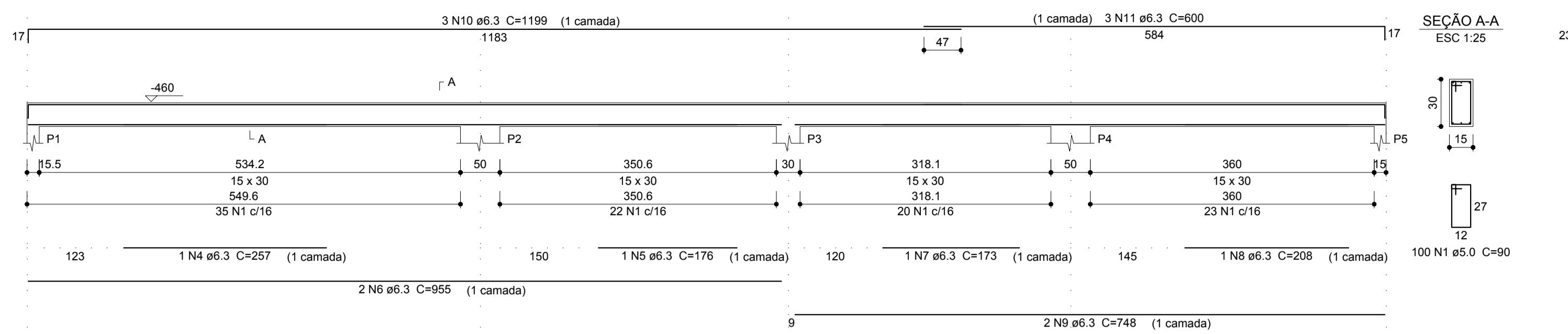
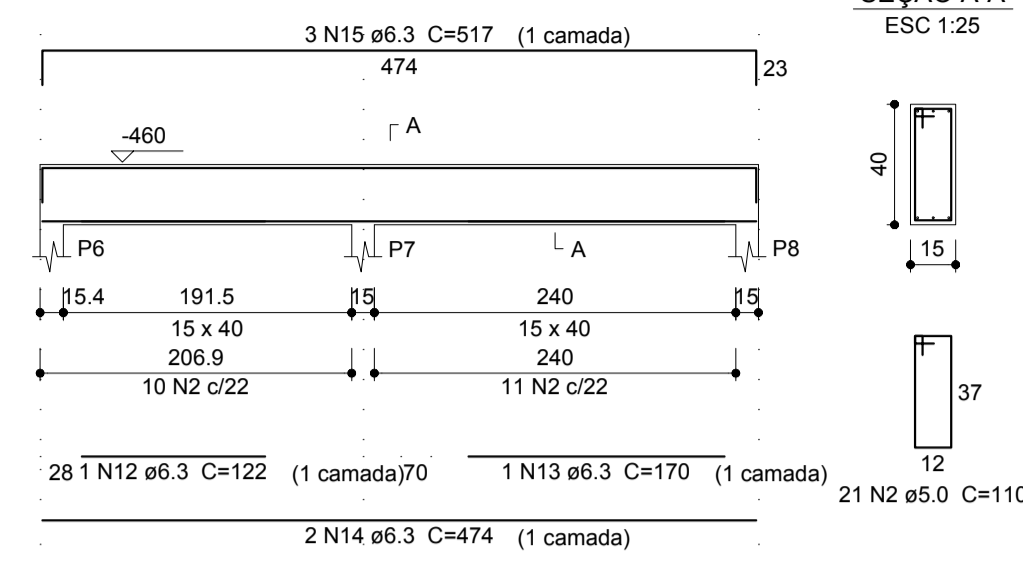


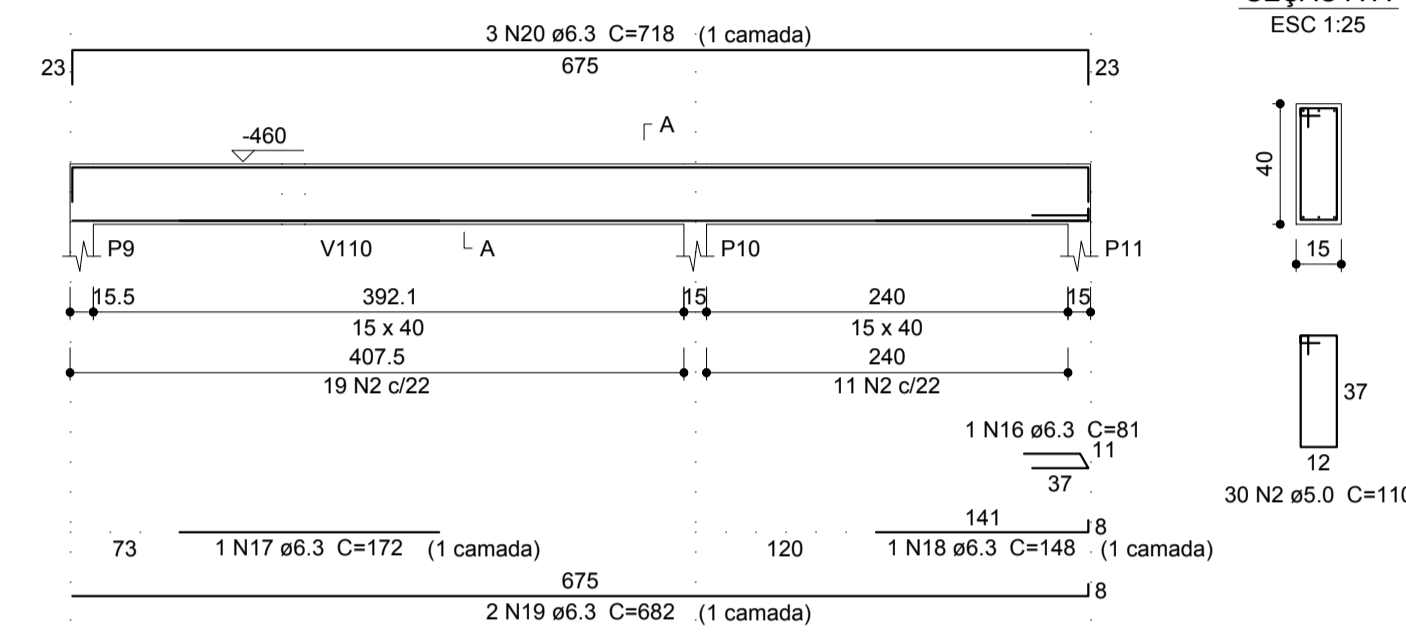
**V100**  
ESC 1:50



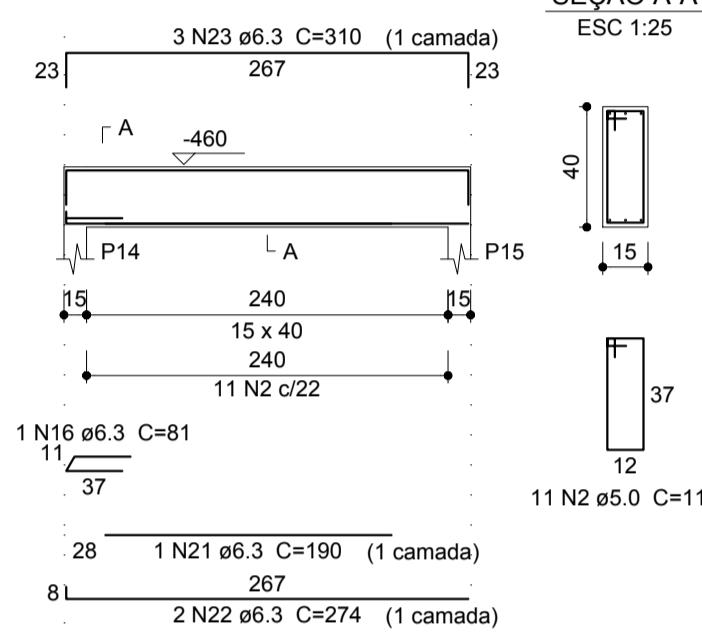
**V101**  
ESC 1:50



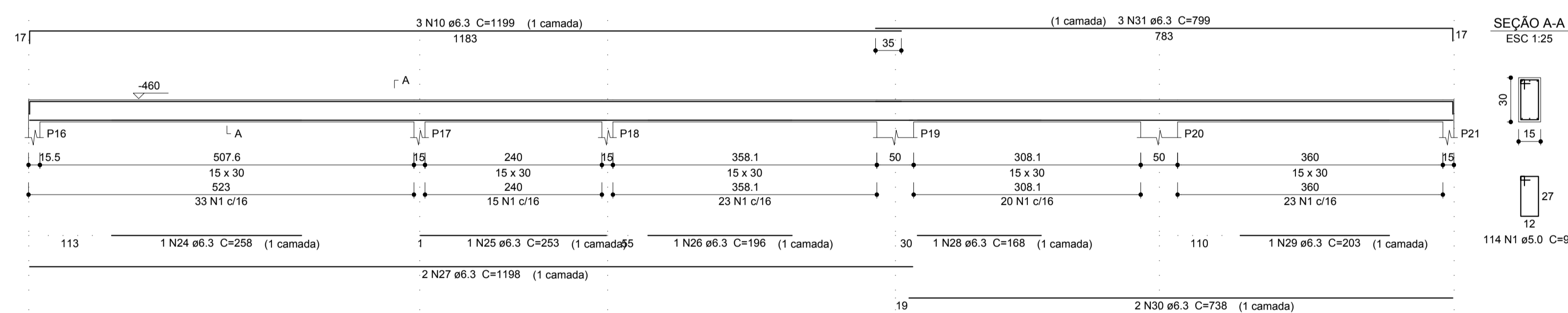
**V102**  
ESC 1:50



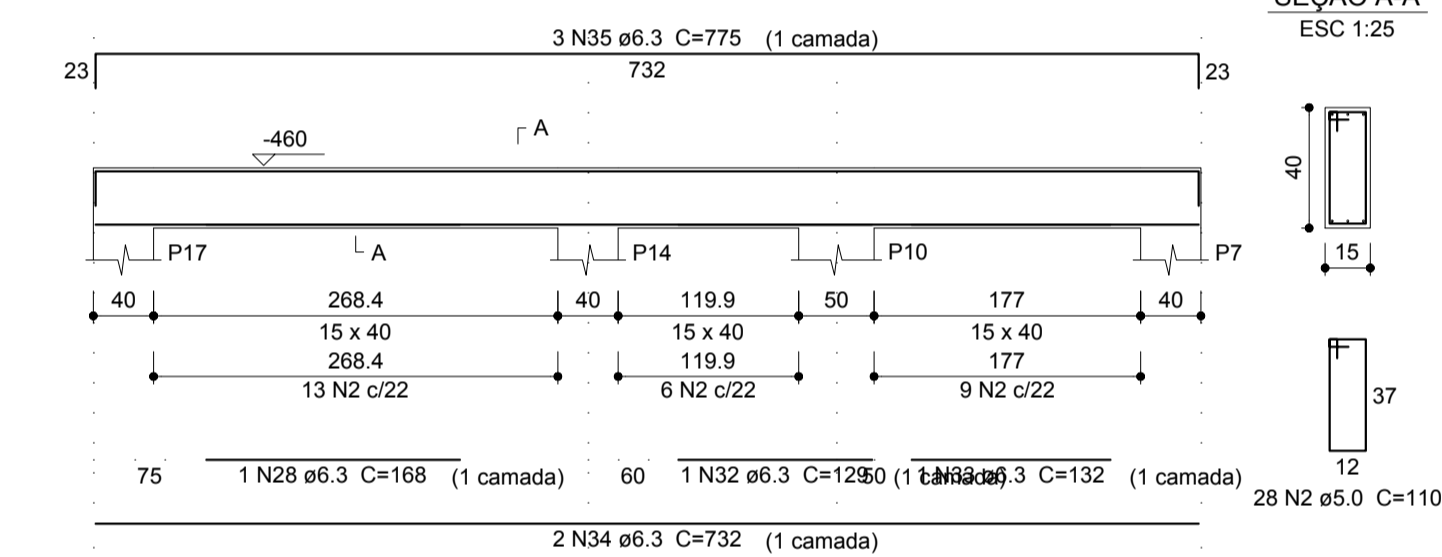
**V103**  
ESC 1:50



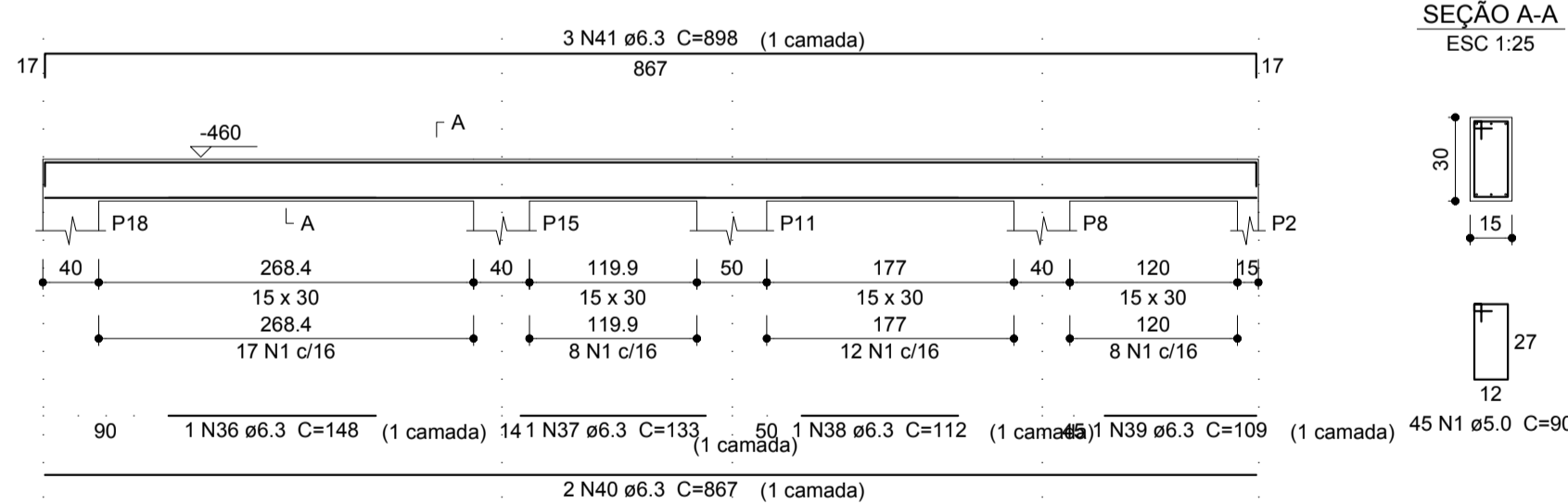
**V104**  
ESC 1:50



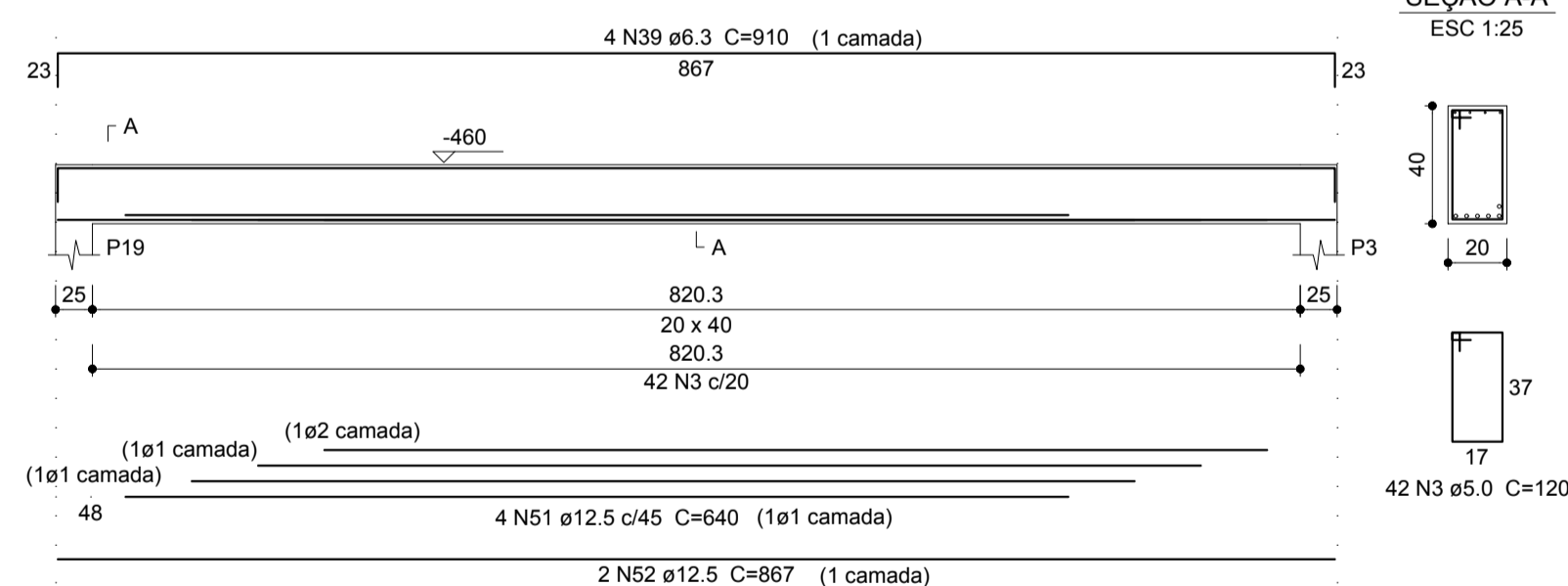
**V105**  
ESC 1:50



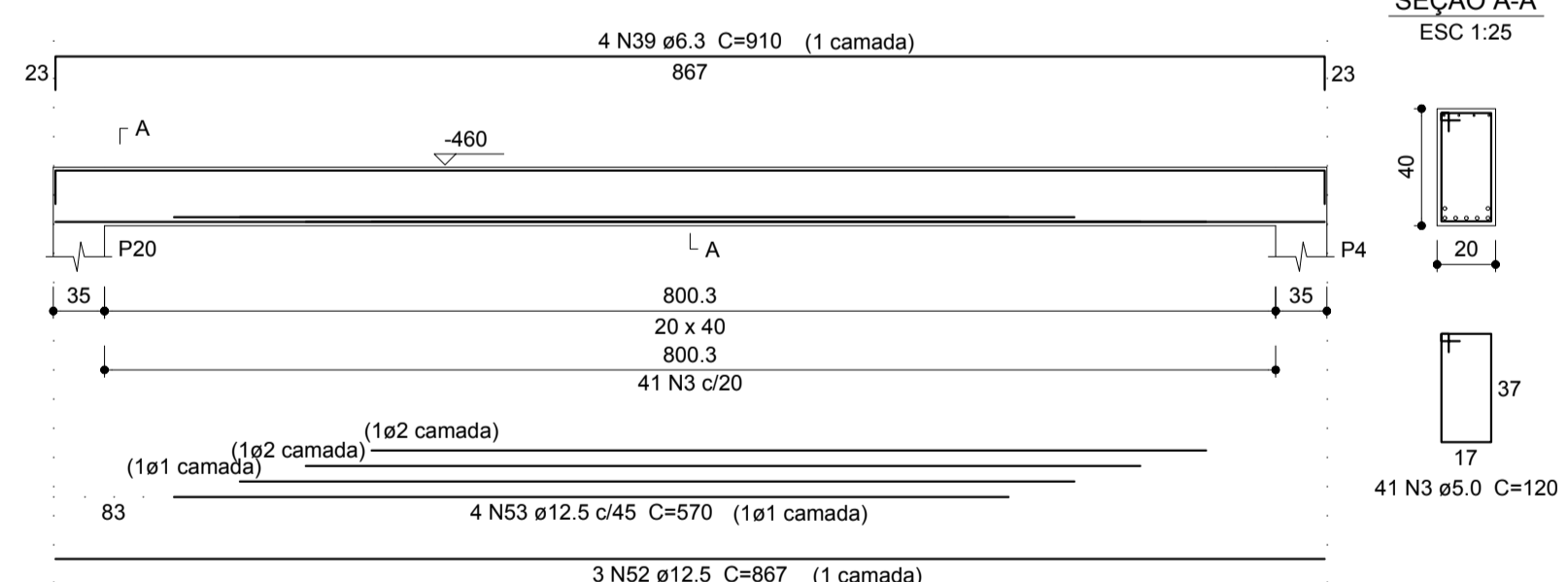
**V106**  
ESC 1:50



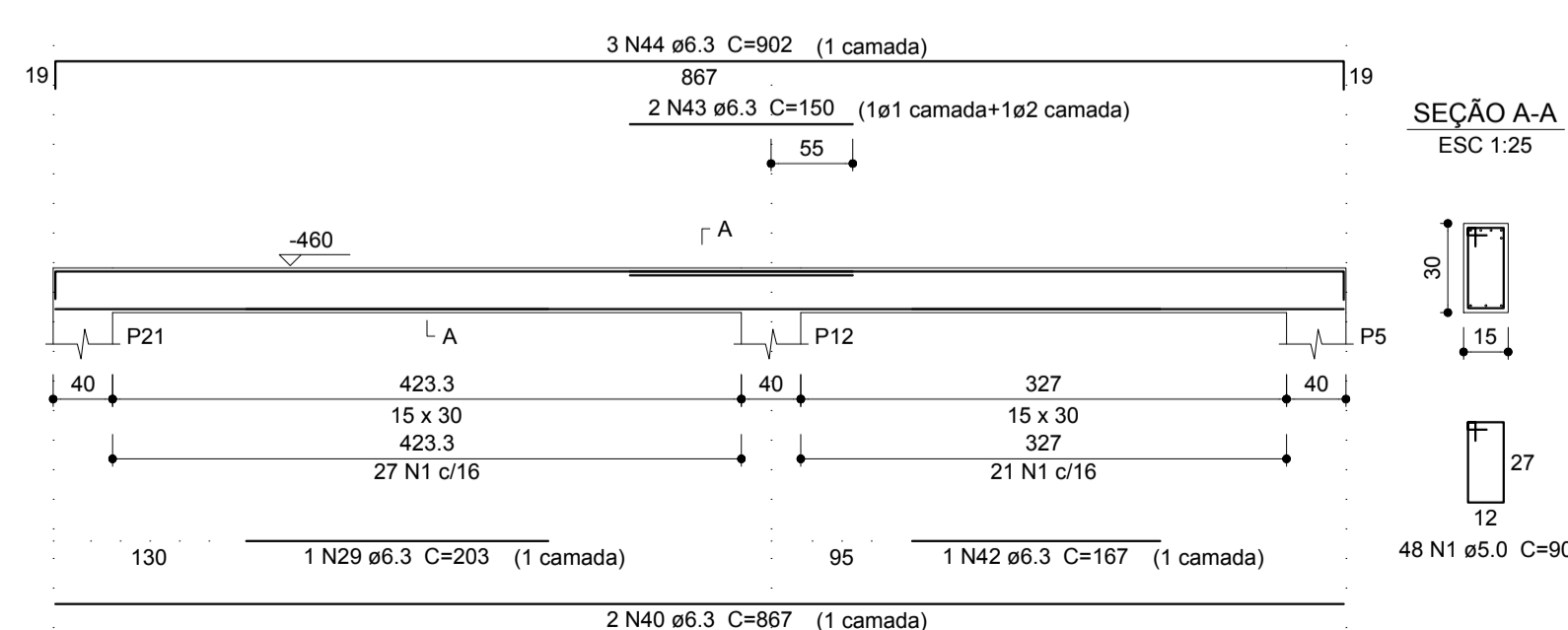
**V107**  
ESC 1:50



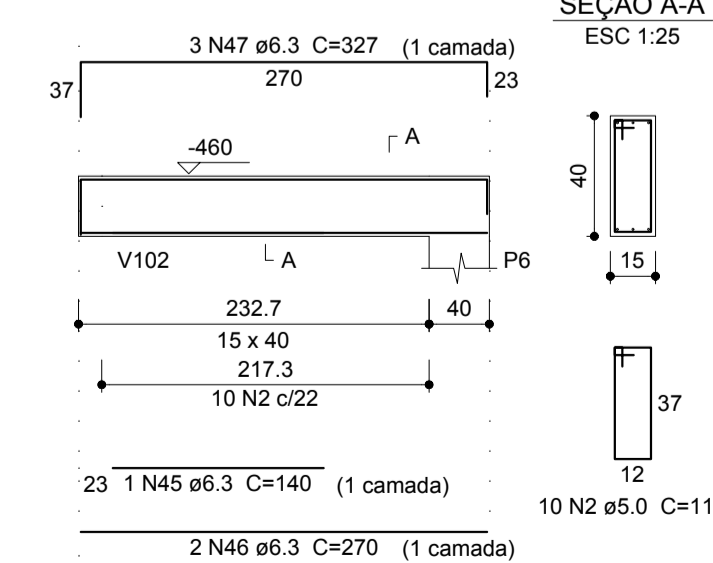
**V108**  
ESC 1:50



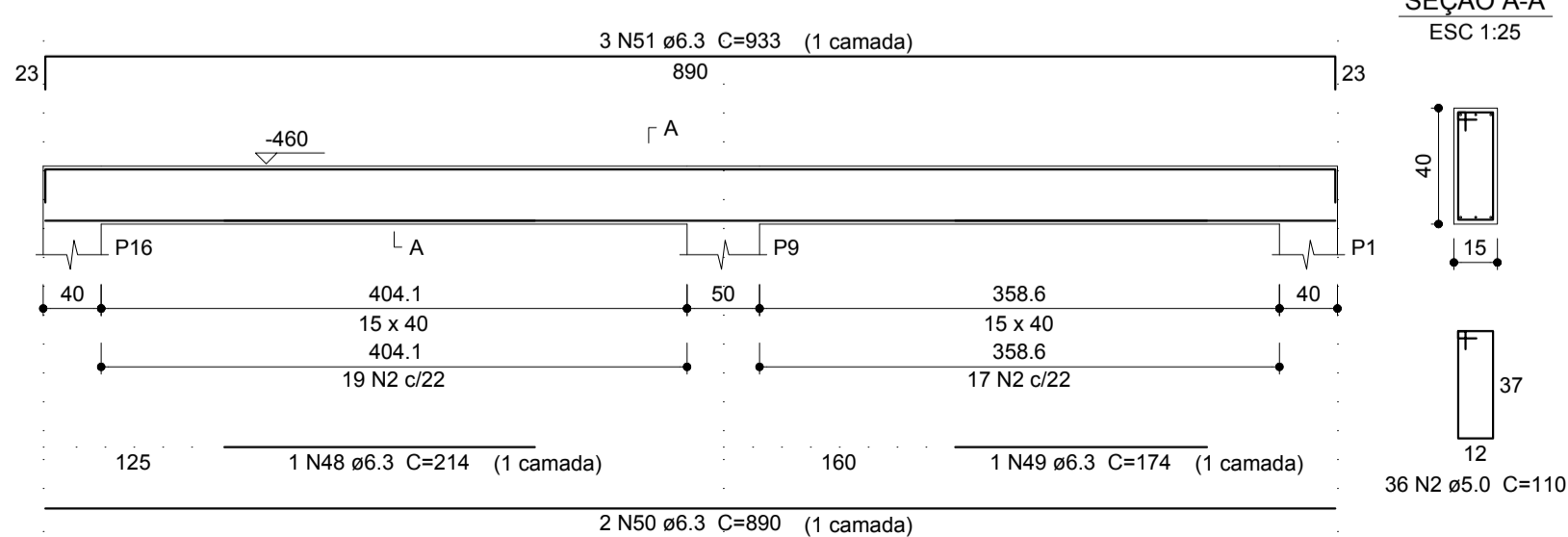
**V109**  
ESC 1:50



**V110**  
ESC 1:50



**V111**  
ESC 1:50



**Relação do aço**

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
V100					
V101					
V102					
V103					
V104					
V105					
V106					
V107					
V108					
V109					
V110					
V111					
CA60	1	5.0	307	90	27630
	2	5.0	136	110	14960
	3	5.0	83	120	9960
CA50	4	6.3	1	257	257
	5	6.3	1	166	166
	6	6.3	2	945	1890
	7	6.3	2	178	356
	8	6.3	2	208	416
	9	6.3	4	738	2952
	10	6.3	6	1199	7194
	11	6.3	3	601	1803
	12	6.3	1	127	127
	13	6.3	1	165	165
	14	6.3	2	474	948
	15	6.3	3	517	1551
	16	6.3	1	81	81
	17	6.3	1	172	172
	18	6.3	1	148	148
	19	6.3	2	682	1364
	20	6.3	3	718	2154
	21	6.3	1	185	185
	22	6.3	2	267	534
	23	6.3	3	310	930
	24	6.3	1	258	258
	25	6.3	1	253	253
	26	6.3	1	191	191
	27	6.3	2	1156	2312
	28	6.3	3	799	2397
	29	6.3	1	168	168
	30	6.3	2	104	208
	31	6.3	1	137	137
	32	6.3	2	732	1464
	33	6.3	3	775	2325
	34	6.3	1	148	148
	35	6.3	1	75	75
	36	6.3	1	112	112
	37	6.3	4	867	3468
	38	6.3	3	898	2694
	39	6.3	8	910	7280
	40	6.3	1	198	198
	41	6.3	1	167	167
	42	6.3	1	150	150
	43	6.3	3	900	2700
	44	6.3	1	135	135
	45	6.3	2	270	540
	46	6.3	3	327	981
	47	6.3	1	214	214
	48	6.3	1	164	164
	49	6.3	2	890	1780
	50	6.3	3	933	2799
	51	12.5	4	640	2560
	52	12.5	5	867	4335
	53	12.5	4	570	2280

**Resumo do aço**

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	567.2	152.7
CA60	12.5	91.8	97.2
CA60	5.0	525.5	88.1
<b>PESO TOTAL</b>		<b>249.9</b>	<b>89.1</b>

Vol. de concreto total (C-25) = 5.82 m³  
Área de forma total = 89.48 m²

**PROJETO ESTRUTURAL**

**VIGAS**

Resp. Téc.: Flávio Reis de Oliveira CREA 48.121/D

R. João XXIII, Lote 6 - Centro - Olaria/MG

Proprietário: Corporação Musical "Nova Aurora"

Escalas indicadas

Vigas - Cintamento e Subsolo