24  | 6,3  | 1     | 663       | 663   |       |

| RESUMO DE AÇO |             |              |              |
|---------------|-------------|--------------|--------------|
| AÇO           | BIT<br>(mm) | COMPR<br>(m) | PESO<br>(kg) |
| 50A           | 6,3         | 1474         | 361          |
| 50A           | 8           | 17           | 7            |
| 50A           | 10          | 1            | 1            |
| Peso Total    |             | 50A =        | 369 kg       |



RESPALDO - Armadura negativa secundaria



| Tabela de Vigotas Treilicadas |        |               |      |       |                    |        |                       |       |      |                       |    |     |       |       |
|-------------------------------|--------|---------------|------|-------|--------------------|--------|-----------------------|-------|------|-----------------------|----|-----|-------|-------|
| Bases                         |        | Vôos / Apolos |      |       | Armação Treilicada |        | Armação Adicional (1) |       |      | Armação Adicional (2) |    |     | Total |       |
| Leje                          | Vigota | Nº Leje       | Vôos | Lirot | Unh                | Unh    | # DE                  | DD    | Unh  | # DE                  | DD | Unh |       |       |
|                               | V17A   | 50            | 493  | 10    | 483                | TR683A | 493                   | 2849  | 2    | 5                     | 5  | 433 | 45986 |       |
|                               | V17B   | 4             | 418  | 10    | 483                | TR683A | 418                   | 2849  | 2    | 5                     | 5  | 433 | 45986 |       |
|                               | V17C   | 1             | 403  | 0     | 403                | TR683A | 413                   | 413   | 2    | 5                     | 5  | 423 | 846   |       |
|                               | V17D   | 1             | 403  | 10    | 233                | TR683A | 423                   | 1019  | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17A   | 49            | 403  | 10    | 483                | TR164A | 483                   | 20727 | 2    | 5                     | 5  | 433 | 48434 |       |
|                               | V17B   | 1             | 2    | 40    | 413                | TR164A | 413                   | 413   | 2    | 5                     | 5  | 423 | 846   |       |
|                               | V17C   | 0             | 0    | 60    | 60                 | TR164A | 365                   | 365   | 5    | 5                     | 5  | 373 | 373   |       |
|                               | V17D   | 4             | 35   | 10    | 371                | TR164A | 371                   | 1484  | 1    | 5                     | 5  | 381 | 1524  |       |
|                               | V17E   | 0             | 413  | 10    | 483                | TR683A | 413                   | 5076  | 2    | 5                     | 5  | 423 | 846   |       |
|                               | V17A   | 1             | 403  | 0     | 413                | TR683A | 413                   | 413   | 2    | 5                     | 5  | 423 | 846   |       |
|                               | V17B   | 5             | 403  | 10    | 483                | TR683A | 423                   | 2113  | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17C   | 0             | 60   | 60    | 60                 | TR683A | 60                    | 3569  | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17D   | 0             | 60   | 60    | 60                 | TR683A | 60                    | 60    | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17E   | 0             | 413  | 10    | 483                | TR683A | 413                   | 1949  | 2    | 5                     | 5  | 423 | 846   |       |
|                               | V17B   | 48            | 0    | 60    | 60                 | TR683A | 60                    | 2874  | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17C   | 0             | 60   | 60    | 60                 | TR683A | 60                    | 2874  | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17D   | 0             | 99   | 59    | 59                 | TR683A | 39                    | 144   | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17A   | 2             | 72   | 70    | 70                 | TR683A | 72                    | 144   | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17B   | 1             | 70   | 70    | 70                 | TR683A | 70                    | 70    | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17A   | 20            | 20   | 10    | 233                | TR683A | 223                   | 6244  | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17B   | 2             | 198  | 28    | 198                | TR683A | 28                    | 144   | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17A   | 4             | 351  | 10    | 371                | TR683A | 371                   | 1484  | 1    | 5                     | 5  | 381 | 1524  |       |
|                               | V17B   | 27            | 403  | 10    | 483                | TR683A | 423                   | 1421  | 2    | 5                     | 5  | 433 | 23382 |       |
|                               | V17C   | 1             | 311C | 1     | 311                | TR683A | 311                   | 311   | 2    | 5                     | 5  | 421 | 841   |       |
|                               | V17A   | 152A          | 5    | 153   | 10                 | 173    | TR683A                | 173   | 865  | 2                     | 5  | 5   | 423   | 189   |
|                               | V17B   | 1             | 153A | 10    | 173                | TR683A | 173                   | 865   | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17C   | 1             | 153A | 10    | 173                | TR683A | 173                   | 865   | 2    | 5                     | 5  | 423 | 189   |       |
|                               | V17A   | 153A          | 7    | 483   | 10                 | 483    | TR683A                | 423   | 6768 | 2                     | 5  | 5   | 433   | 13866 |
|                               | V17B   | 7             | 483  | 10    | 483                | TR683A | 423                   | 6768  | 2    | 5                     | 5  | 433 | 13866 |       |
|                               | V17C   | 7             | 483  | 10    | 483                | TR683A | 423                   | 6768  | 2    | 5                     | 5  | 433 | 13866 |       |

|  |  |         |  |
|--|--|---------|--|
| <b>TQS Informática Ltda</b><br>Rua Pineiro, 706 c/2 - Tel:(011)3983-2722 - CEP 05422-001 - São Paulo |  |         |  |
|  |  |         |  |
| CLIENTE<br>Fck = MP3   |  | DBA N 2 |  |
| CLIENTE  |  | DEL N 2 |  |
| DBA  |  | DEV N 2 |  |
| TITULO   |  |         |  |
| DATA   |  | END 2   |  |
| ESCALA   |  | CODA    |  |
| DESENHO  |  | CODA    |  |