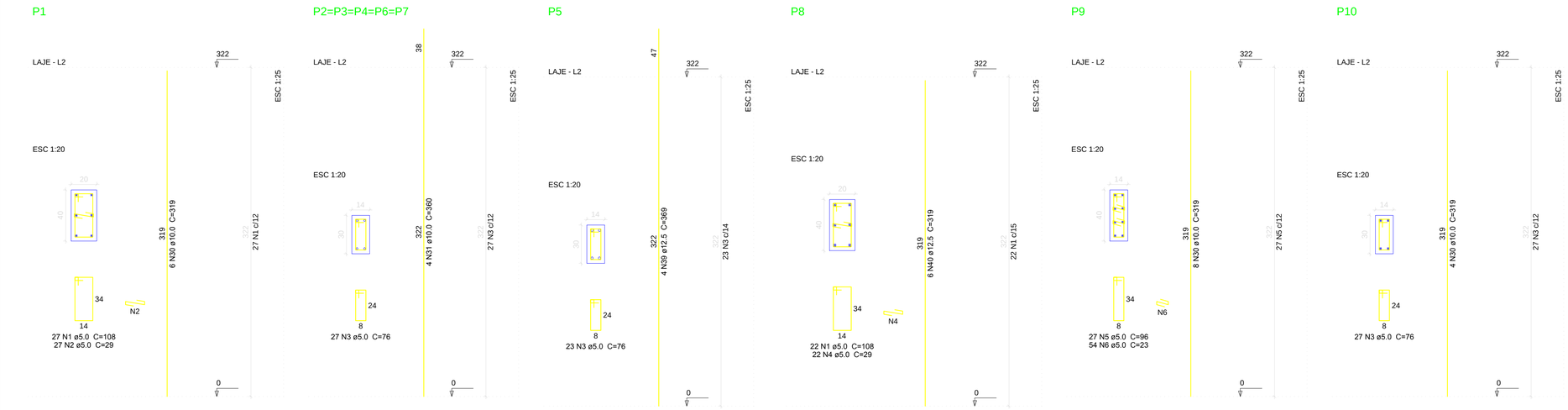



## Relação do aço

| | | |
|---|---|---|
| P1 | 5xP2 | P5 |
| P8 | P9 | P10 |
| V1 | V2 | V3 |
| V4 | V5 | V6 |
| V7 | | |

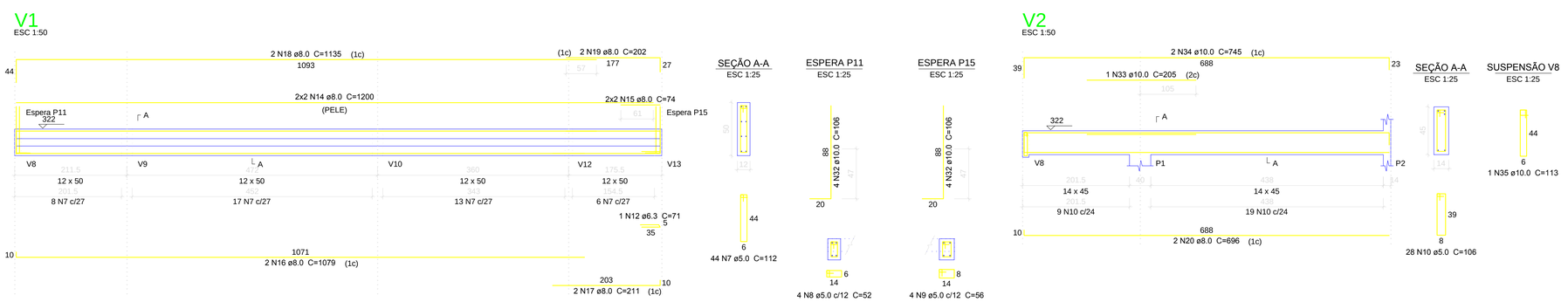
| AÇO | N | DIAM (mm) | QUANT (Barras) | UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 49 | 108 | 5292 |
| | 2 | 5.0 | 27 | 29 | 783 |
| | 3 | 5.0 | 288 | 76 | 21888 |
| | 4 | 5.0 | 22 | 29 | 638 |
| | 5 | 5.0 | 27 | 96 | 2592 |
| | 6 | 5.0 | 54 | 23 | 1242 |
| | 7 | 5.0 | 89 | 112 | 9968 |
| | 8 | 5.0 | 8 | 52 | 416 |
| | 9 | 5.0 | 8 | 56 | 448 |
| | 10 | 5.0 | 28 | 106 | 2968 |
| | 11 | 5.0 | 33 | 118 | 3894 |
| CA50 | 12 | 6.3 | 1 | 71 | 71 |
| | 13 | 6.3 | 2 | 103 | 206 |
| | 14 | 8.0 | 8 | 1200 | 9600 |
| | 15 | 8.0 | 8 | 74 | 592 |
| | 16 | 8.0 | 2 | 1079 | 2158 |
| | 17 | 8.0 | 2 | 211 | 422 |
| | 18 | 8.0 | 2 | 1135 | 2270 |
| | 19 | 8.0 | 2 | 202 | 404 |
| | 20 | 8.0 | 2 | 696 | 1392 |
| | 21 | 8.0 | 6 | 542 | 3252 |
| | 22 | 8.0 | 2 | 576 | 1152 |
| | 23 | 8.0 | 2 | 568 | 1136 |
| | 24 | 8.0 | 1 | 140 | 140 |
| | 25 | 8.0 | 2 | 573 | 1146 |
| | 26 | 8.0 | 2 | 1049 | 2098 |
| | 27 | 8.0 | 2 | 181 | 362 |
| | 28 | 8.0 | 2 | 598 | 1196 |
| | 29 | 8.0 | 2 | 710 | 1420 |
| | 30 | 10.0 | 18 | 319 | 5742 |
| | 31 | 10.0 | 20 | 360 | 7200 |
| | 32 | 10.0 | 14 | 106 | 1484 |
| | 33 | 10.0 | 1 | 205 | 205 |
| | 34 | 10.0 | 2 | 745 | 1490 |
| | 35 | 10.0 | 2 | 113 | 226 |
| | 36 | 10.0 | 2 | 705 | 1410 |
| | 37 | 10.0 | 4 | 101 | 404 |
| | 38 | 10.0 | 1 | 117 | 117 |
| | 39 | 12.5 | 4 | 369 | 1476 |
| | 40 | 12.5 | 6 | 319 | 1914 |
| | 41 | 12.5 | 2 | 280 | 560 |
| | 42 | 12.5 | 1 | 435 | 435 |
| | 43 | 12.5 | 2 | 747 | 1494 |

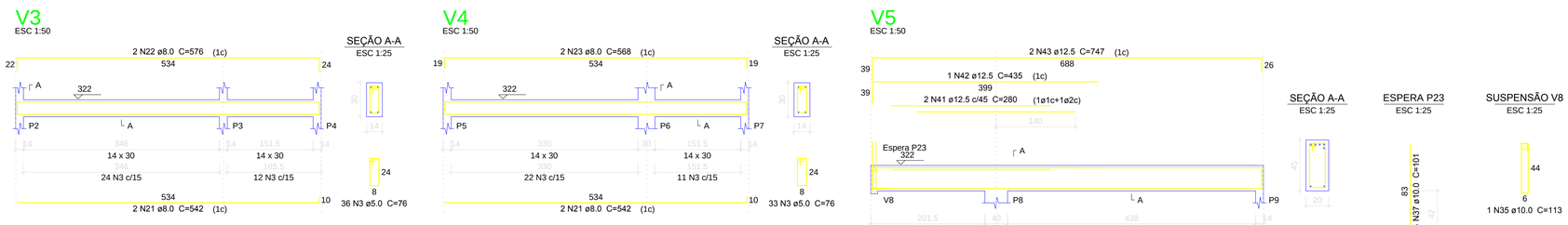
## Resumo do aço

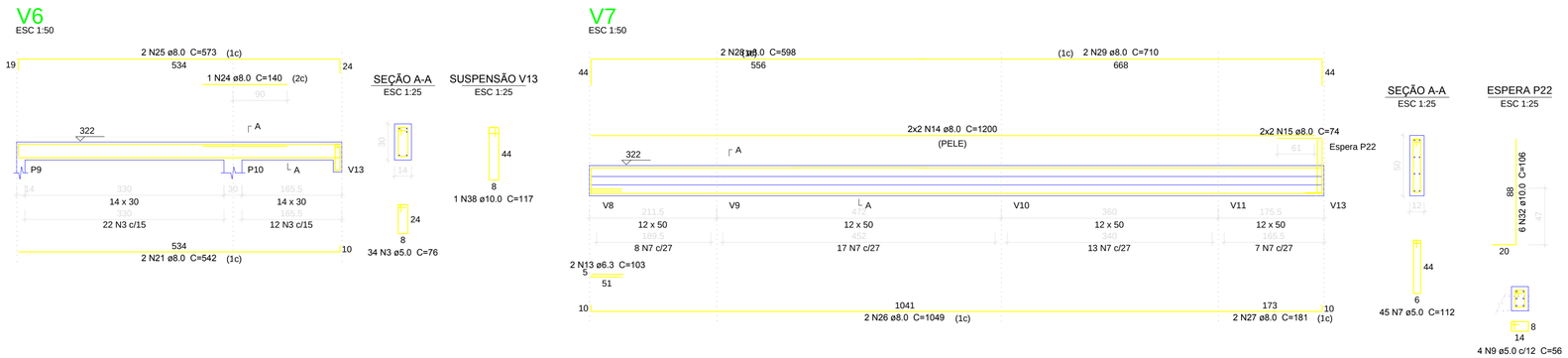
| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|---|---|---|---|
| CA50 | 6.3 | 2.8 | 0.7 |
| | 8.0 | 287.4 | 124.7 |
| | 10.0 | 182.8 | 124 |
| | 12.5 | 58.8 | 62.3 |
| CA60 | 5.0 | 501.3 | 85 |

| PESO TOTAL (kg) | |
|---|---|
| CA50 | 311.7 |
| CA60 | 85 |

Volume de concreto (C-25) = 4.85 m³
Área de forma = 85.16 m²




# PROJETO ESTRUTURAL

OBRA:
COZINHA ESCOLA
ENDEREÇO:
UBIRATA

RESPONSÁVEL TÉCNICO:
REGINALDO DA SILVA RETAMERO CREA: 94820/D -PR

Conteúdo: PILARES
VIGAS LAJE

| PAVIMENTO: | UNIDADE: | TOTAL DE PRANCHAS |
|---|---|---|
| LAJE | cm | 05 |

PROPRIETÁRIO:
PREFEITURA MUNICIPAL DE UBIRATA

| DESENHO: | DATA: | FOLHA: |
|---|---|---|
| EDUARDO | 23/04/2019 | 03 / 05 |

A1