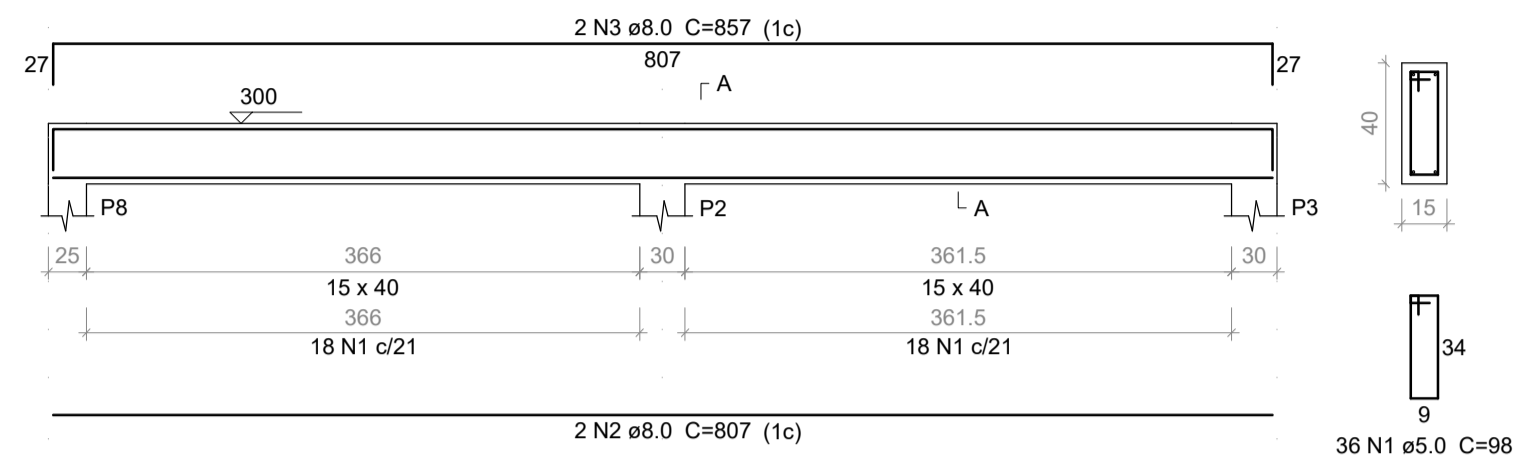
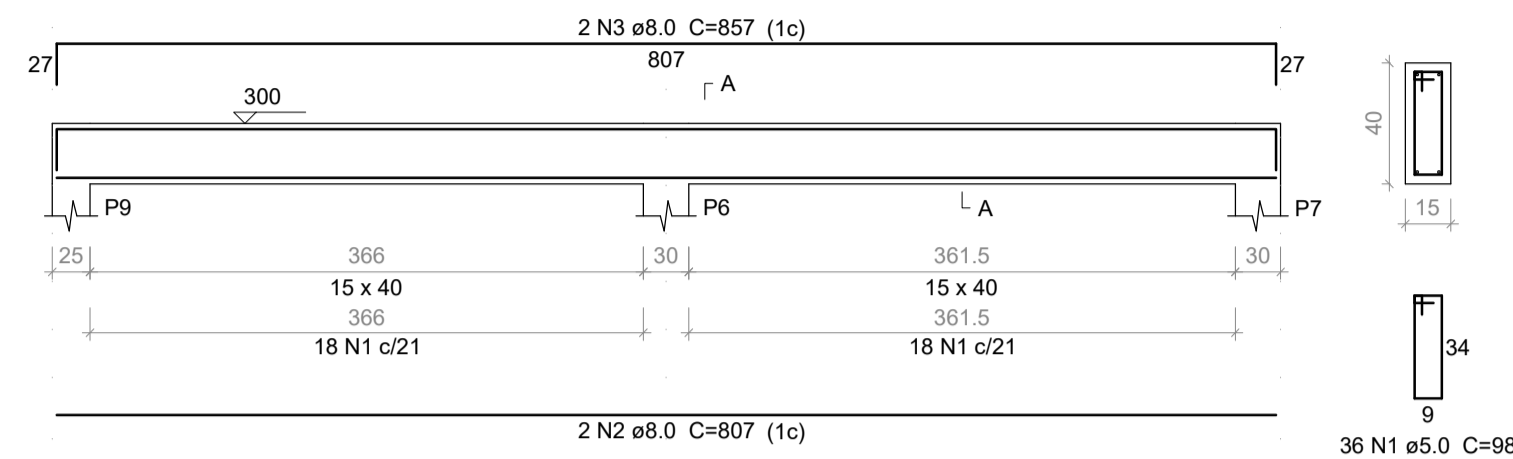


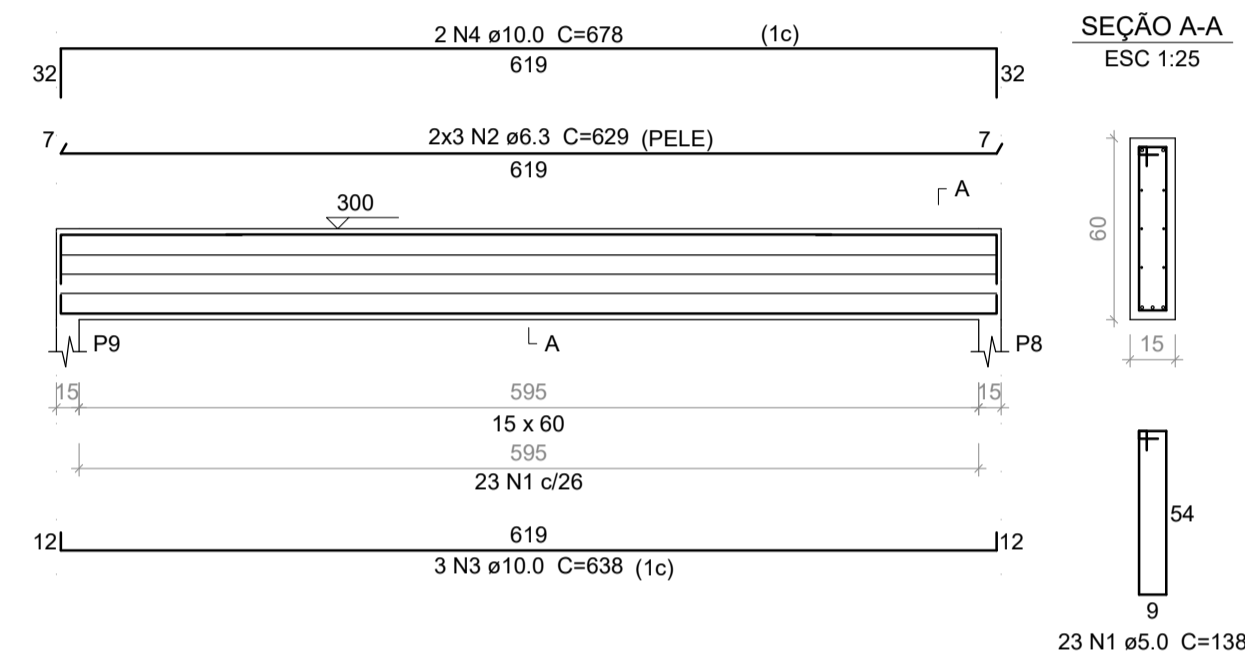
V1  
ESC 1:50



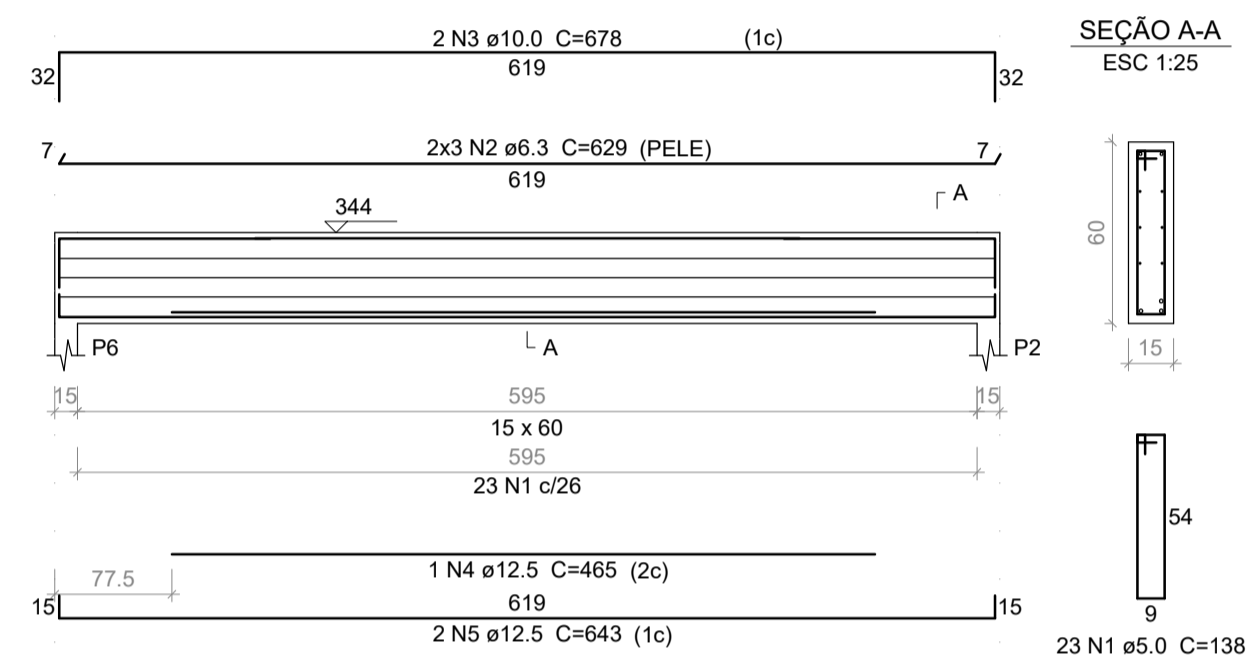
V2  
ESC 1:50



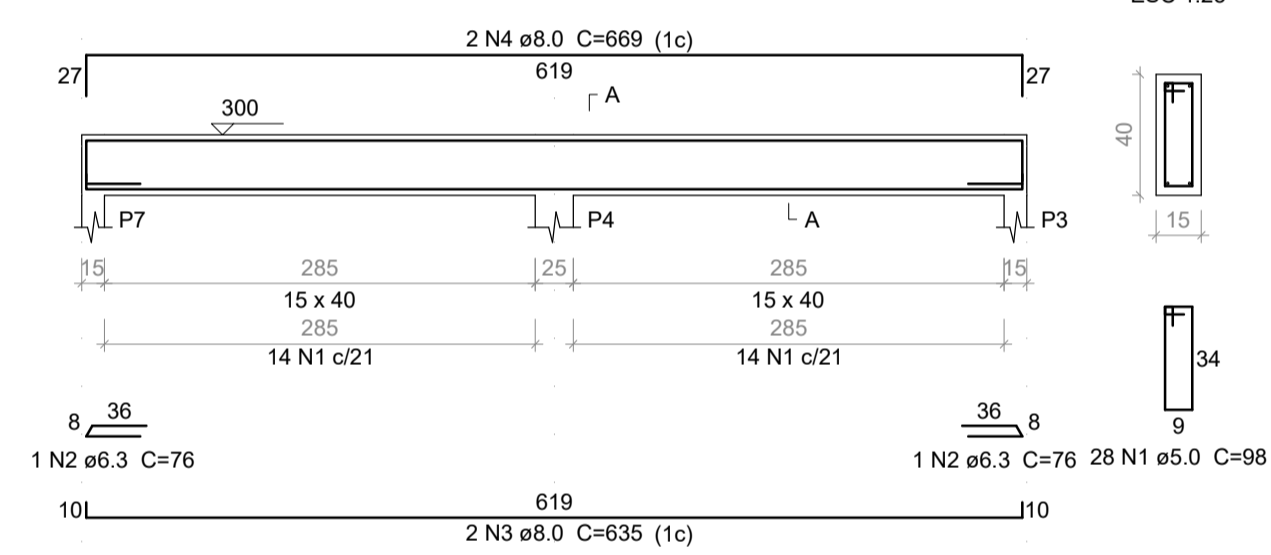
V3  
ESC 1:50



V4  
ESC 1:50



V5  
ESC 1:50



Relação do aço

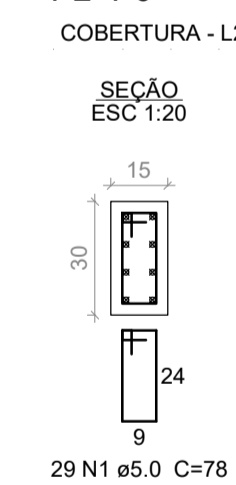
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
V1	CA60	1	5.0	36	98	3528
	CA50	2	8.0	2	807	1614
	CA50	3	8.0	2	857	1714
V2	CA60	1	5.0	36	98	3528
	CA50	2	8.0	2	807	1614
	CA50	3	8.0	2	857	1714
V3	CA60	1	5.0	23	138	3174
	CA50	2	6.3	6	629	3774
	CA50	3	10.0	3	638	1914
	CA50	4	10.0	2	678	1356
V4	CA60	1	5.0	23	138	3174
	CA50	2	6.3	6	629	3774
	CA50	3	10.0	2	678	1356
	CA50	4	12.5	1	465	465
	CA50	5	12.5	2	643	1286
V5	CA60	1	5.0	28	98	2744
	CA50	2	6.3	2	78	152
	CA50	3	8.0	2	635	1270
	CA50	4	8.0	2	669	1338

Resumo do aço

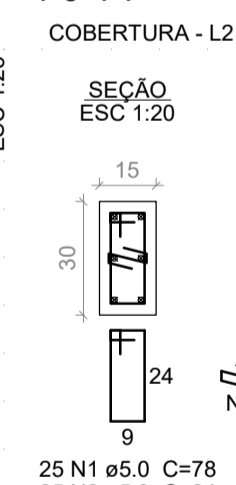
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	77	20.7
	8.0	92.7	40.2
	10.0	46.3	31.4
	12.5	17.6	18.6
	5.0	161.5	27.4
PESO TOTAL (kg)			
CA50	110.9		
CA60	27.4		

Volume de concreto (C-25) = 2.48 m<sup>3</sup>  
Área de forma = 38.25 m<sup>2</sup>

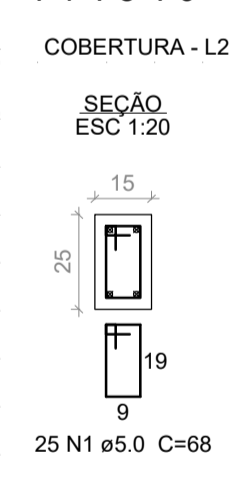
P2=P6



P3=P7



P4=P8=P9



Relação do aço

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
2xP2	CA60	1	5.0	58	78	4524
	CA50	2	10.0	16	341	5456
2xP3	CA60	1	5.0	50	78	3900
	CA60	2	5.0	50	24	1200
	CA50	3	10.0	12	297	3564
3xP4	CA60	1	5.0	75	68	5100
	CA50	2	10.0	12	297	3564

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	125.9	85.3
CA60	5.0	147.3	25
PESO TOTAL (kg)			
CA50	85.3		
CA60	25		

Volume de concreto (C-25) = 0.92 m<sup>3</sup>  
Área de forma = 18.79 m<sup>2</sup>

## PROJETO ESTRUTURAL



Obra:	AMPLIAÇÃO ESCOLA MUNICIPAL IRMÃ BLANDINA CISZ - REFEITÓRIO Rua Amazonas, n° 415, Centro - Lajeado Grande/SC	Data:	05/2019
Resp. Técnico:	Alexandre Bée Longhi- Engenheiro civil CREA 098.740-6	Escala:	Indicada
Município:	Lajeado Grande - SC	Área:	51,35 m <sup>2</sup>
Especificação:	Detalhamento das armaduras dos pilares Detalhamento das armaduras das vigas de cobertura	Prancha:	ES - 03