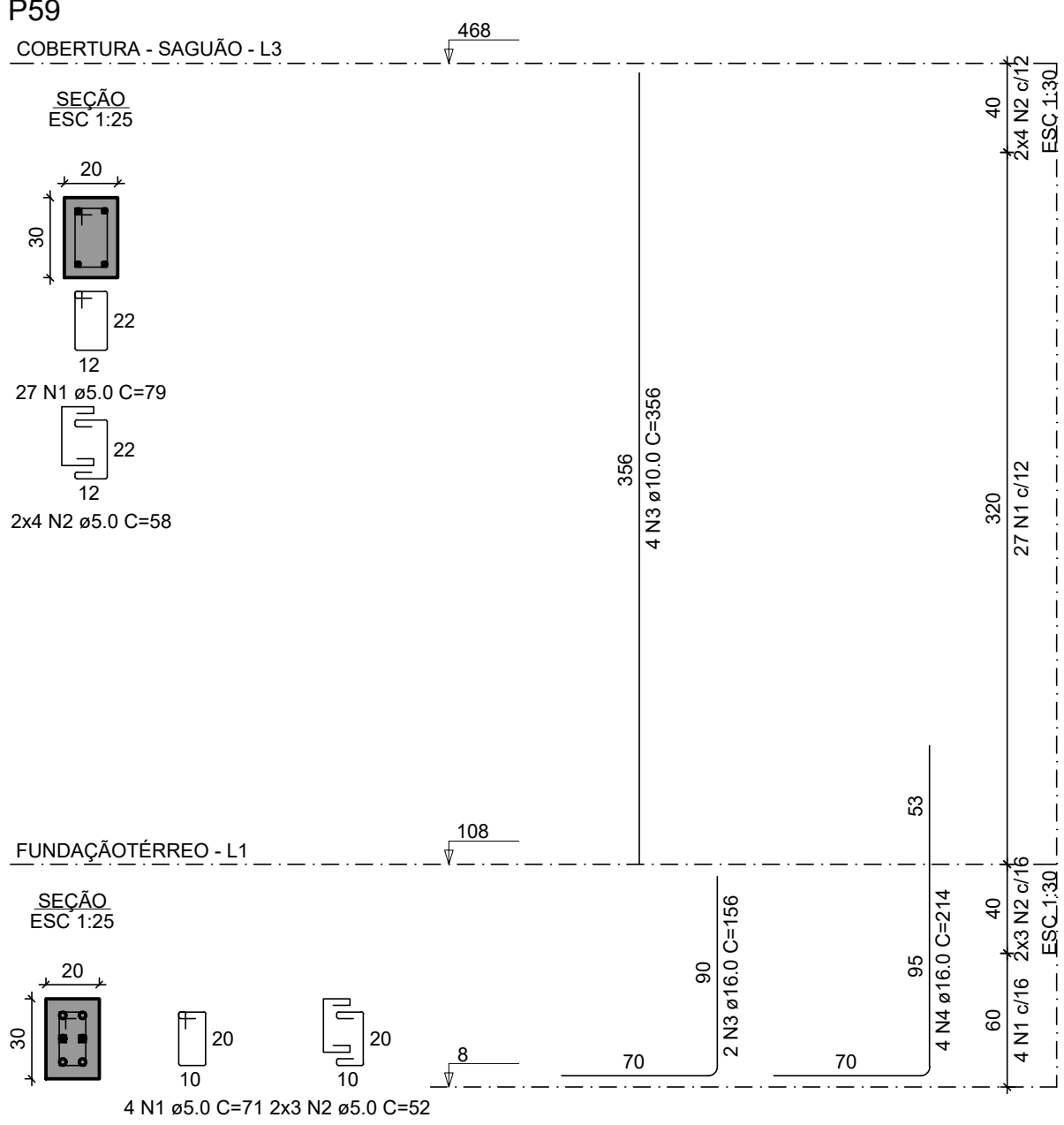
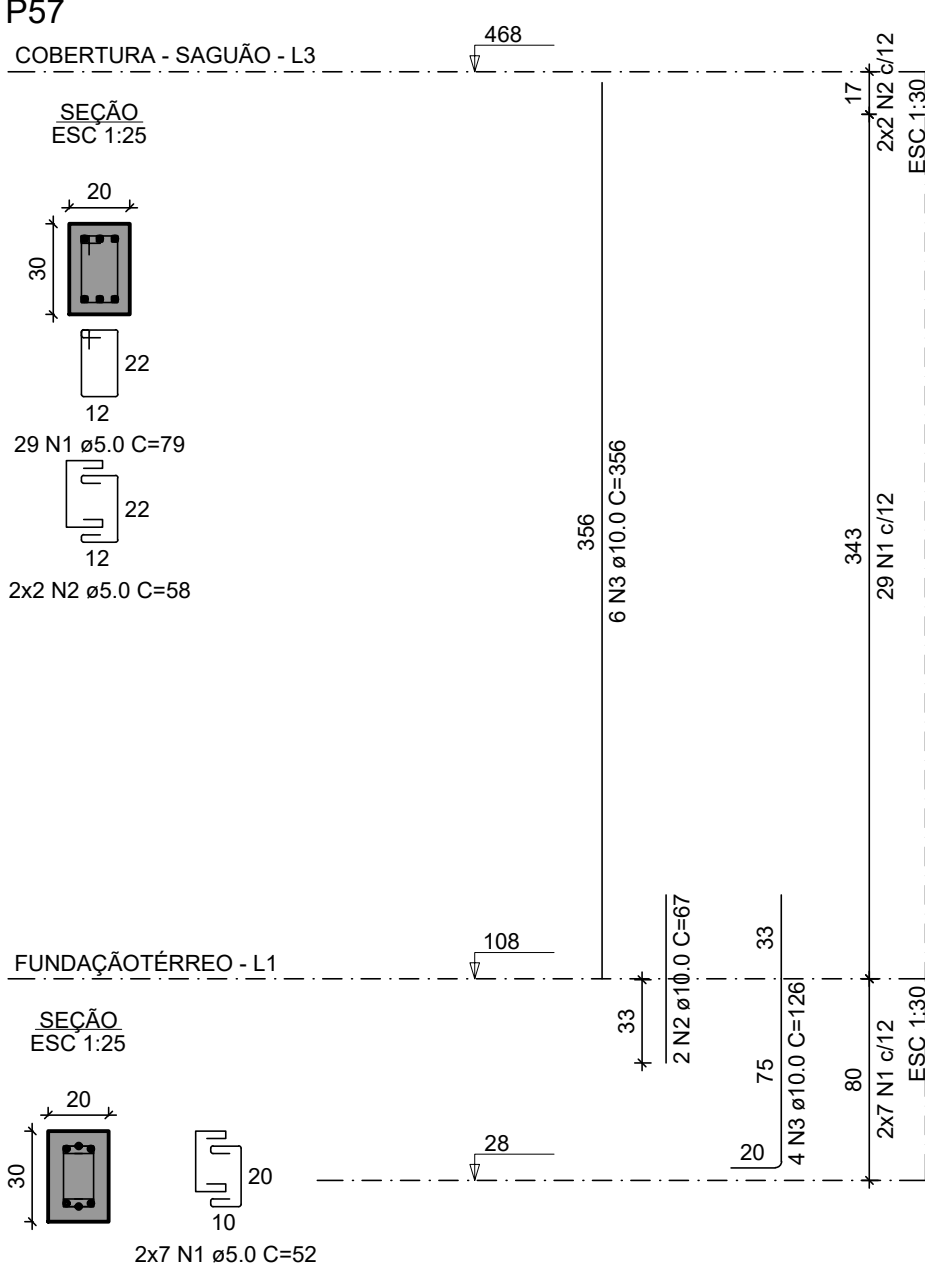
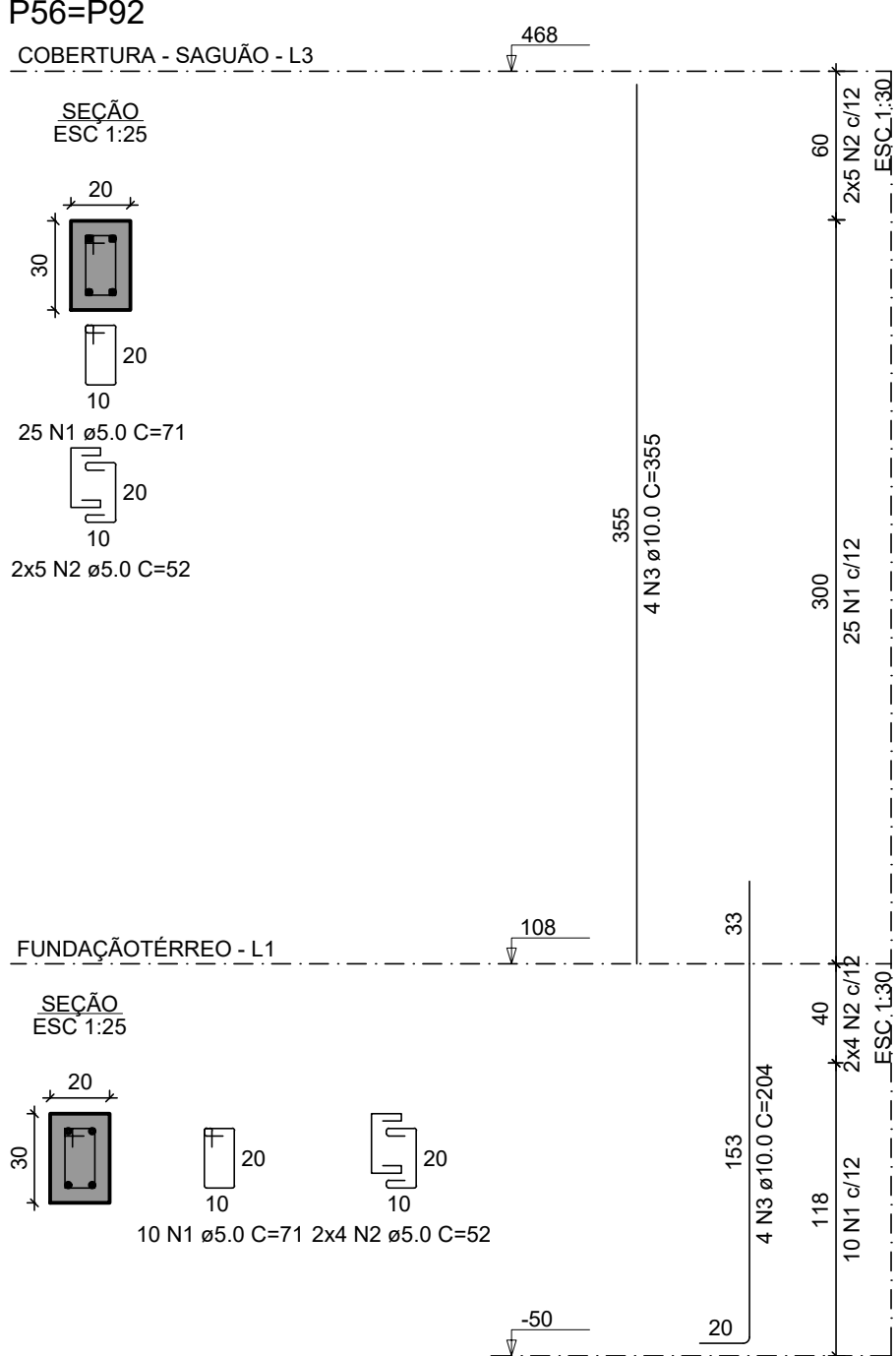
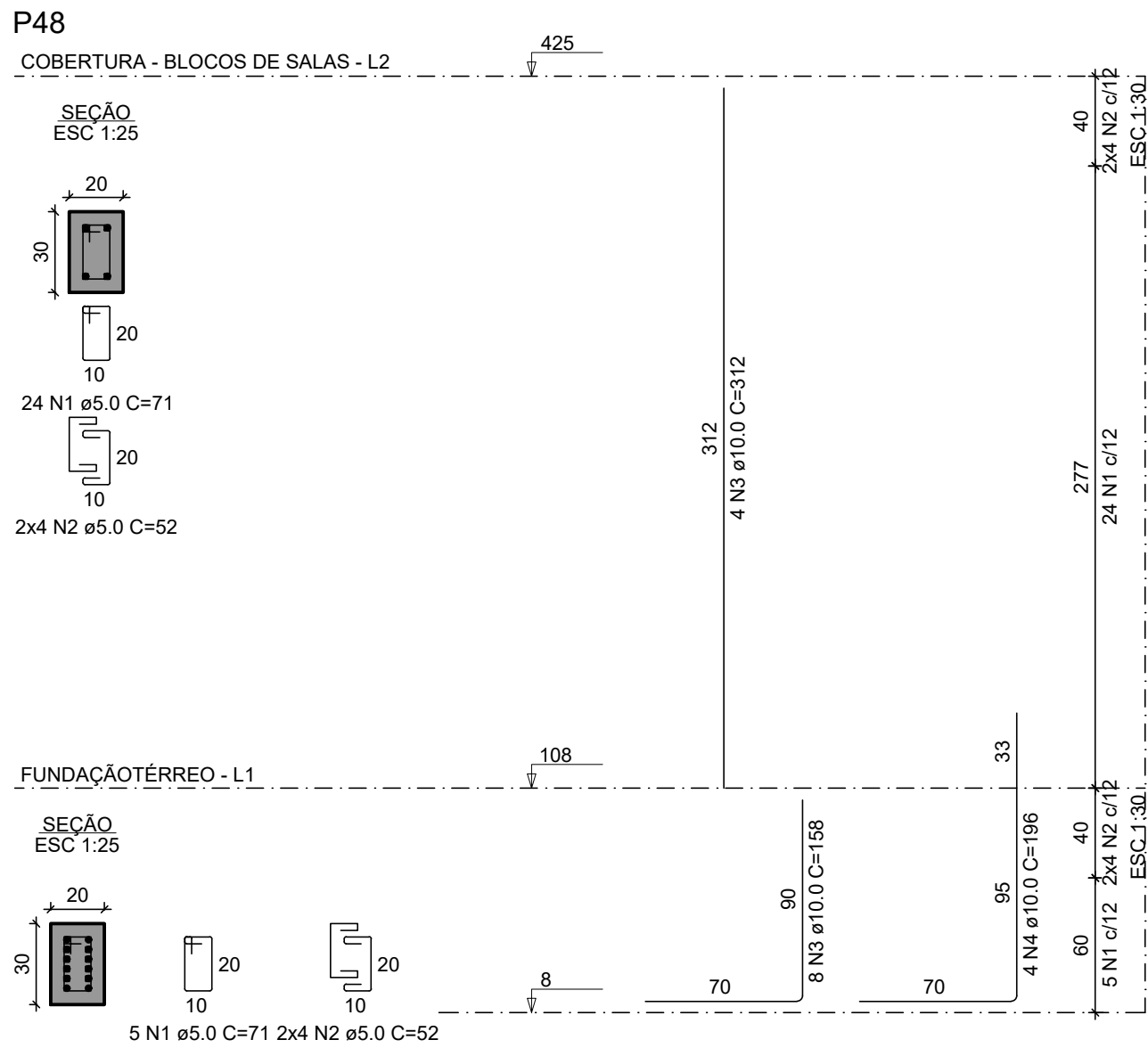
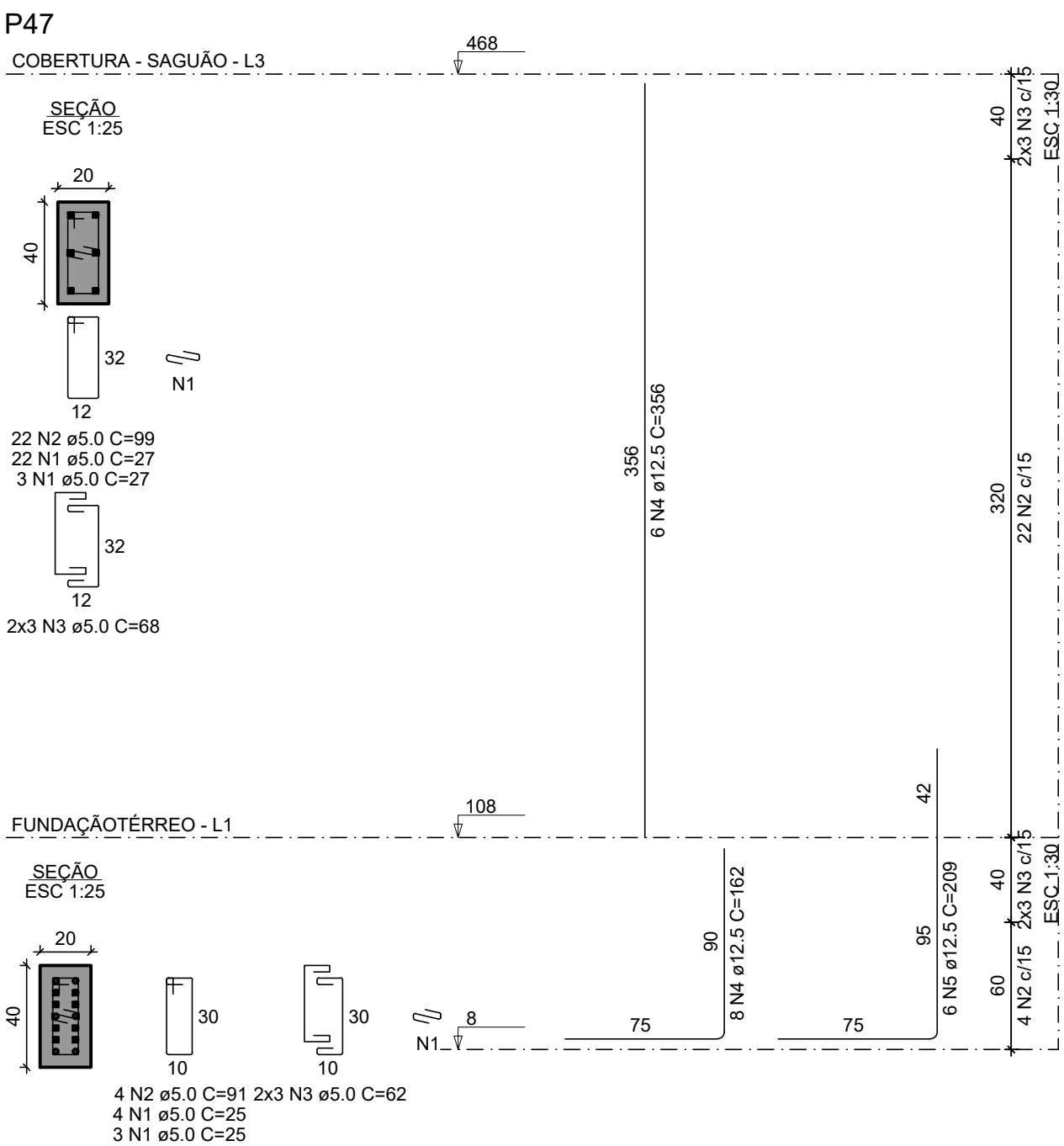
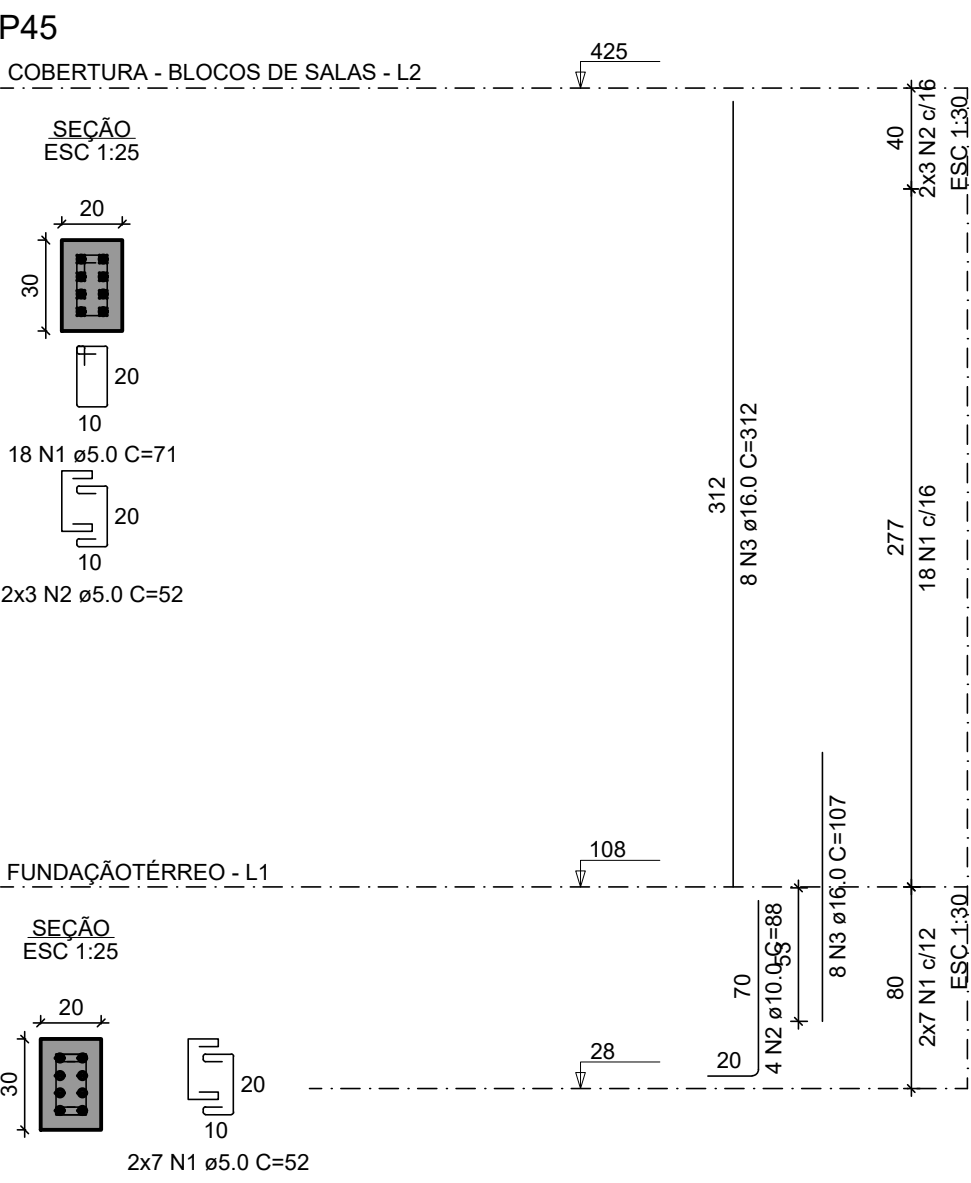
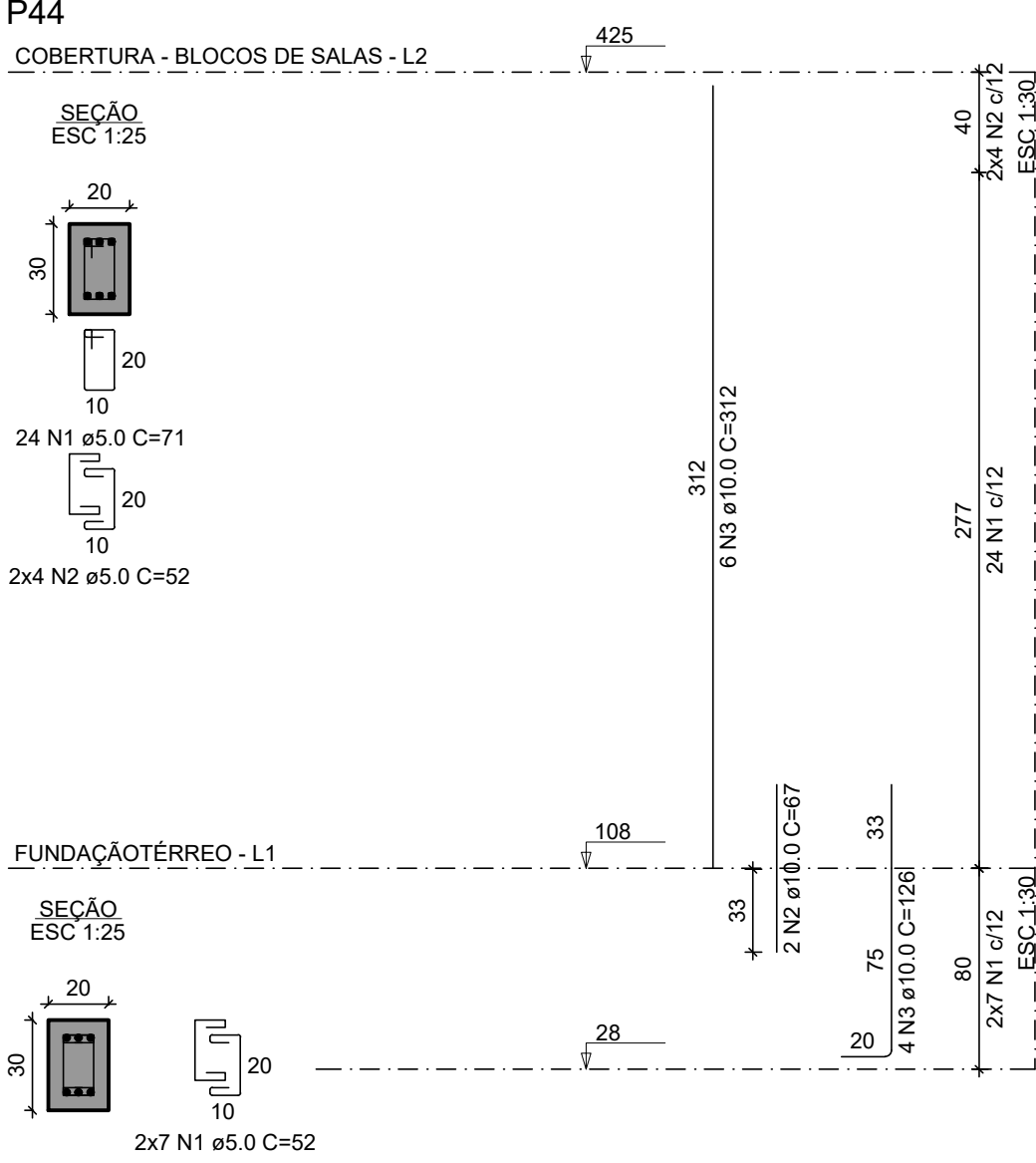
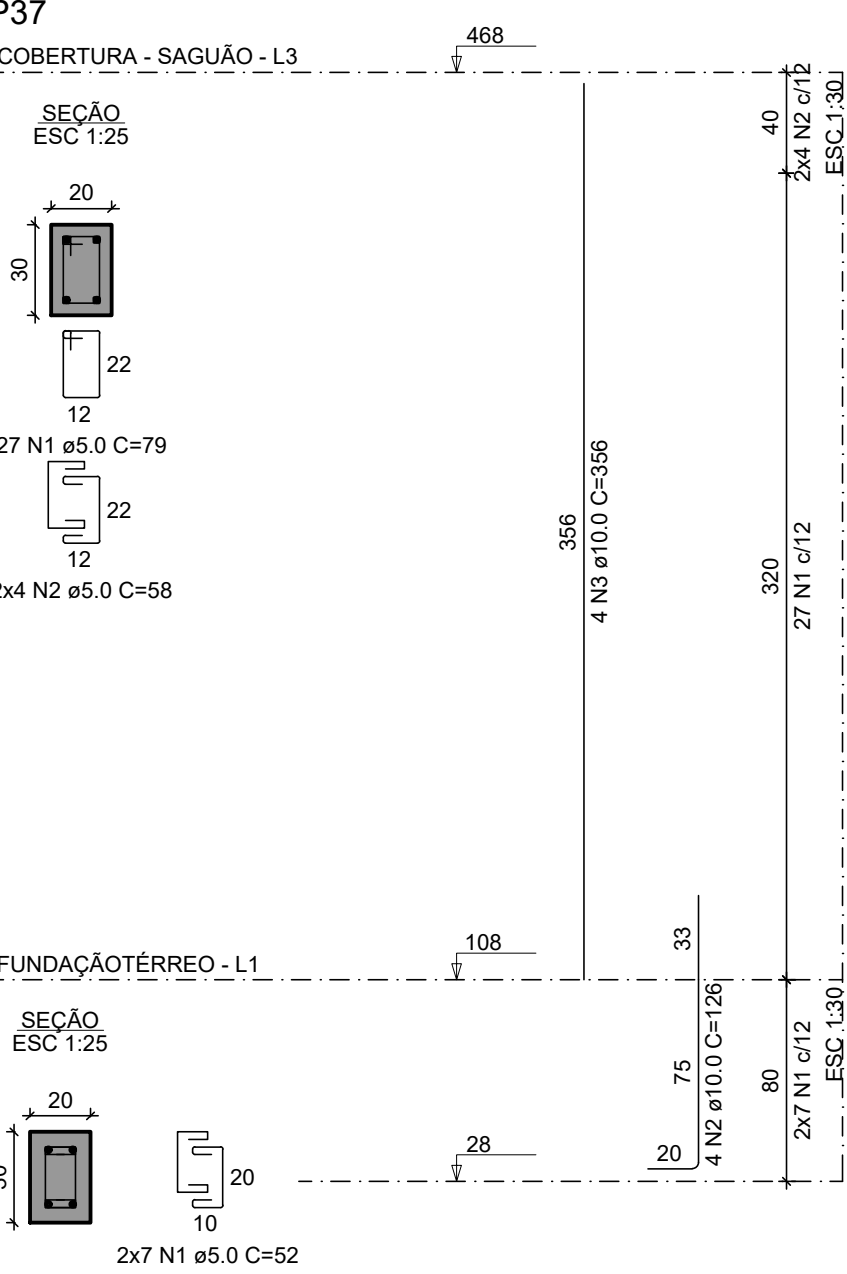
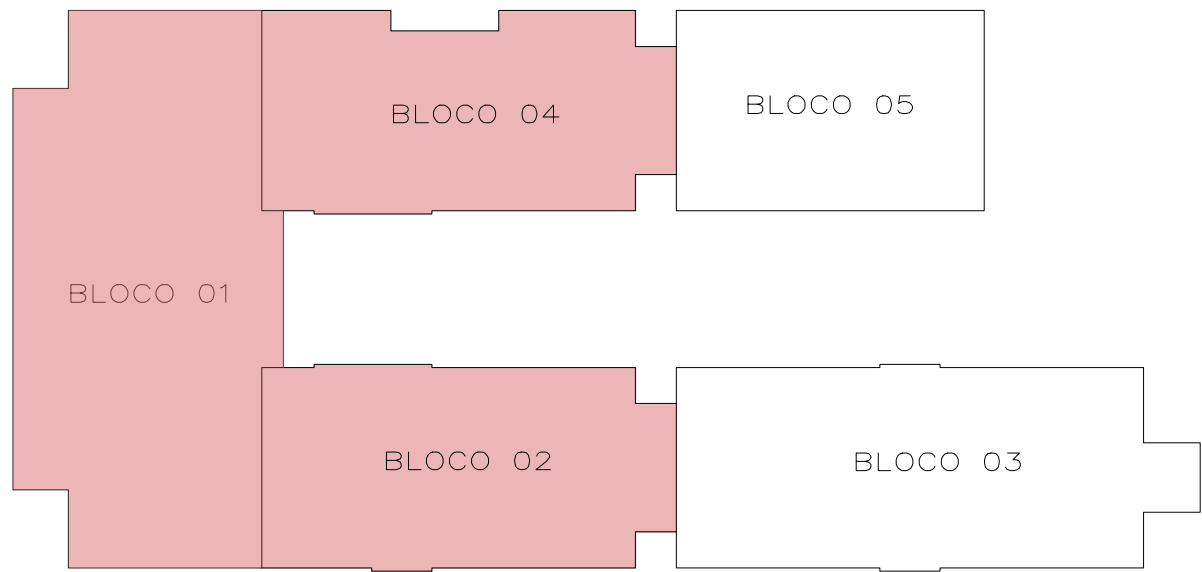




| RELAÇÃO DO AÇO |      |   |           |       |             |              |
|----------------|------|---|-----------|-------|-------------|--------------|
| ELEMENTO       | AÇO  | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
| P37-L3         | CA60 | 1 | 5.0       | 27    | 79          | 2133         |
|                | CA60 | 2 | 5.0       | 8     | 58          | 464          |
|                | CA50 | 3 | 10.0      | 4     | 356         | 1424         |
| P37-L1         | CA60 | 1 | 5.0       | 14    | 52          | 728          |
|                | CA50 | 2 | 10.0      | 4     | 126         | 504          |
|                | CA60 | 1 | 5.0       | 24    | 71          | 1704         |
| P44-L2         | CA60 | 1 | 5.0       | 8     | 52          | 416          |
|                | CA50 | 3 | 10.0      | 6     | 312         | 1872         |
|                | CA60 | 1 | 5.0       | 14    | 52          | 728          |
| P44-L1         | CA60 | 1 | 5.0       | 2     | 67          | 134          |
|                | CA50 | 3 | 10.0      | 4     | 126         | 504          |
|                | CA60 | 1 | 5.0       | 18    | 71          | 1278         |
| P45-L2         | CA60 | 2 | 5.0       | 6     | 52          | 312          |
|                | CA50 | 3 | 10.0      | 4     | 126         | 504          |
|                | CA60 | 1 | 5.0       | 18    | 71          | 1278         |
| P45-L1         | CA50 | 3 | 10.0      | 8     | 312         | 2496         |
|                | CA60 | 1 | 5.0       | 14    | 52          | 728          |
|                | CA50 | 2 | 10.0      | 4     | 88          | 352          |
| P47-L3         | CA50 | 3 | 10.0      | 8     | 107         | 856          |
|                | CA60 | 1 | 5.0       | 25    | 27          | 675          |
|                | CA60 | 2 | 5.0       | 22    | 99          | 2178         |
| P47-L1         | CA60 | 3 | 5.0       | 6     | 68          | 408          |
|                | CA50 | 4 | 12.5      | 6     | 356         | 2136         |
|                | CA60 | 1 | 5.0       | 7     | 25          | 175          |
| P48-L2         | CA60 | 2 | 5.0       | 4     | 91          | 364          |
|                | CA60 | 3 | 5.0       | 6     | 62          | 372          |
|                | CA50 | 4 | 12.5      | 8     | 162         | 1296         |
| P48-L1         | CA50 | 5 | 12.5      | 6     | 209         | 1254         |
|                | CA60 | 1 | 5.0       | 24    | 71          | 1704         |
|                | CA60 | 2 | 5.0       | 8     | 52          | 416          |
| 2xP56-L3       | CA50 | 3 | 10.0      | 4     | 312         | 1248         |
|                | CA60 | 1 | 5.0       | 5     | 71          | 355          |
|                | CA60 | 2 | 5.0       | 8     | 52          | 416          |
| 2xP56-L1       | CA50 | 3 | 10.0      | 8     | 158         | 1264         |
|                | CA60 | 1 | 5.0       | 4     | 186         | 784          |
|                | CA60 | 1 | 5.0       | 50    | 71          | 3550         |
| P57-L3         | CA60 | 1 | 5.0       | 20    | 52          | 1040         |
|                | CA50 | 3 | 10.0      | 8     | 355         | 3840         |
|                | CA60 | 1 | 5.0       | 20    | 71          | 1420         |
| P57-L1         | CA60 | 1 | 5.0       | 16    | 52          | 832          |
|                | CA50 | 3 | 10.0      | 8     | 204         | 1632         |
|                | CA60 | 1 | 5.0       | 29    | 79          | 2291         |
| 6xP58-L3       | CA60 | 1 | 5.0       | 4     | 58          | 232          |
|                | CA50 | 2 | 10.0      | 2     | 67          | 134          |
|                | CA50 | 3 | 10.0      | 4     | 126         | 504          |
| 6xP58-L1       | CA60 | 1 | 5.0       | 198   | 87          | 17226        |
|                | CA50 | 2 | 10.0      | 36    | 356         | 12816        |
|                | CA60 | 1 | 5.0       | 48    | 80          | 3840         |
| P59-L3         | CA50 | 2 | 10.0      | 36    | VAR         | VAR          |
|                | CA60 | 1 | 5.0       | 27    | 79          | 2133         |
|                | CA60 | 2 | 5.0       | 8     | 58          | 464          |
| P59-L1         | CA50 | 3 | 10.0      | 4     | 356         | 1424         |
|                | CA60 | 1 | 5.0       | 4     | 71          | 284          |
|                | CA60 | 2 | 5.0       | 6     | 52          | 312          |
| 2xP60-L2       | CA50 | 3 | 10.0      | 2     | 156         | 312          |
|                | CA60 | 1 | 5.0       | 4     | 214         | 856          |
|                | CA60 | 1 | 5.0       | 48    | 71          | 3408         |
| 2xP60-L1       | CA60 | 2 | 5.0       | 16    | 52          | 832          |
|                | CA50 | 3 | 10.0      | 12    | 312         | 3744         |
|                | CA60 | 1 | 5.0       | 10    | 71          | 710          |
| P61-L3         | CA60 | 1 | 5.0       | 16    | 52          | 832          |
|                | CA50 | 3 | 10.0      | 8     | 186         | 1488         |
|                | CA60 | 1 | 5.0       | 27    | 71          | 1917         |
| P61-L1         | CA60 | 2 | 5.0       | 8     | 57          | 456          |
|                | CA50 | 3 | 12.5      | 4     | 199         | 795          |
|                | CA60 | 1 | 5.0       | 5     | 71          | 355          |
| 4xP62-L2       | CA60 | 2 | 5.0       | 8     | 57          | 456          |
|                | CA50 | 3 | 12.5      | 4     | 199         | 795          |
|                | CA60 | 1 | 5.0       | 112   | 25          | 2800         |
| 4xP62-L1       | CA60 | 2 | 5.0       | 96    | 95          | 9120         |
|                | CA50 | 3 | 5.0       | 32    | 64          | 2048         |
|                | CA50 | 4 | 10.0      | 24    | 312         | 7488         |
|                | CA60 | 1 | 5.0       | 28    | 25          | 700          |
|                | CA60 | 2 | 5.0       | 56    | 64          | 3584         |
|                | CA50 | 3 | 10.0      | 24    | 126         | 3024         |

| RESUMO DO AÇO   |           |             |                 |
|-----------------|-----------|-------------|-----------------|
| AÇO             | DIAM (mm) | C.TOTAL (m) | PESO + 10% (kg) |
| CA50            | 10.0      | 526.7       | 357.2           |
|                 | 12.5      | 54.8        | 58.1            |
|                 | 16.0      | 45.2        | 78.5            |
| CA60            | 5.0       | 771.2       | 130.8           |
| PESO TOTAL (kg) |           |             |                 |
| CA50            | 493.8     |             |                 |
| CA60            | 130.8     |             |                 |

Volume de concreto (C-30) = 5.82 m³  
Área de forma = 88.50 m²

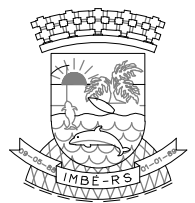
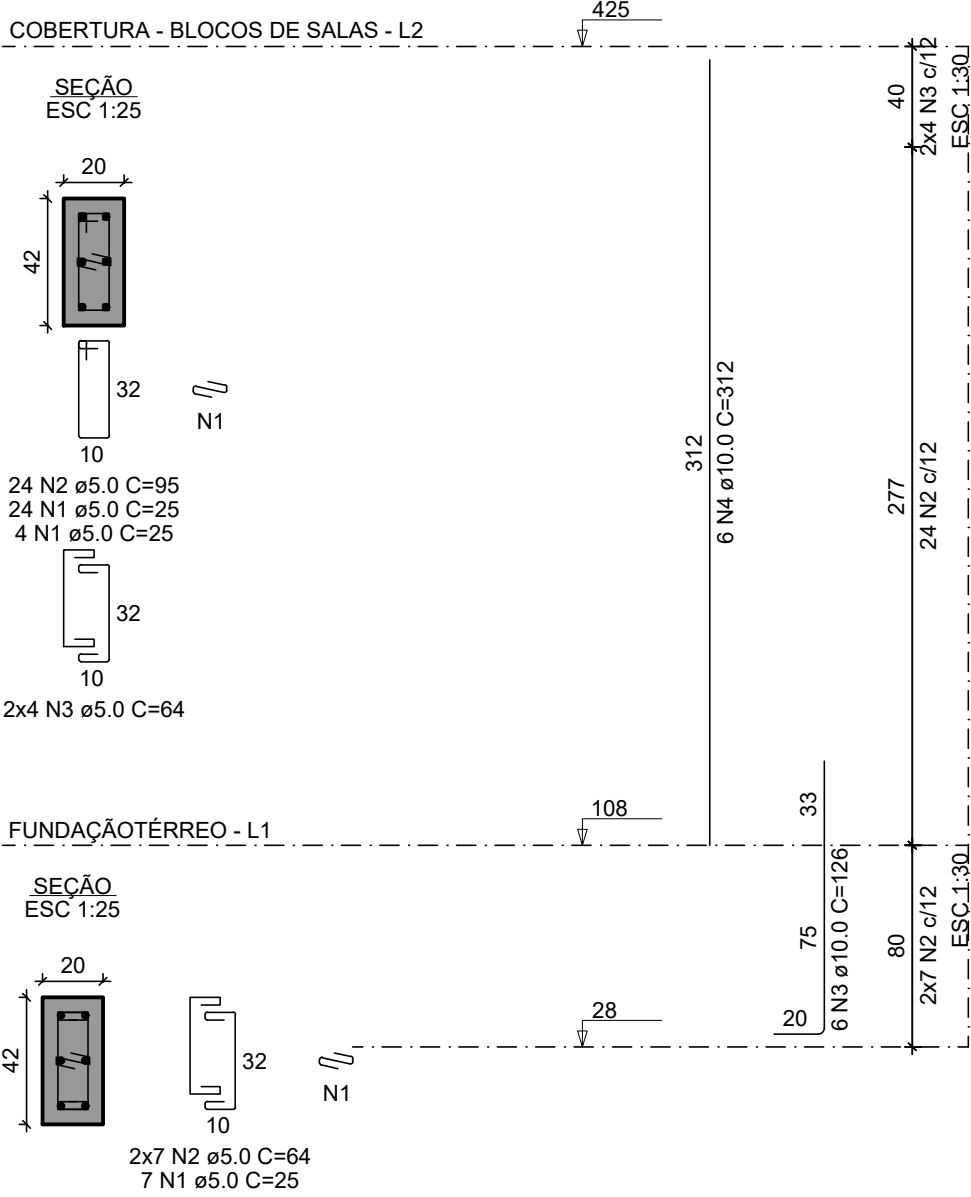
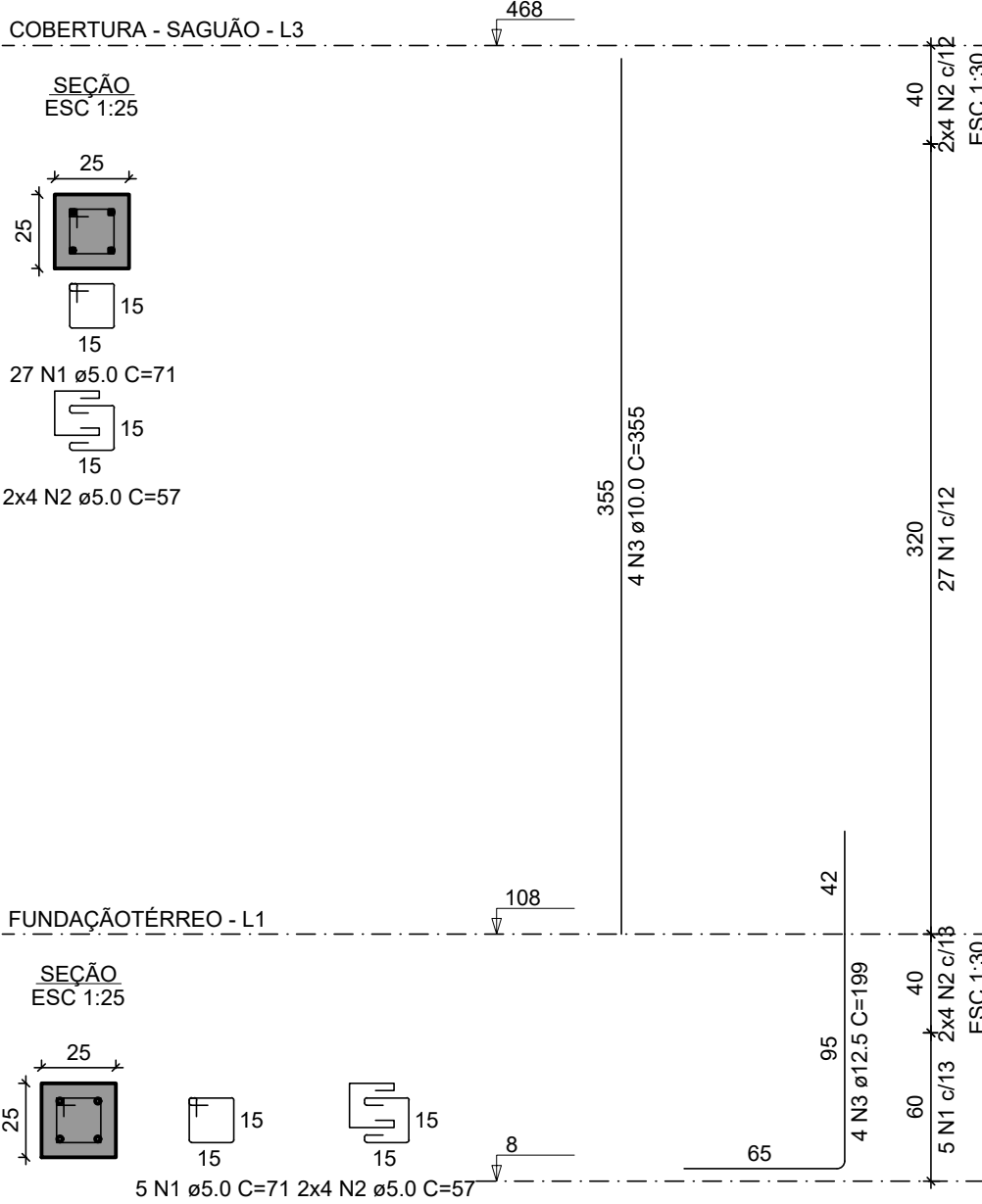
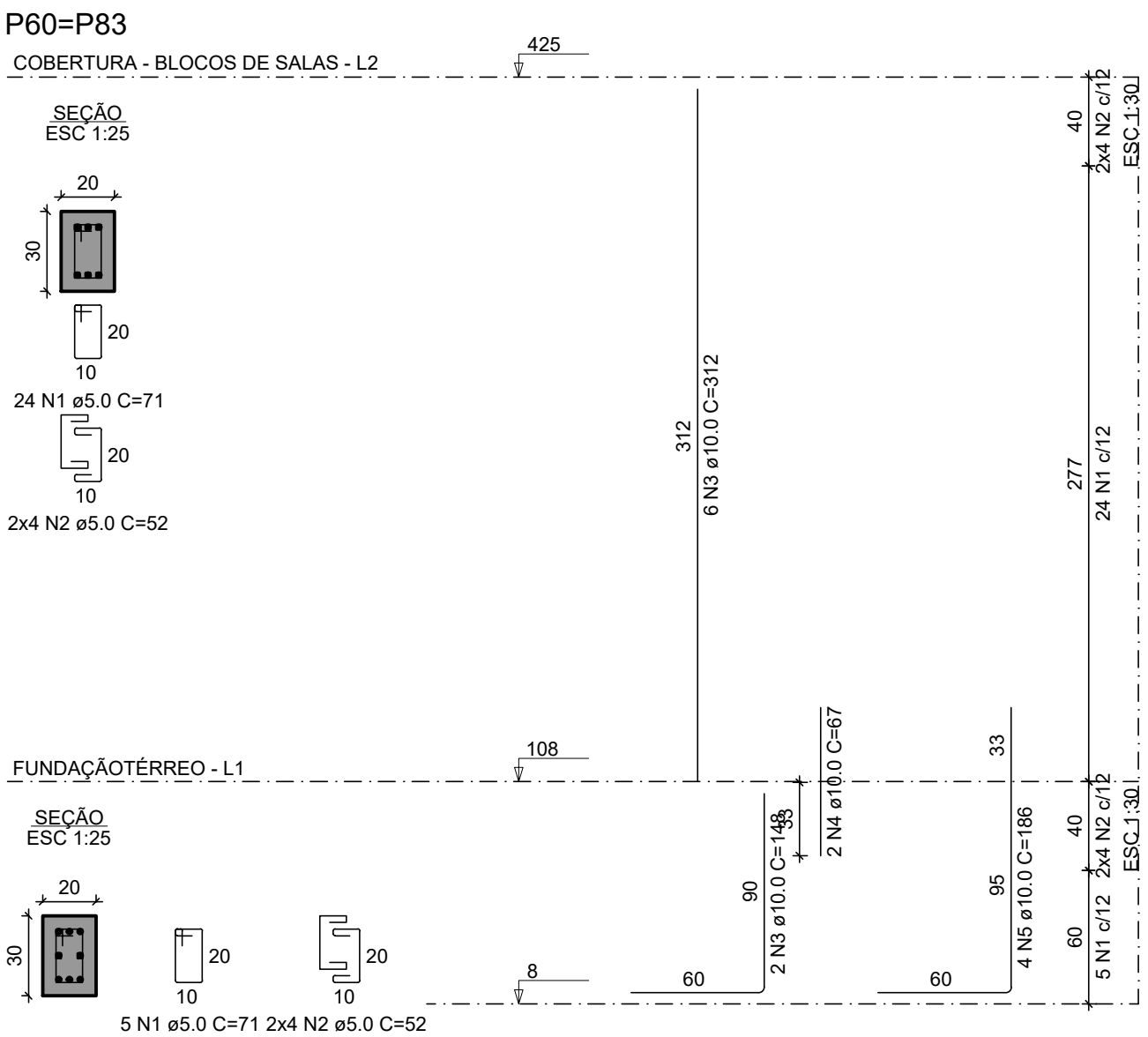
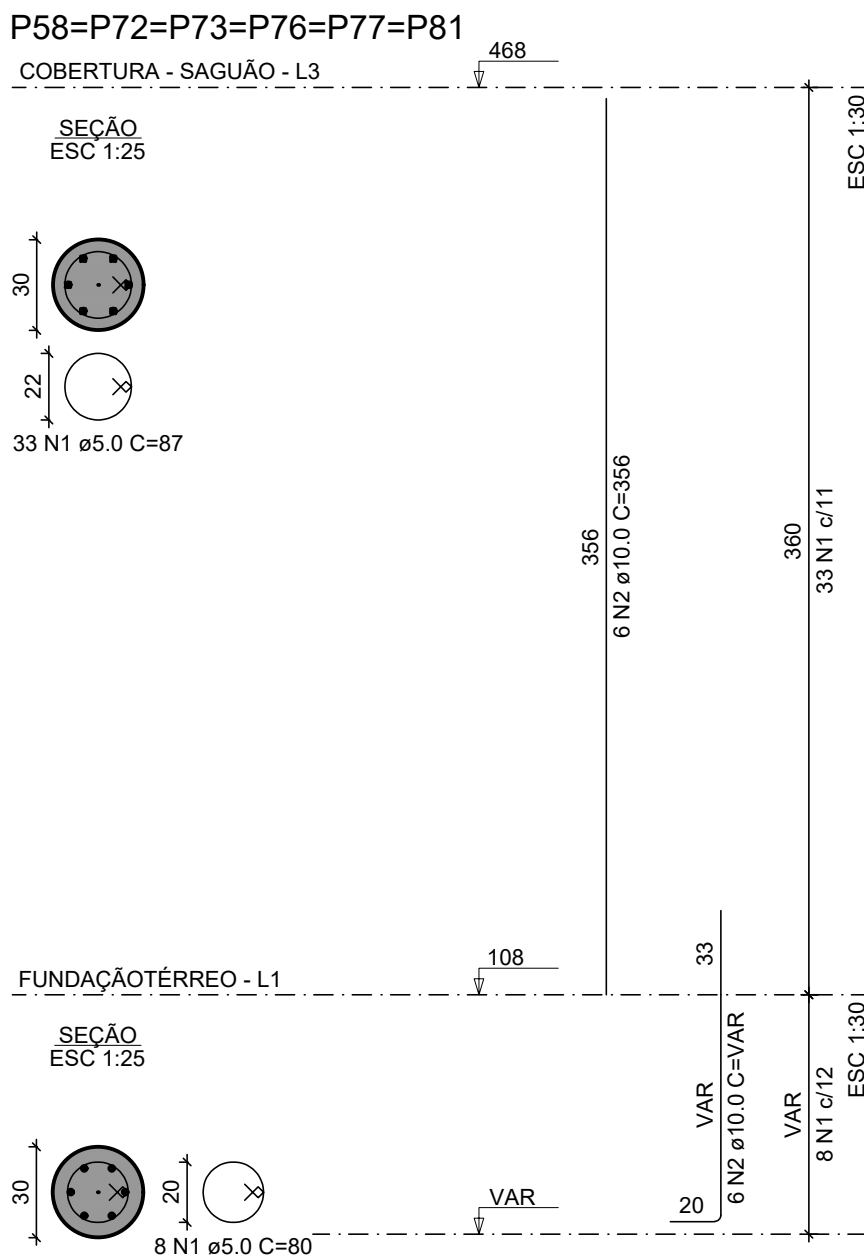


JOSÉ VILMAR P. DE FRAGA  
ARQUITETO E URBANISTA

BRUNO REBECHI DALLE MULLE  
ENGENHEIRO CIVIL

ANA CAROLINA M. SANTOS  
ARQUITETA E URBANISTA

HENRIQUE RODRIGUES DIAS  
AUX. ENGENHEIRA CIVIL



ESTADO DO RIO GRANDE DO SUL  
PREFEITURA MUNICIPAL DE IMBÉ  
AVENIDA PARAGUASSU, 2070 - CENTRO - IMBÉ - RS  
FONE: 51.3627.8515 - CEP: 95.625-000

E. M. E. F. RUI BARBOSA  
NOVAS INSTALAÇÕES

|                                  |                                                                      |                                                 |            |
|----------------------------------|----------------------------------------------------------------------|-------------------------------------------------|------------|
| ENDEREÇO:                        | BAIRRO MARILUZ - IMBÉ - RS                                           | DESENHO:                                        | BRUNO      |
| ADMINISTRAÇÃO                    | 2025/2028                                                            | INDICADAS:                                      |            |
| SECRETARIA MUNICIPAL DE EDUCAÇÃO | ANA CAROLINA MOREIRA SANTOS<br>ARQUITETA E URBANISTA<br>CAU-A7175046 | DATA:                                           | ABRIL 2025 |
| med@imbe.rs.gov.br               | BRUNO REBECHI DALLE MULLE<br>ENGENHEIRO CIVIL<br>CREA-RS 202822      | ÁREA:                                           | 2.491,91m² |
|                                  | RUTH JOSIELI MONTEIRO RUSCHEL<br>SECRETARIA MUNICIPAL DE EDUCAÇÃO    | PROJETO:                                        | ESTRUTURAL |
|                                  |                                                                      | ARMADURAS DOS PILARES - BLOCOS 01, 02 E 04 - 03 | PRÉDIO:    |
|                                  |                                                                      |                                                 | 34/56      |