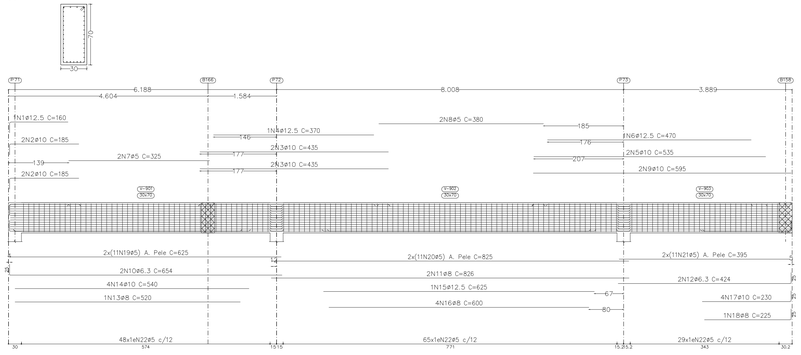
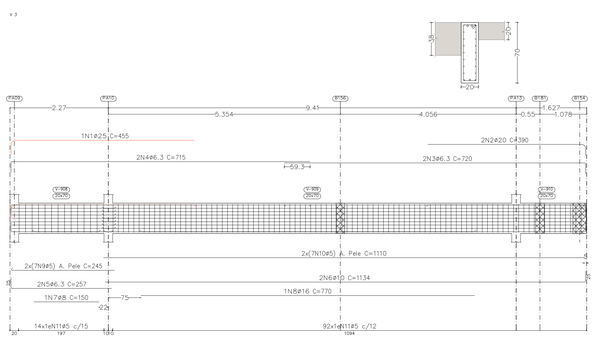
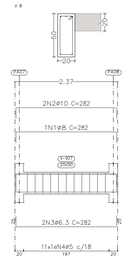
V 1



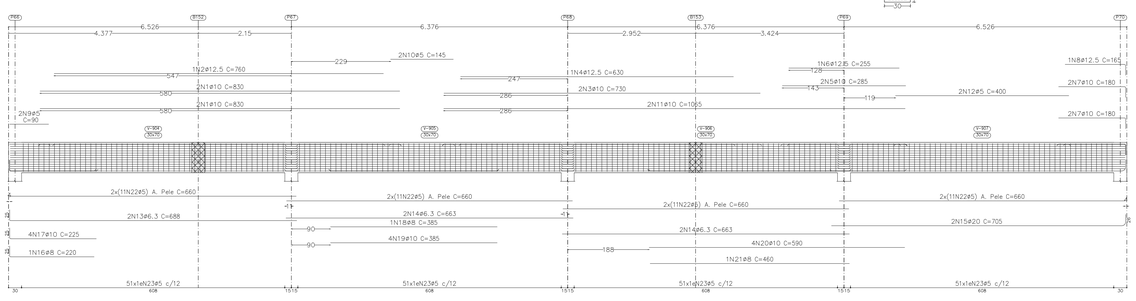

V 3



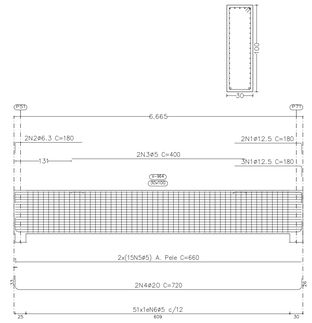

V 8



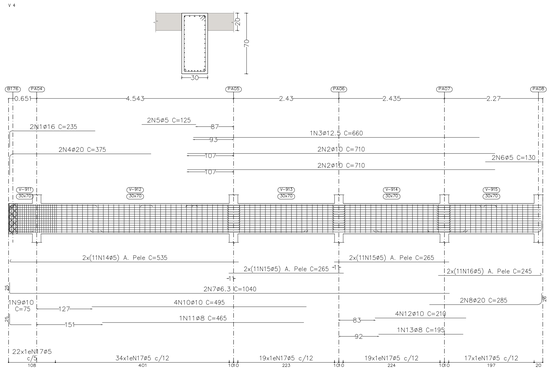

V 2



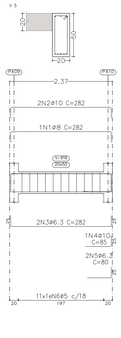

V 27



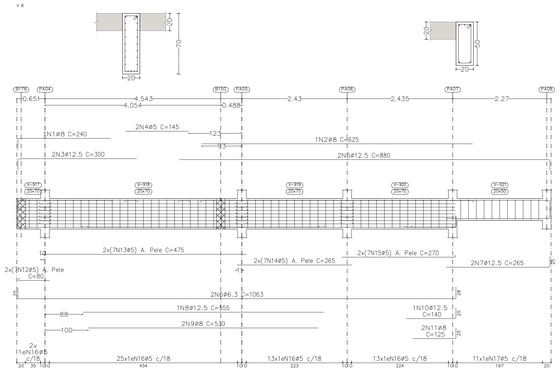

V 4



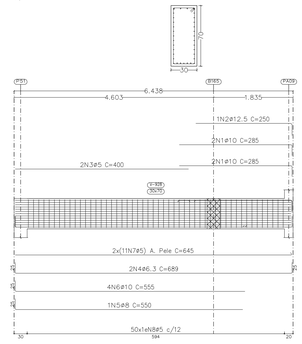

V 5



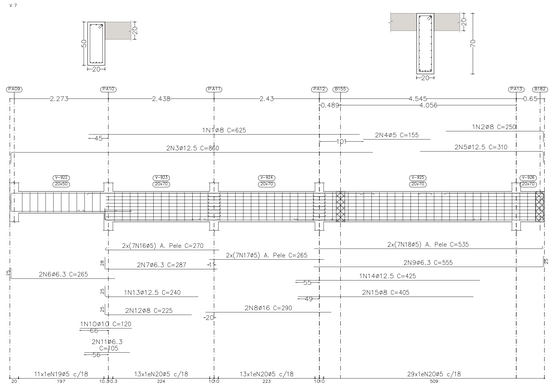

V 6



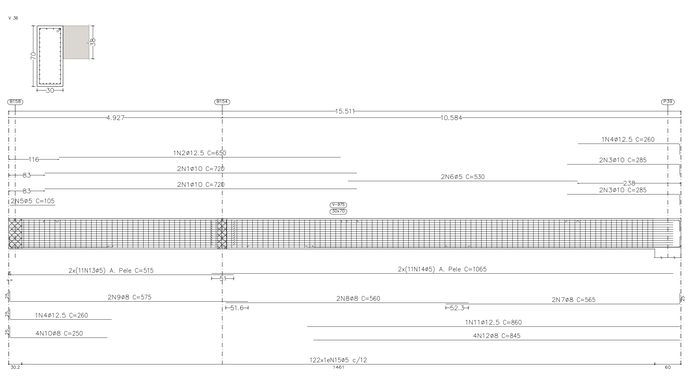

V 9



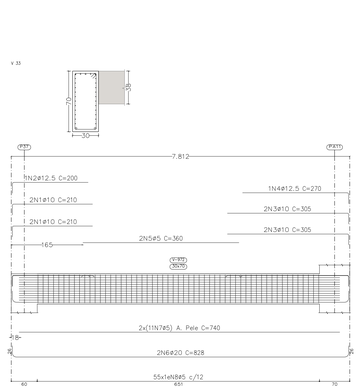

V 7




V 36




V 33




| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp. (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|---|---|---|---|---|---|---|---|---|
| V 36 | 1 | ø10 | 4 | 720 | 720 | 2880 | 17.7 | |
| | 2 | ø12.5 | 1 | 650 | 650 | 650 | 6.3 | |
| | 3 | ø10 | 4 | 260 / 285 | 285 | 1140 | 7.0 | |
| | 4 | ø12.5 | 2 | 220 / 310 | 260 | 520 | 5.0 | |
| | 5 | ø5 | 2 | 105 | 105 | 210 | | 0.3 |
| | 6 | ø5 | 2 | 530 | 530 | 1060 | | 1.7 |
| | 7 | ø8 | 2 | 540 / 565 | 565 | 1130 | 4.5 | |
| | 8 | ø8 | 2 | 560 | 560 | 1120 | 4.4 | |
| | 9 | ø8 | 2 | 550 / 575 | 575 | 1150 | 4.5 | |
| | 10 | ø8 | 4 | 225 | 250 | 1000 | 3.9 | |
| | 11 | ø12.5 | 1 | 860 | 860 | 860 | 8.3 | |
| | 12 | ø8 | 4 | 845 | 845 | 3380 | 13.3 | |
| | 13 | ø5 | 22 | 515 | 515 | 11330 | | 17.8 |
| | 14 | ø5 | 22 | 1065 | 1065 | 23430 | | 36.8 |
| | 15 | ø5 | 122 | 50 / 25 / 50 | 188 | 22936 | | 36.0 |
| | | | | | Total+10% | | 82.4 | 101.9 |
| | | | | | ø5: | | 0.0 | 101.9 |
| | | | | | ø8: | | 33.7 | 0.0 |
| | | | | | ø10: | | 27.2 | 0.0 |
| | | | | | ø12.5: | | 21.5 | 0.0 |
| | | | | | Total: | | 82.4 | 101.9 |

| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp. (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|---|---|---|---|---|---|---|---|---|
| V 33 | 1 | ø10 | 4 | 185 / 25 | 210 | 840 | 5.2 | |
| | 2 | ø12.5 | 1 | 175 / 25 | 200 | 200 | 1.9 | |
| | 3 | ø10 | 4 | 280 / 25 | 305 | 1220 | 7.5 | |
| | 4 | ø12.5 | 1 | 245 / 25 | 270 | 270 | 2.6 | |
| | 5 | ø5 | 2 | 360 | 360 | 720 | | 1.1 |
| | 6 | ø20 | 2 | 778 / 25 | 828 | 1656 | 40.8 | |
| | 7 | ø5 | 22 | 740 | 740 | 16280 | | 25.6 |
| | 8 | ø5 | 55 | 50 / 25 / 50 | 188 | 10340 | | 16.2 |
| | | | | | Total+10% | | 63.8 | 47.2 |
| | | | | | ø5: | | 0.0 | 47.2 |
| | | | | | ø10: | | 14.0 | 0.0 |
| | | | | | ø12.5: | | 4.9 | 0.0 |
| | | | | | ø20: | | 44.9 | 0.0 |
| | | | | | Total: | | 63.8 | 47.2 |

| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp. (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|---|---|---|---|---|---|---|---|---|
| V 7 | 1 | ø8 | 1 | 625 | 625 | 625 | 2.5 | |
| | 2 | ø8 | 1 | 225 / 25 | 250 | 250 | 1.0 | |
| | 3 | ø12.5 | 2 | 830 / 25 | 860 | 1720 | 16.6 | |
| | 4 | ø5 | 2 | 155 | 155 | 310 | | 0.5 |
| | 5 | ø12.5 | 2 | 284 / 25 | 310 | 620 | 6.0 | |
| | 6 | ø6.3 | 2 | 240 | 265 | 530 | 1.3 | |
| | 7 | ø6.3 | 2 | 258 | 287 | 574 | 1.4 | |
| | 8 | ø16 | 2 | 290 | 290 | 580 | 9.2 | |
| | 9 | ø6.3 | 2 | 530 / 25 | 555 | 1110 | 2.7 | |
| | 10 | ø10 | 1 | 120 | 120 | 120 | 0.7 | |
| | 11 | ø6.3 | 1 | 105 | 105 | 210 | 0.5 | |
| | 12 | ø8 | 2 | 200 | 225 | 450 | 1.8 | |
| | 13 | ø12.5 | 1 | 215 | 240 | 240 | 2.3 | |
| | 14 | ø12.5 | 1 | 425 | 425 | 425 | 4.1 | |
| | 15 | ø8 | 2 | 405 | 405 | 810 | 3.2 | |
| | 16 | ø5 | 14 | 264 | 270 | 3780 | | 5.9 |
| | 17 | ø5 | 14 | 265 | 265 | 3710 | | 5.8 |
| | 18 | ø5 | 14 | 529 | 535 | 7490 | | 11.8 |
| | 19 | ø5 | 11 | 50 / 25 / 15 / 50 | 128 | 1408 | | 2.2 |
| | 20 | ø5 | 55 | 50 / 25 / 15 / 50 | 168 | 9240 | | 14.5 |
| | | | | | Total+10% | | 58.6 | 44.8 |

| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp. (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|---|---|---|---|---|---|---|---|---|
| V 8 | 1 | ø8 | 1 | 232 / 25 | 282 | 282 | 1.1 | |
| | 2 | ø10 | 2 | 232 / 25 | 282 | 564 | 3.5 | |
| | 3 | ø6.3 | 2 | 232 / 25 | 282 | 564 | 1.4 | |
| | 4 | ø5 | 11 | 50 / 25 / 15 / 50 | 128 | 1408 | | 2.2 |
| | | | | | Total+10% | | 6.6 | 2.4 |
| V 9 | 1 | ø10 | 4 | 260 / 25 | 285 | 1140 | 7.0 | |
| | 2 | ø12.5 | 1 | 222 / 25 | 250 | 250 | 2.4 | |
| | 3 | ø5 | 2 | 400 | 400 | 800 | | 1.3 |
| | 4 | ø6.3 | 2 | 639 / 25 | 689 | 1378 | 3.4 | |
| | 5 | ø8 | 1 | 525 / 25 | 550 | 550 | 2.2 | |
| | 6 | ø10 | 4 | 530 / 25 | 555 | 2220 | 13.7 | |
| | 7 | ø5 | 22 | 639 / 25 | 645 | 14190 | | 22.3 |
| | 8 | ø5 | 50 | 50 / 25 / 15 / 50 | 188 | 9400 | | 14.8 |
| | | | | | Total+10% | | 31.6 | 42.2 |
| V 27 | 1 | ø12.5 | 5 | 155 / 25 | 180 | 900 | 8.7 | |
| | 2 | ø6.3 | 2 | 155 | 180 | 360 | 0.9 | |
| | 3 | ø5 | 2 | 400 | 400 | 800 | | 1.3 |
| | 4 | ø20 | 2 | 662 / 25 | 720 | 1440 | 35.5 | |
| | 5 | ø5 | 30 | 660 | 660 | 19800 | | 31.1 |
| | 6 | ø5 | 51 | 50 / 25 / 15 / 50 | 248 | 12648 | | 19.9 |
| | | | | | Total+10% | | 49.6 | 57.5 |
| | | | | | ø5: | | 0.0 | 146.9 |
| | | | | | ø6.3: | | 12.7 | 0.0 |
| | | | | | ø8: | | 13.0 | 0.0 |
| | | | | | ø10: | | 27.4 | 0.0 |
| | | | | | ø12.5: | | 44.9 | 0.0 |
| | | | | | ø16: | | 10.2 | 0.0 |
| | | | | | ø20: | | 39.0 | 0.0 |
| | | | | | Total: | | 146.4 | 146.9 |

| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp. (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|---|---|---|---|---|---|---|---|---|
| V 4 | 1 | ø16 | 2 | 197 | 235 | 470 | 7.4 | |
| | 2 | ø10 | 4 | 710 | 710 | 2840 | 17.5 | |
| | 3 | ø12.5 | 1 | 660 | 660 | 660 | 6.4 | |
| | 4 | ø20 | 2 | 326 / 25 | 375 | 750 | 18.5 | |
| | 5 | ø5 | 2 | 125 | 125 | 250 | | 0.4 |
| | 6 | ø5 | 2 | 130 | 130 | 260 | | 0.4 |
| | 7 | ø6.3 | 2 | 1015 | 1040 | 2080 | 5.1 | |
| | 8 | ø20 | 2 | 259 / 25 | 285 | 570 | 14.1 | |
| | 9 | ø10 | 1 | 50 / 25 | 75 | 75 | 0.5 | |
| | 10 | ø10 | 4 | 495 | 495 | 1980 | 12.2 | |
| | 11 | ø8 | 1 | 465 | 465 | 465 | 1.8 | |
| | 12 | ø10 | 4 | 210 | 210 | 840 | 5.2 | |
| | 13 | ø8 | 1 | 195 | 195 | 195 | 0.8 | |
| | 14 | ø5 | 22 | 529 | 535 | 11770 | | 18.5 |
| | 15 | ø5 | 44 | 265 | 265 | 11660 | | 18.3 |
| | 16 | ø5 | 22 | 239 | 245 | 5390 | | 8.5 |
| | 17 | ø5 | 111 | 50 / 25 / 15 / 50 | 188 | 20868 | | 32.8 |
| | | | | | Total+10% | | 98.5 | 86.8 |
| V 5 | 1 | ø8 | 1 | 232 / 25 | 282 | 282 | 1.1 | |
| | 2 | ø10 | 2 | 232 / 25 | 282 | 564 | 3.5 | |
| | 3 | ø6.3 | 2 | 232 / 25 | 282 | 564 | 1.4 | |
| | 4 | ø10 | 1 | 60 / 25 | 85 | 85 | 0.5 | |
| | 5 | ø6.3 | 2 | 55 / 25 | 80 | 160 | 0.4 | |
| | 6 | ø5 | 11 | 50 / 25 / 15 / 50 | 128 | 1408 | | 2.2 |
| | | | | | Total+10% | | 7.6 | 2.4 |
| V 6 | 1 | ø8 | 1 | 215 / 25 | 240 | 240 | 0.9 | |
| | 2 | ø8 | 1 | 625 / 25 | 625 | 625 | 2.5 | |
| | 3 | ø12.5 | 2 | 274 / 25 | 300 | 600 | 5.8 | |
| | 4 | ø5 | 2 | 145 | 145 | 290 | | 0.5 |
| | 5 | ø12.5 | 2 | 855 / 25 | 880 | 1760 | 17.0 | |
| | 6 | ø6.3 | 2 | 1011 / 25 | 1063 | 2126 | 5.2 | |
| | 7 | ø12.5 | 2 | 240 / 25 | 265 | 530 | 5.1 | |
| | 8 | ø12.5 | 1 | 555 | 555 | 555 | 5.3 | |
| | 9 | ø8 | 2 | 530 | 530 | 1060 | 4.2 | |
| | 10 | ø12.5 | 1 | 115 / 25 | 140 | 140 | 1.3 | |
| | 11 | ø8 | 2 | 100 / 25 | 125 | 250 | 1.0 | |
| | 12 | ø5 | 14 | 74 | 80 | 1120 | | 1.8 |
| | 13 | ø5 | 14 | 475 | 475 | 6650 | | 10.4 |
| | 14 | ø5 | 14 | 265 | 265 | 3710 | | 5.8 |
| | 15 | ø5 | 14 | 264 | 270 | 3780 | | 5.9 |
| | 16 | ø5 | 53 | 50 / 25 / 15 / 50 | 168 | 8904 | | 14.0 |
| | 17 | ø5 | 11 | 50 / 25 / 15 / 50 | 128 | 1408 | | 2.2 |
| | | | | | Total+10% | | 53.1 | 44.7 |
| | | | | | ø5: | | 0.0 | 33.9 |
| | | | | | ø6.3: | | 13.3 | 0.0 |
| | | | | | ø8: | | 13.6 | 0.0 |
| | | | | | ø10: | | 43.4 | 0.0 |
| | | | | | ø12.5: | | 44.9 | 0.0 |
| | | | | | ø16: | | 8.1 | 0.0 |
| | | | | | ø20: | | 35.9 | 0.0 |
| | | | | | Total: | | 159.2 | 33.9 |

| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp. (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|---|---|---|---|---|---|---|---|---|
| V 1 | 1 | ø12.5 | 1 | 135 / 25 | 160 | 160 | 1.5 | |
| | 2 | ø10 | 4 | 160 / 25 | 185 | 740 | 4.6 | |
| | 3 | ø10 | 4 | 435 | 435 | 1740 | 10.7 | |
| | 4 | ø12.5 | 1 | 370 | 370 | 370 | 3.6 | |
| | 5 | ø10 | 2 | 535 | 535 | 1070 | 6.6 | |
| | 6 | ø12.5 | 1 | 470 | 470 | 470 | 4.5 | |
| | 7 | ø5 | 2 | 325 | 325 | 650 | | 1.0 |
| | 8 | ø5 | 2 | 380 | 380 | 760 | | 1.2 |
| | 9 | ø10 | 2 | 595 | 595 | 1190 | 7.3 | |
| | 10 | ø6.3 | 2 | 628 / 25 | 654 | 1308 | 3.2 | |
| | 11 | ø8 | 2 | 826 | 826 | 1652 | 6.5 | |
| | 12 | ø6.3 | 2 | 399 / 25 | 424 | 848 | 2.1 | |
| | 13 | ø8 | 1 | 520 | 520 | 520 | 2.1 | |
| | 14 | ø10 | 4 | 540 | 540 | 2160 | 13.3 | |
| | 15 | ø12.5 | 1 | 625 | 625 | 625 | 6.0 | |
| | 16 | ø8 | 4 | 600 | 600 | 2400 | 9.5 | |
| | 17 | ø10 | 4 | 205 / 25 | 230 | 920 | 5.7 | |
| | 18 | ø8 | 1 | 200 / 25 | 225 | 225 | 0.9 | |
| | 19 | ø5 | 22 | 625 | 625 | 13750 | | 21.6 |
| | 20 | ø5 | 22 | 825 | 825 | 18150 | | 28.5 |
| | 21 | ø5 | 22 | 395 | 395 | 8690 | | 13.6 |
| | 22 | ø5 | 142 | 50 / 25 / 50 | 188 | 26696 | | 41.9 |
| | | | | | Total+10% | | 96.9 | 118.6 |
| V 3 | 1 | ø25 | 1 | 423 / 25 | 455 | 455 | 17.5 | |
| | 2 | ø20 | 2 | 364 / 25 | 390 | 780 | 19.2 | |
| | 3 | ø6.3 | 2 | 699 / 25 | 720 | 1440 | 3.5 | |
| | 4 | ø6.3 | 2 | 690 / 25 | 715 | 1430 | 3.5 | |
| | 5 | ø6.3 | 2 | 232 / 25 | 257 | 514 | 1.3 | |
| | 6 | ø10 | 2 | 1109 / 25 | 1134 | 2268 | 14.0 | |
| | 7 | ø8 | 1 | 150 | 150 | 150 | 0.6 | |
| | 8 | ø16 | 1 | 770 | 770 | 770 | 12.2 | |
| | 9 | ø5 | 14 | 238 | 245 | 3430 | | 5.4 |
| | 10 | ø5 | 14 | 1110 | 1110 | 15540 | | 24.4 |
| | 11 | ø5 | 106 | 50 / 25 / 15 / 50 | 168 | 17808 | | 28.0 |
| | | | | | Total+10% | | 79.0 | 63.6 |
| | | | | | ø5: | | 0.0 | 182.2 |
| | | | | | ø6.3: | | 14.9 | 0.0 |
| | | | | | ø8: | | 21.6 | 0.0 |
| | | | | | ø10: | | 68.4 | 0.0 |
| | | | | | ø12.5: | | 17.2 | 0.0 |
| | | | | | ø16: | | 13.4 | 0.0 |
| | | | | | ø20: | | 21.1 | 0.0 |
| | | | | | ø25: | | 19.3 | 0.0 |
| | | | | | Total: | | 175.9 | 182.2 |

| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp. (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|---|---|---|---|---|---|---|---|---|
| V 2 | 1 | ø10 | 4 | 830 | 830 | 3320 | 20.5 | |
| | 2 | ø12.5 | 1 | 760 | 760 | 760 | 7.3 | |
| | 3 | ø10 | 2 | 730 | 730 | 1460 | 9.0 | |
| | 4 | ø12.5 | 1 | 630 | 630 | 630 | 6.1 | |
| | 5 | ø10 | 2 | 285 | 285 | 570 | 3.5 | |
| | 6 | ø12.5 | 1 | 255 | 255 | 255 | 2.5 | |
| | 7 | ø10 | 4 | 155 / 25 | 180 | 720 | 4.4 | |
| | 8 | ø12.5 | 1 | 140 / 25 | 165 | 165 | 1.6 | |
| | 9 | ø5 | 2 | 90 | 90 | 180 | | 0.3 |
| | 10 | ø5 | 2 | 145 | 145 | 290 | | 0.5 |
| | 11 | ø10 | 2 | 1065 | 1065 | 2130 | 13.1 | |
| | 12 | ø5 | 2 | 400 | 400 | 800 | | 1.3 |
| | 13 | ø6.3 | 2 | 663 / 25 | 688 | 1376 | 3.4 | |
| | 14 | ø6.3 | 4 | 663 | 663 | 2652 | 6.5 | |
| | 15 | ø20 | 2 | 679 / 25 | 705 | 1410 | 34.8 | |
| | 16 | ø8 | 1 | 195 / 25 | 220 | 220 | 0.9 | |
| | 17 | ø10 | 4 | 200 / 25 | 225 | 900 | 5.5 | |
| | 18 | ø8 | 1 | 385 | 385 | 385 | 1.5 | |
| | 19 | ø10 | 4 | 385 | 385 | 1540 | 9.5 | |
| | 20 | ø10 | 4 | 590 | 590 | 2360 | 14.5 | |
| | 21 | ø8 | 1 | 460 | 460 | 460 | 1.8 | |
| | 22 | ø5 | 88 | 660 | 660 | 58080 | | 91.2 |
| | 23 | ø5 | 204 | 50 / 25 / 50 | 188 | 38352 | | 60.2 |
| | | | | | Total+10% | | 161.0 | 168.9 |
| | | | | | ø5: | | 0.0 | 168.9 |
| | | | | | ø6.3: | | 10.8 | 0.0 |
| | | | | | ø8: | | 4.6 | 0.0 |
| | | | | | ø10: | | 88.0 | 0.0 |
| | | | | | ø12.5: | | 19.3 | 0.0 |
| | | | | | ø20: | | 38.3 | 0.0 |
| | | | | | Total: | | 161.0 | 168.9 |

LAJE TÉCNICA_BARRILETE
Desenho de vigas
Concreto: C35, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:25
Escala aberturas 1:25

| VERSÃO | DATA | DES. | VER. | APR. | DESCRIÇÃO |
|---|---|---|---|---|---|
| 03 | 05/2022 | D.N. | S.F. | S.F. | REVISÃO GERAL |
| 02 | 03/2022 | D.N. | S.F. | S.F. | REVISÃO GERAL |
| 01 | 10/2021 | S.F. | S.F. | S.F. | REVISÃO GERAL |
| 00 | 08/2021 | S.F. | S.F. | S.F. | EMISSÃO INICIAL |

RESPONSÁVEIS TÉCNICOS

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Eng. Samuel Isaque P. Ferreira, CREA: 5070546180, ART: 28027230211051413

Eng. Samuel Isaque P. Ferreira, CREA: 5070546180, ART: 28027230211051413

CONTRATADA

**INPLENITUS**
Projetos, Gerenciamento e Fiscalização de Obras Ltda.

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Dário Nascimento
Marcos Verdi Coirne

# PREFEITURA MUNICÍPAL DE ARUJÁ

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www.prefeituradearuja.sp.gov.br obras.secretaria@aruja.sp.gov.br

Assunto

## CONSTRUÇÃO DO HOSPITAL GERAL DE ARUJÁ

Projeto: CONSTRUÇÃO

Disciplina: ESTRUTURA

Etapa: PROJETO EXECUTIVO

Endereço: AVENIDA MAJOR BENJAMIN FRANCO, CENTRO - ARUJÁ - SP

Nome do Arquivo: IN_061_01_PE_EST_V00-ESTRUTURA GERAL HOSPITAL ARUJÁ V04_JUNHO 2022.dwg

Requisitante: SECRETARIA MUNICIPAL DE OBRAS

APROVADO

ENG. BRUNO HIGALLO DA SILVA
Secretário Municipal de Obras

ENG. DÉBORA FABRO VALENÇO LOUREIRO
Diretora Técnica do Departamento de Obras

ARQ. GABRIELA ITO CARDOSO DE MORAES
Arquiteta do Projetos

Título: PISO TÉCNICO BARRILETE_cota 27.30
DESENHO DE VIGAS

Folha: 79 | 85

Código do DPFU: PB SMO 001 - 01/01

Data: MAIO/2022

Escala: 1/50

FORMATO DA FOLHA: A0

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