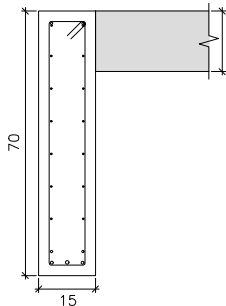
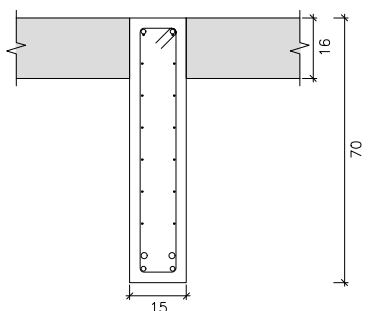
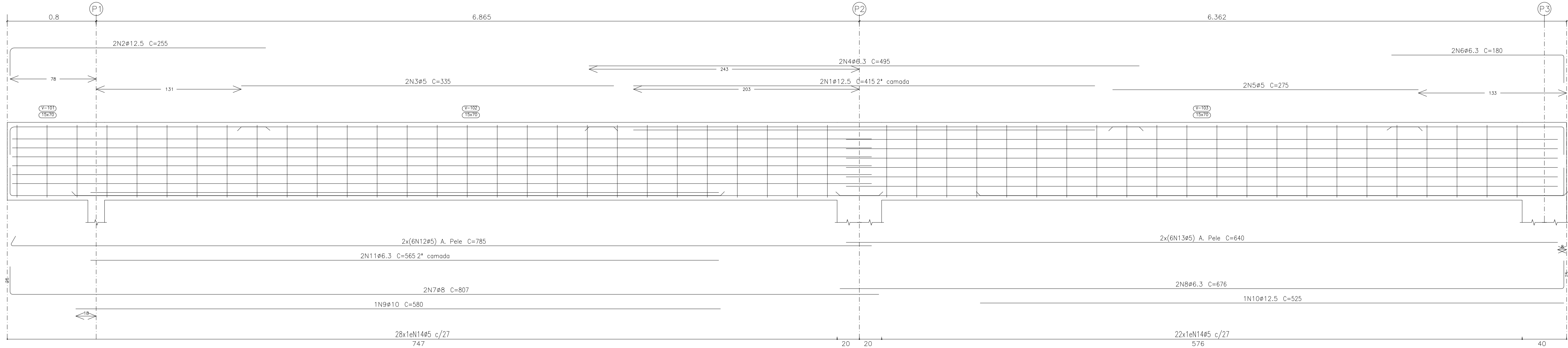


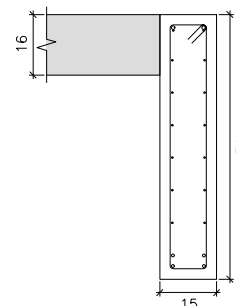
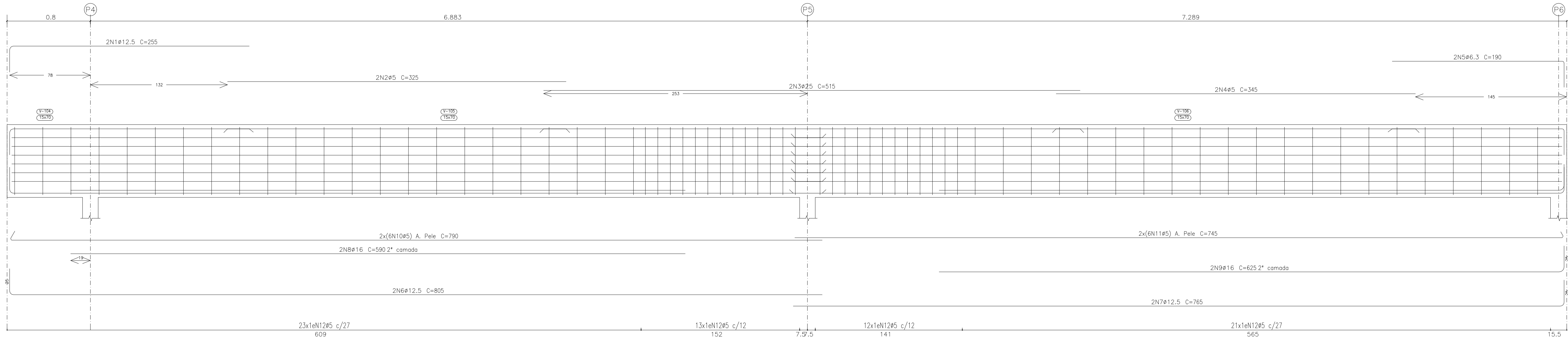
Laje
Desenho de vigas
Concreto: C30, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:20
Escala seções 1:20
Escala aberturas 1:20



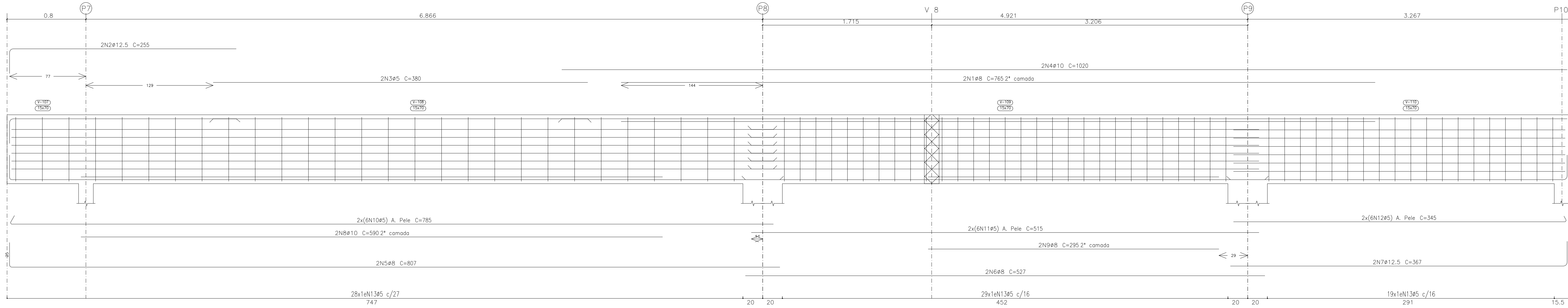
V 1



V 2



V 3



| Elemento | Pos. | Diam. | Q. | Esquema (cm) | Comp (cm) | Total (cm) | CA-50 (kg) | CA-60 (kg) |
|----------|------|-------|----|--------------|-----------|------------|------------|------------|
| V 1 | 1 | ø12.5 | 2 | | 415 | 415 | 830 | 8.0 |
| | 2 | ø12.5 | 2 | | 230 | 255 | 510 | 4.9 |
| | 3 | ø5 | 2 | | 335 | 335 | 670 | 1.1 |
| | 4 | ø6.3 | 2 | | 495 | 495 | 990 | 2.4 |
| | 5 | ø5 | 2 | | 275 | 275 | 550 | 0.9 |
| | 6 | ø6.3 | 2 | | 155 | 180 | 360 | 0.9 |
| | 7 | ø8 | 2 | | 782 | 807 | 1614 | 6.4 |
| | 8 | ø6.3 | 2 | | 651 | 676 | 1352 | 3.3 |
| | 9 | ø10 | 1 | | 580 | 580 | 580 | 3.6 |
| | 10 | ø12.5 | 1 | | 525 | 525 | 525 | 5.1 |
| | 11 | ø6.3 | 2 | | 585 | 585 | 1170 | 2.8 |
| | 12 | ø5 | 12 | | 775 | 785 | 9420 | 14.8 |
| | 13 | ø5 | 12 | | 640 | 640 | 7680 | 12.1 |
| | 14 | ø5 | 50 | | 370 | 158 | 7900 | 12.4 |
| V 2 | | | | | Total+10% | 41.1 | 45.4 | |
| | 1 | ø12.5 | 2 | | 230 | 255 | 510 | 4.9 |
| | 2 | ø5 | 2 | | 325 | 325 | 650 | 1.0 |
| | 3 | ø25 | 2 | | 515 | 515 | 1030 | 39.7 |
| | 4 | ø5 | 2 | | 345 | 345 | 690 | 1.1 |
| | 5 | ø6.3 | 2 | | 185 | 190 | 380 | 0.9 |
| | 6 | ø12.5 | 2 | | 780 | 805 | 1610 | 15.5 |
| | 7 | ø12.5 | 2 | | 740 | 765 | 1530 | 14.7 |
| | 8 | ø16 | 2 | | 590 | 590 | 1180 | 18.6 |
| | 9 | ø16 | 2 | | 625 | 625 | 1250 | 19.7 |
| | 10 | ø5 | 12 | | 780 | 790 | 9480 | 14.9 |
| | 11 | ø5 | 12 | | 735 | 745 | 8940 | 14.0 |
| V 3 | | | | | Total+10% | 125.4 | 41.1 | 45.4 |
| | 1 | ø8 | 2 | | 765 | 765 | 1530 | 6.0 |
| | 2 | ø12.5 | 2 | | 230 | 255 | 510 | 4.9 |
| | 3 | ø5 | 2 | | 380 | 380 | 760 | 1.2 |
| | 4 | ø10 | 2 | | 1020 | 1020 | 2040 | 12.6 |
| | 5 | ø8 | 2 | | 782 | 807 | 1614 | 6.4 |
| | 6 | ø8 | 2 | | 527 | 527 | 1054 | 4.2 |
| | 7 | ø12.5 | 2 | | 342 | 367 | 734 | 7.1 |
| | 8 | ø10 | 2 | | 590 | 590 | 1180 | 7.3 |
| | 9 | ø8 | 2 | | 295 | 295 | 590 | 2.3 |
| | 10 | ø5 | 12 | | 775 | 785 | 9420 | 14.8 |
| | 11 | ø5 | 12 | | 515 | 515 | 6180 | 9.7 |
| | | | | | Total+10% | 55.9 | 56.2 | |
| | | | | | ø5: | 0.0 | 154.5 | |
| | | | | | ø6.3: | 11.3 | 0.0 | |
| | | | | | ø8: | 27.9 | 0.0 | |
| | | | | | ø10: | 25.8 | 0.0 | |
| | | | | | ø12.5: | 71.6 | 0.0 | |
| | | | | | ø16: | 42.1 | 0.0 | |
| | | | | | ø25: | 43.7 | 0.0 | |
| | | | | | Total: | 222.4 | 154.5 | |