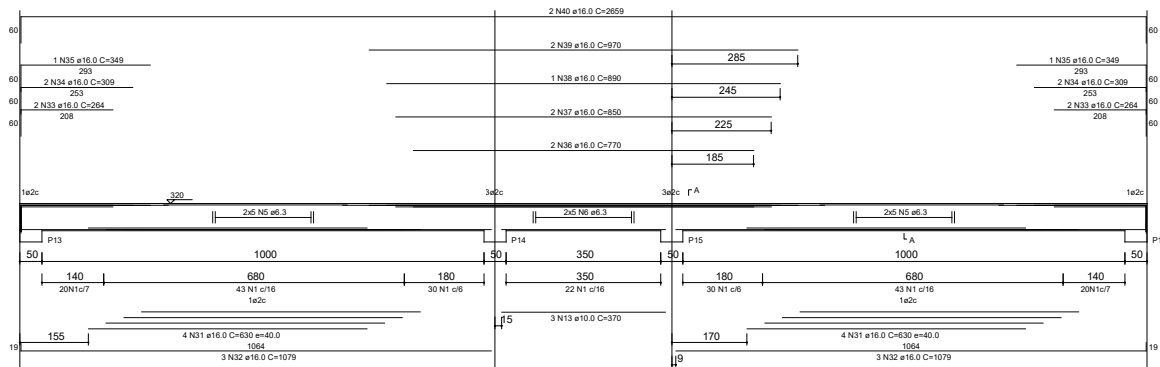


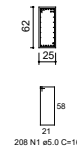
V5

ESC 1:60



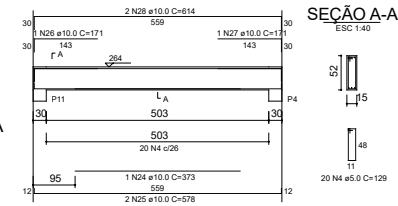
SEÇÃO A-A

ESC 1:40



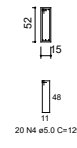
V18

ESC 1:60



SEÇÃO A-A

ESC 1:40



RELAÇÃO DO AÇO

| ACO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|------|----|-----------|-------|-------------|--------------|
| CA60 | 1 | 5.0 | 208 | 169 | 35152 |
| | 2 | 5.0 | 180 | 159 | 28820 |
| | 3 | 5.0 | 87 | 125 | 8375 |
| | 4 | 5.0 | 20 | 129 | 2580 |
| CA50 | 5 | 6.3 | 20 | corr | 21920 |
| | 6 | 6.3 | 10 | corr | 4460 |
| | 7 | 6.3 | 8 | corr | 5968 |
| | 8 | 6.3 | 8 | corr | 6368 |
| | 9 | 6.3 | 8 | corr | 3168 |
| | 10 | 6.3 | 8 | corr | 5968 |
| | 11 | 6.3 | 8 | corr | 9568 |
| | 12 | 6.3 | 8 | 57 | 456 |
| | 13 | 10.0 | 3 | 370 | 1110 |
| | 14 | 10.0 | 1 | 375 | 375 |
| | 15 | 10.0 | 3 | 716 | 2148 |
| | 16 | 10.0 | 1 | 375 | 375 |
| | 17 | 10.0 | 3 | 1066 | 3198 |
| | 18 | 10.0 | 2 | 313 | 626 |
| | 19 | 10.0 | 2 | 1084 | 2168 |
| | 20 | 10.0 | 2 | 186 | 376 |
| | 21 | 10.0 | 2 | 149 | 298 |
| | 22 | 10.0 | 1 | 210 | 210 |
| | 23 | 10.0 | 2 | 1251 | 2502 |
| | 24 | 10.0 | 1 | 375 | 375 |
| | 25 | 10.0 | 2 | 578 | 1156 |
| | 26 | 10.0 | 1 | 171 | 171 |
| | 27 | 10.0 | 1 | 171 | 171 |
| | 28 | 10.0 | 2 | 614 | 1228 |
| | 29 | 12.5 | 2 | 416 | 832 |
| | 30 | 12.5 | 2 | 725 | 1450 |
| | 31 | 16.0 | 8 | 630 | 5040 |
| | 32 | 16.0 | 8 | 1079 | 8632 |
| | 33 | 16.0 | 4 | 264 | 1056 |
| | 34 | 16.0 | 2 | 309 | 1236 |
| | 35 | 16.0 | 2 | 349 | 698 |
| | 36 | 16.0 | 2 | 770 | 1540 |
| | 37 | 16.0 | 2 | 850 | 1700 |
| | 38 | 16.0 | 1 | 890 | 890 |
| | 39 | 16.0 | 2 | 970 | 1940 |
| | 40 | 16.0 | 2 | 2659 | 5318 |
| | 41 | 16.0 | 3 | 430 | 1290 |
| | 42 | 16.0 | 1 | 365 | 365 |
| | 43 | 16.0 | 1 | 760 | 760 |
| | 44 | 16.0 | 1 | 1196 | 1196 |
| | 45 | 16.0 | 2 | 1200 | 2400 |
| | 46 | 16.0 | 1 | 439 | 439 |
| | 47 | 16.0 | 1 | 1090 | 1090 |
| | 48 | 16.0 | 1 | 555 | 555 |
| | 49 | 16.0 | 2 | 540 | 1080 |
| | 50 | 16.0 | 2 | 1177 | 2354 |
| | 51 | 16.0 | 1 | 757 | 757 |
| | 52 | 16.0 | 2 | 297 | 594 |
| | 53 | 16.0 | 1 | 337 | 337 |
| | 54 | 16.0 | 1 | 377 | 377 |
| | 55 | 16.0 | 2 | 1255 | 2510 |
| | 56 | 16.0 | 1 | 257 | 257 |
| | 57 | 16.0 | 2 | 297 | 594 |
| | 58 | 16.0 | 1 | 337 | 337 |
| | 59 | 16.0 | 1 | 377 | 377 |

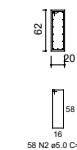
RESUMO DO AÇO

| ACO | DIAM (mm) | C. TOTAL (m) | PESO + 10% (kg) |
|-----------------|-----------|--------------|-----------------|
| CA50 | 6.3 | 578.8 | 155.8 |
| | 10.0 | 164.8 | 111.8 |
| | 12.5 | 22.7 | 24.1 |
| | 16.0 | 430.5 | 747.4 |
| CA60 | 5.0 | 747.3 | 126.7 |
| PESO TOTAL (kg) | | | |
| CA50 | 1038.1 | | |
| CA60 | 126.7 | | |

Volume de concreto (C-25) = 10.19 m³
 Área de forma = 110.77 m²

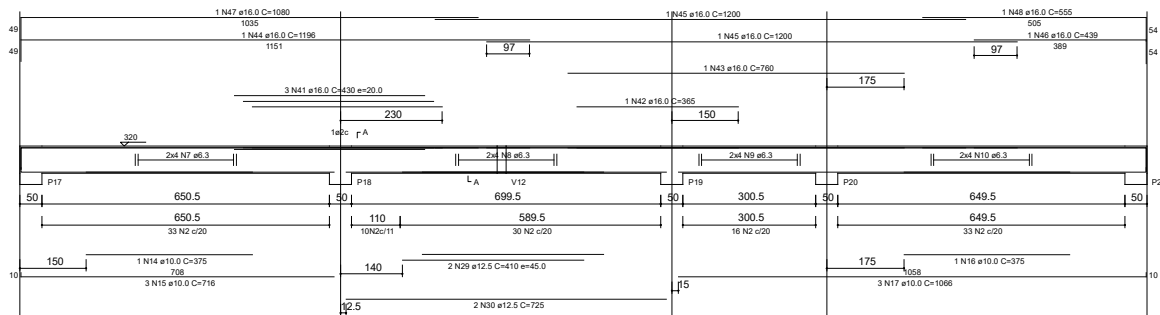
SEÇÃO A-A

ESC 1:40



V6

ESC 1:60



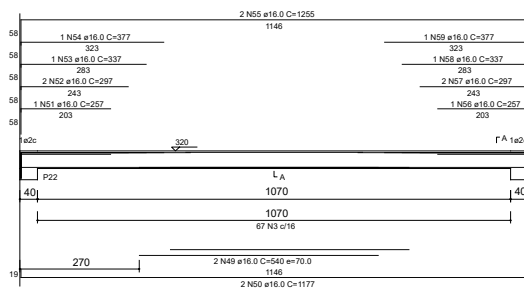
SEÇÃO A-A

ESC 1:40



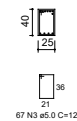
V7

ESC 1:60



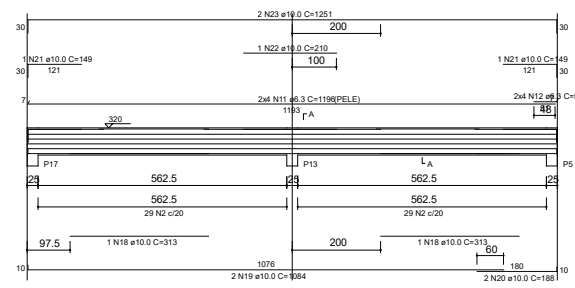
SEÇÃO A-A

ESC 1:40



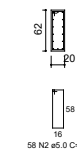
V8

ESC 1:60



SEÇÃO A-A

ESC 1:40



| Nº | Descrição | Data |
|----|-----------|------|
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| | | |

Cliente / Proprietário: **Douglas Fontana**
 Município de Espumoso - RS

Responsável pelo projeto: **Gerson L. Schuchle**
 Engenheiro Civil Gerson L. Schuchle
 CREA / RS 054411

Projeto Tipo: **ESTRUTURAL**
 Descrição: **CASA VELATÓRIA - 2ª Etapa Vigas de Forro**
 Desenhado: **Gerson**
 Escala: **1/50**
 Data: **Abril / 2021**