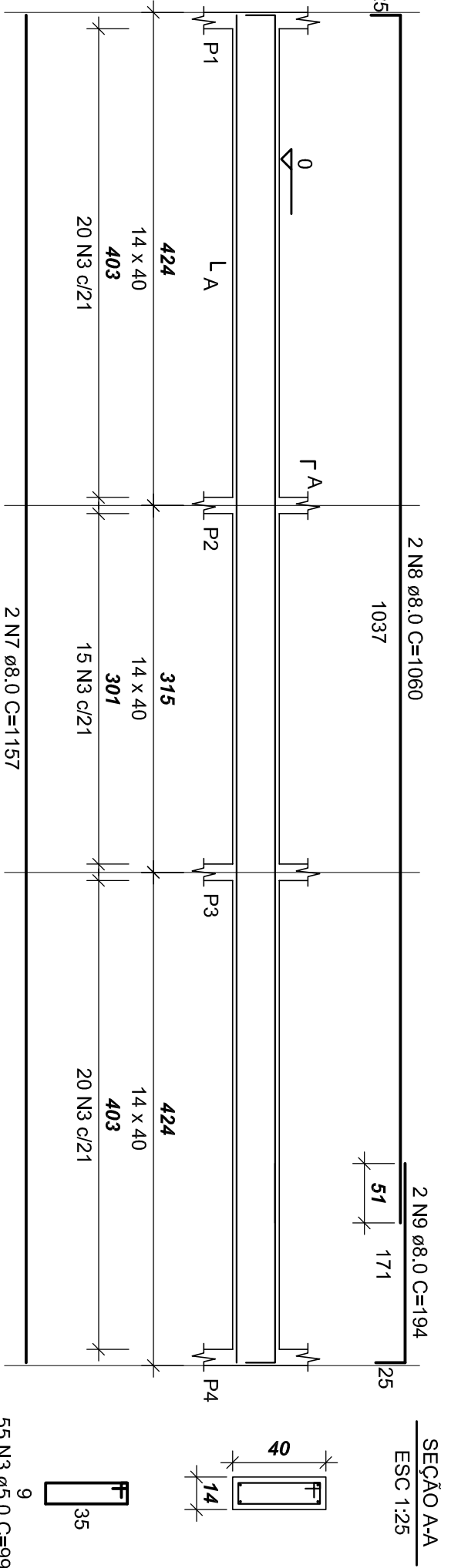
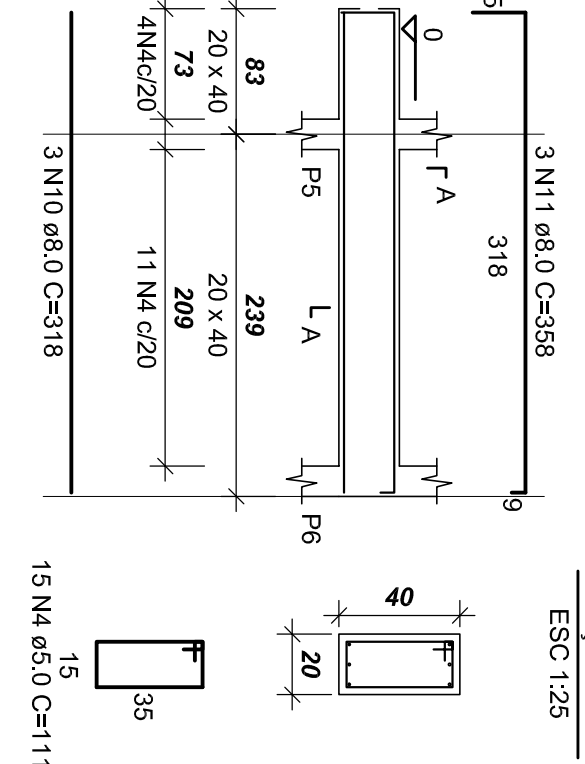


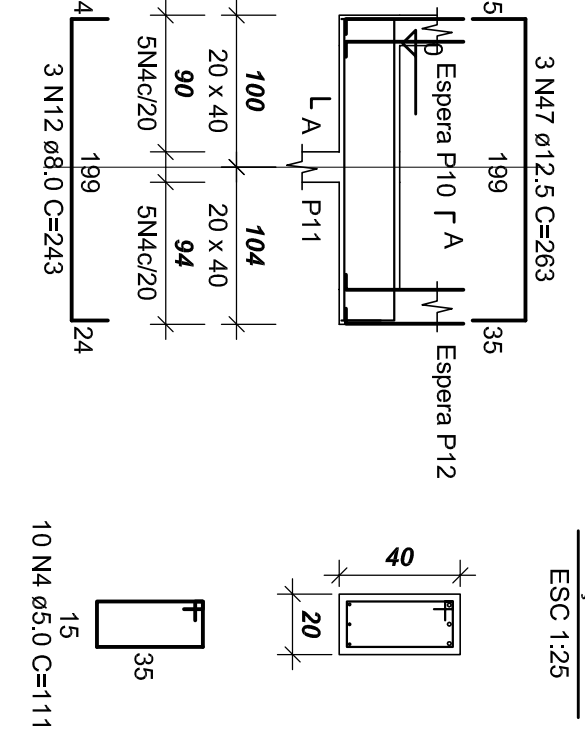
VB1 (14 x 40)



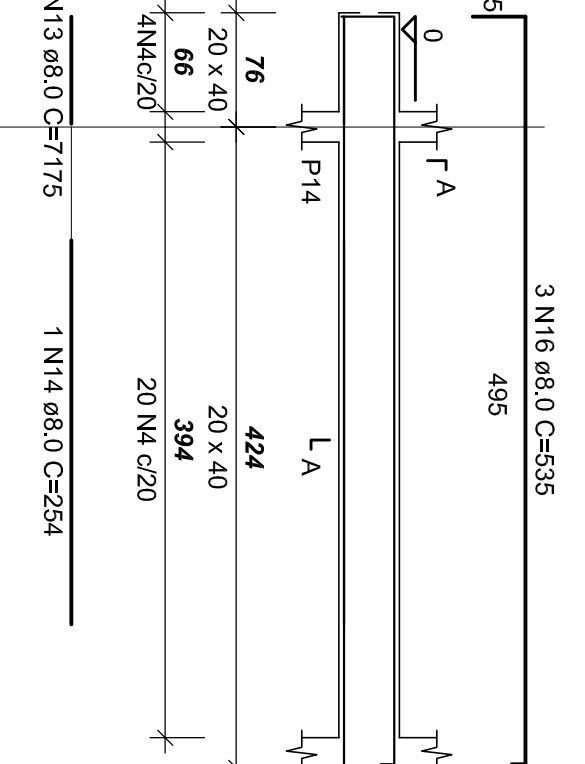
VB2 (20 x 40)



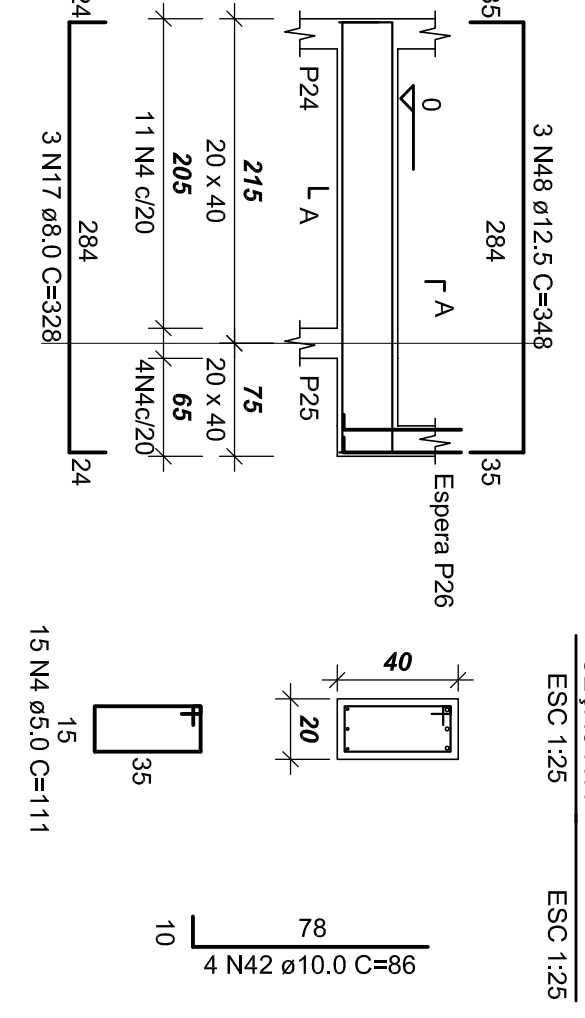
VB3 (20 x 40)



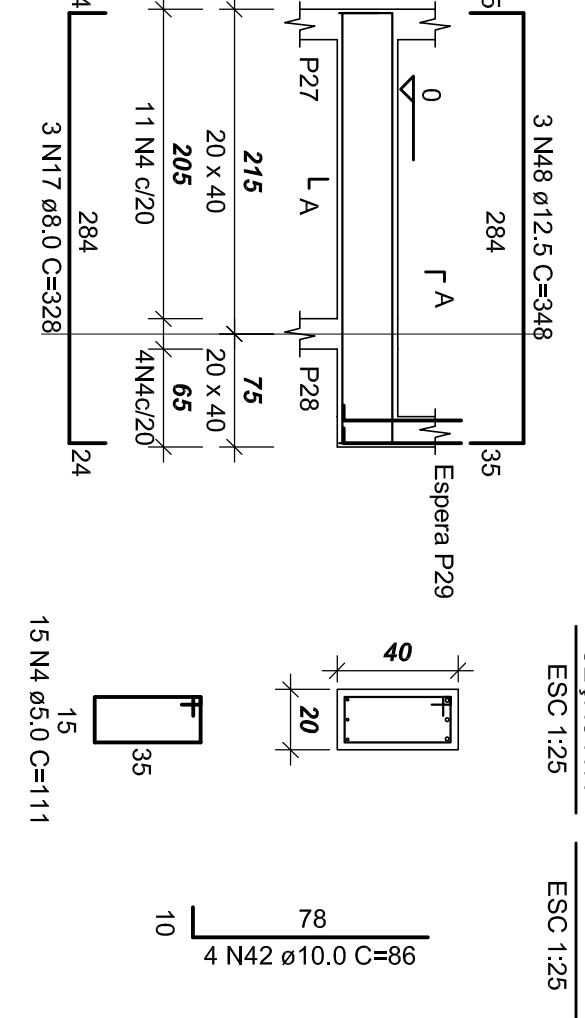
VB4 (20 x 40)



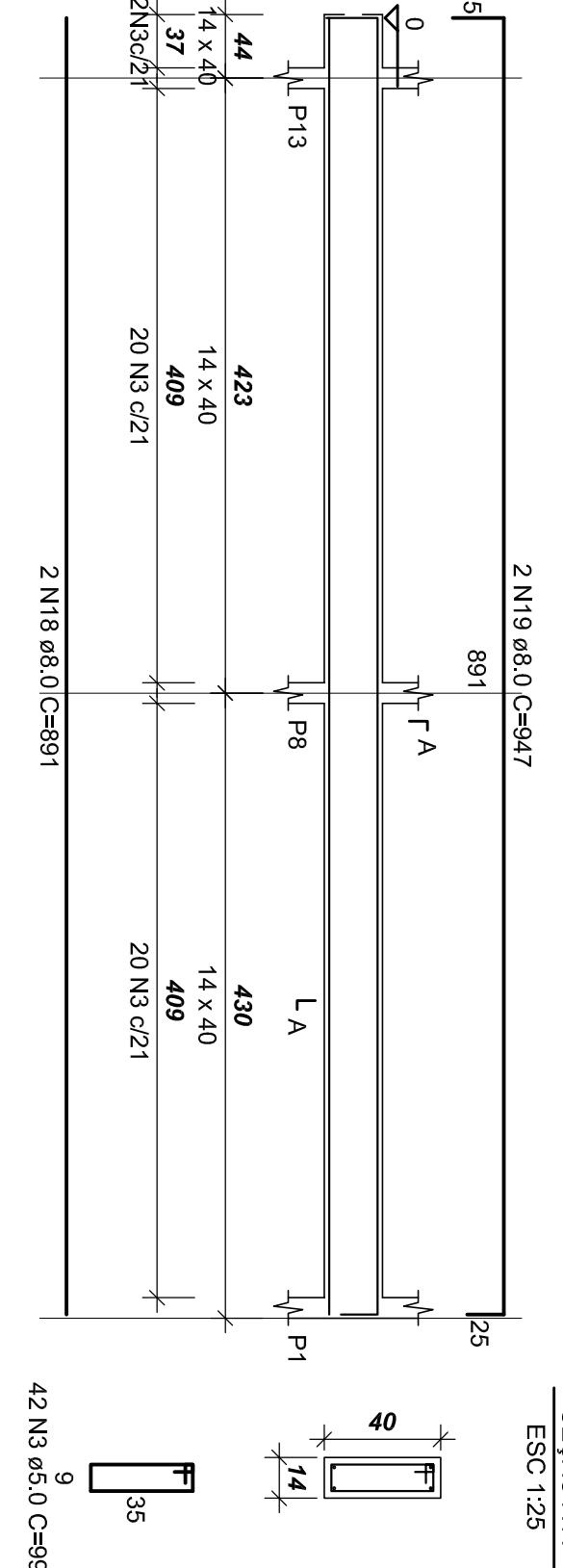
VB7 (20 x 40)



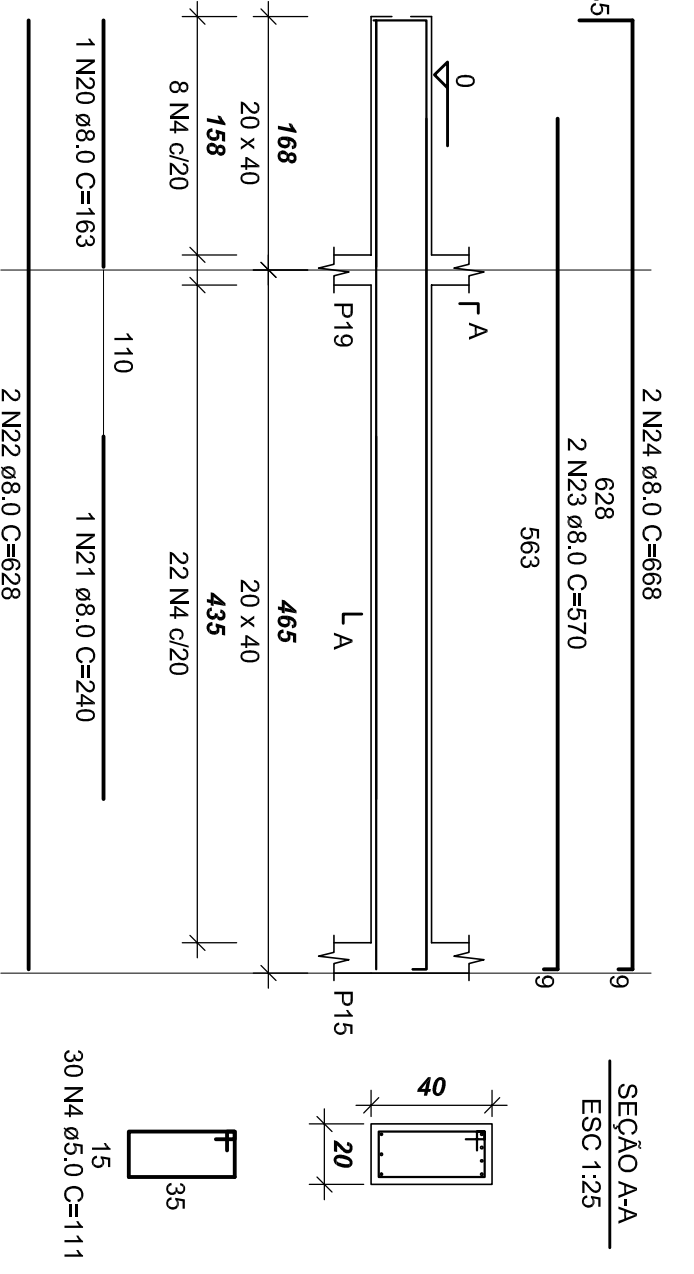
VB8 (20 x 40)



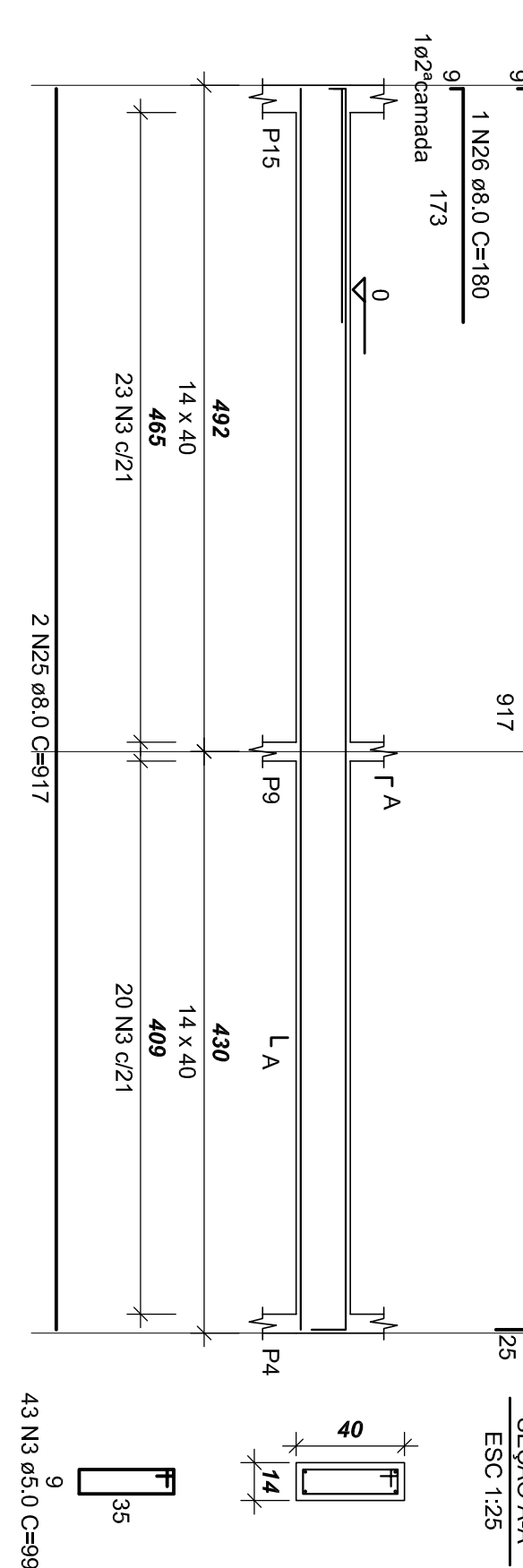
VB9 (14 x 40)



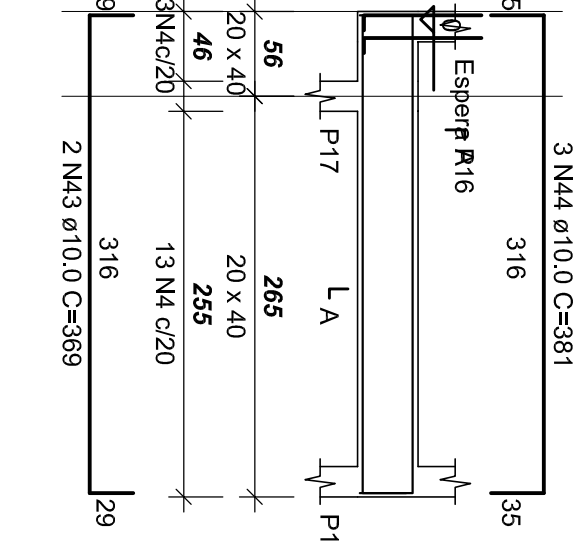
VB10 (20 x 40)



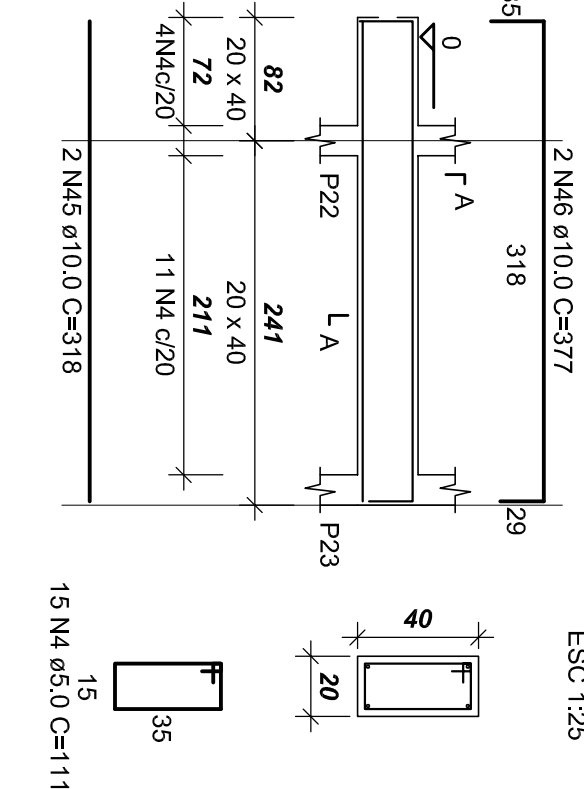
VB11 (14 x 40)



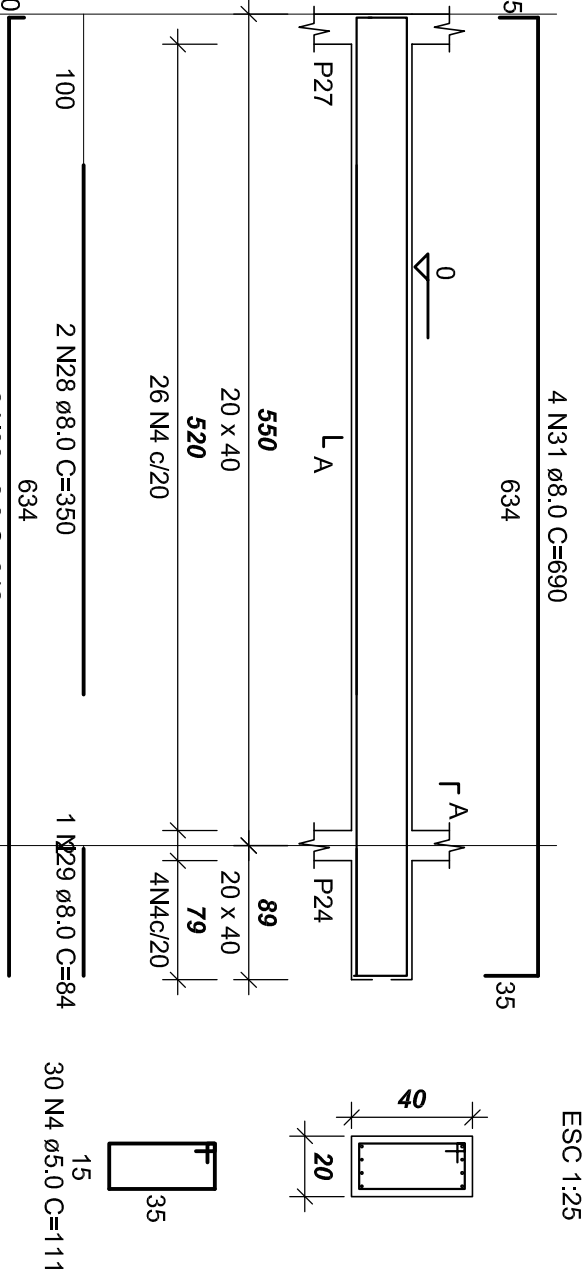
VB5 (20 x 40)



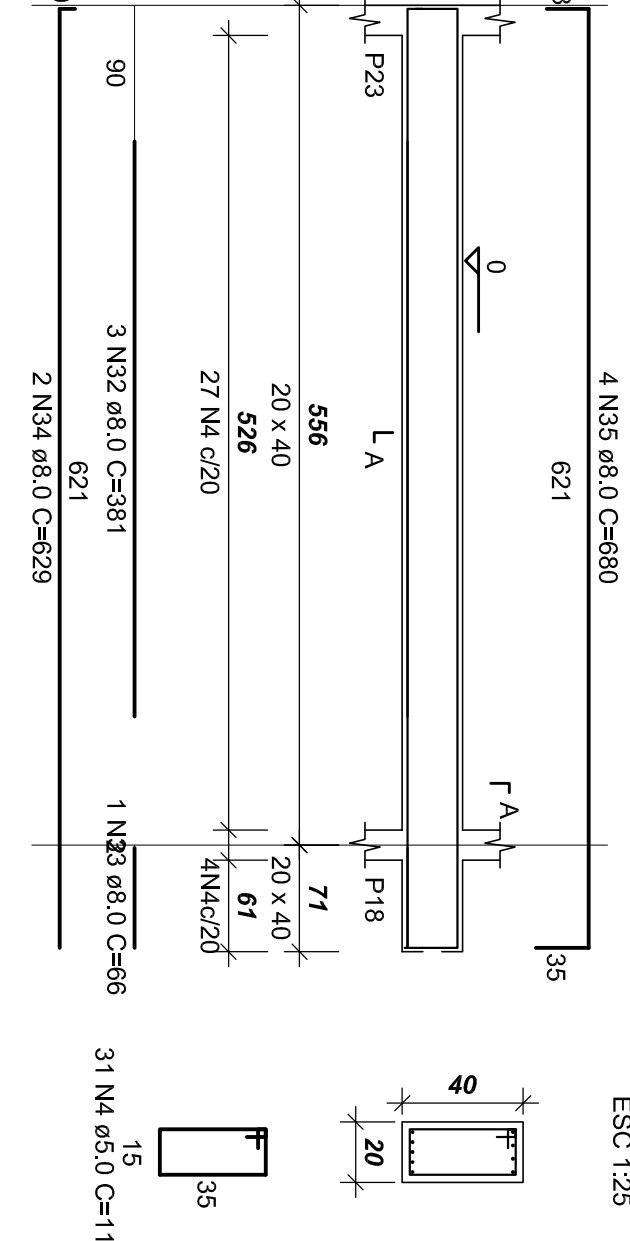
VB6 (20 x 40)



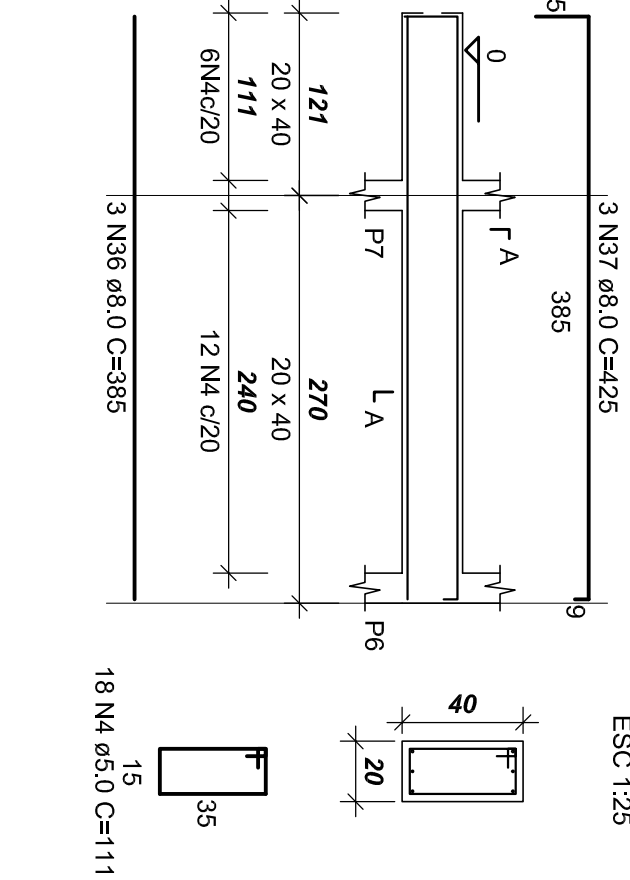
VB12 (20 x 40)



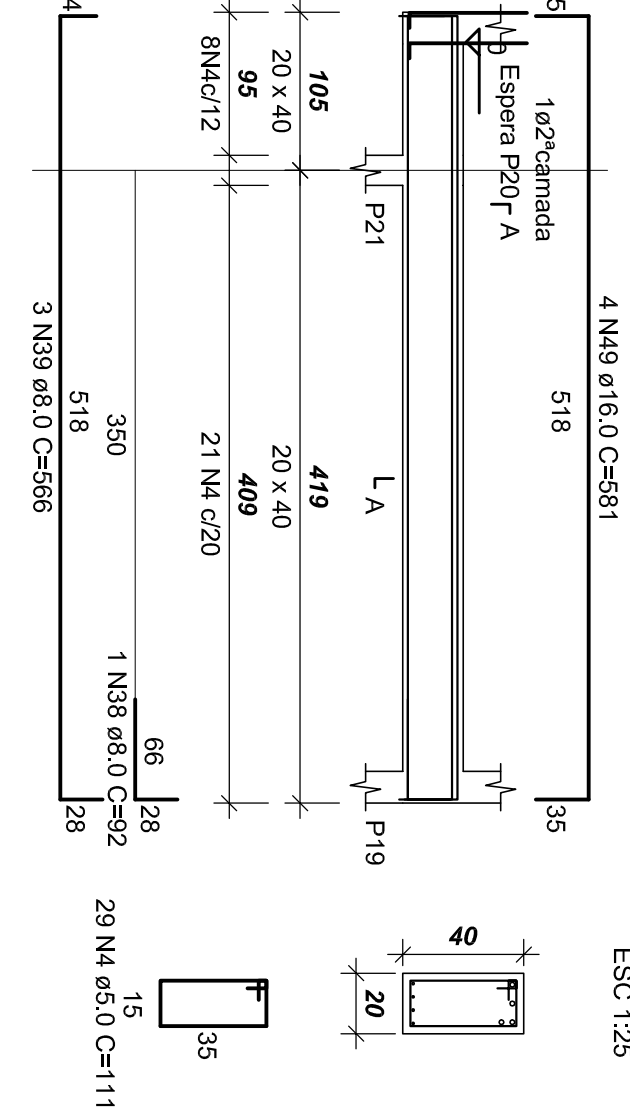
VB13 (20 x 40)



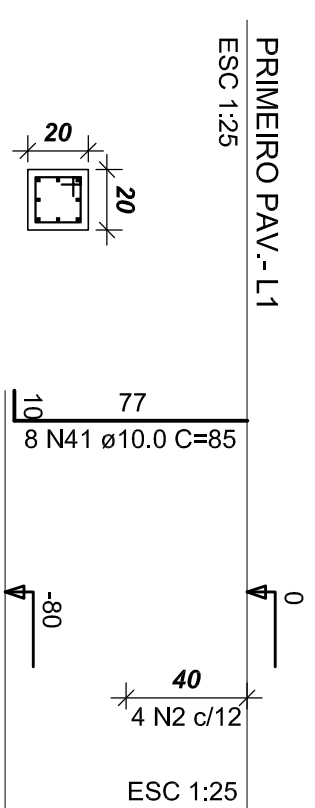
VB14 (20 x 40)



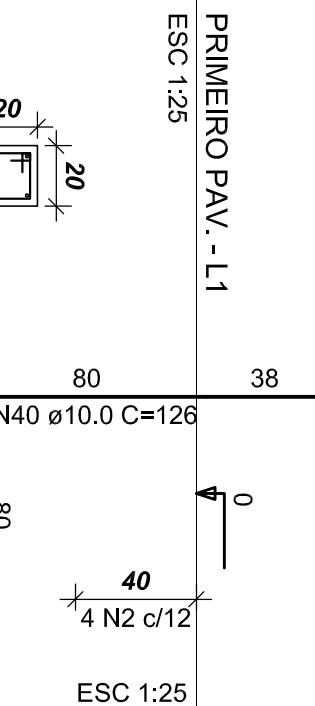
VB15 (20 x 40)



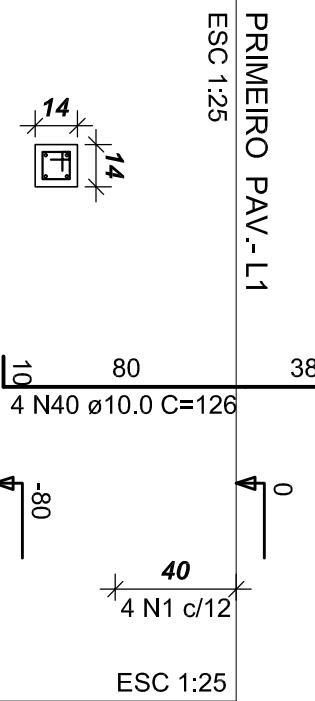
P21



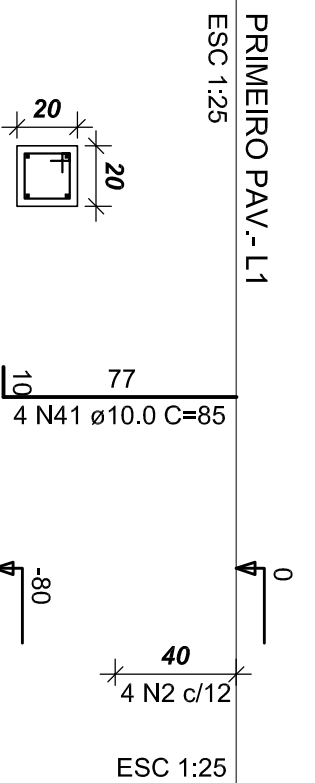
P5=P6=P7=P14=P15=P18
P19=P22=P23=P24=P27



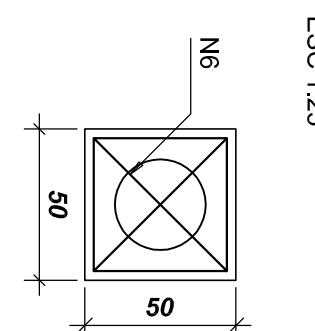
P1=P2=P3=P4=P8=P9=P13



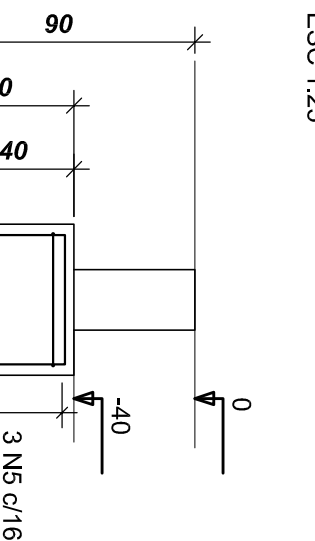
P11=P17=P25=P28



B1=B2=B3=B4=B5=B6=B7=B8=B9=B11=B13=B14
=B15=B17=B18=B19=B21=B22=B23=B24=B25
=B27=B28
10630



CORTE



RELAÇÃO DO AÇO									
23B24	7xP1	11xP5							
44P11	P21	VB1							
VB2	VB3	VB4							
VB5	VB6	VB7							
VB8	VB9	VB10							
VB11	VB12	VB13							
VB14	VB15	VB16							
AÇO	N	DIAM	Q	UNIT	C.TOTAL				
				(cm)	(cm)				
60	1	5.0	28	47	1316				
2	3	5.0	140	71	4544				
3	5	5.0	700	99	13860				
4	6	5.0	840	111	16224				
5	6	5.0	840	111	16224				
6	6	6.3	46	188	9108				
7	8	8.0	2	1157	2314				
8	8	8.0	2	1060	2120				
9	9	8.0	3	194	368				
10	10	8.0	3	358	1074				
11	10	8.0	3	358	1074				
12	12	8.0	3	243	729				
13	13	8.0	1	254	254				
14	15	8.0	2	455	909				
15	16	8.0	2	535	1070				
16	17	8.0	6	325	1958				
17	18	8.0	2	891	1782				
18	19	8.0	2	947	1894				
19	20	8.0	1	163	163				
20	20	8.0	1	163	163				
21	21	8.0	2	629	1258				
22	22	8.0	2	570	1140				
23	23	8.0	2	570	1140				
24	24	8.0	2	668	1336				
25	25	8.0	2	917	1834				
26	26	8.0	2	180	360				
27	26	8.0	2	180	360				
28	28	8.0	1	350	350				
29	29	8.0	1	84	84				
30	30	8.0	2	642	1284				
31	32	8.0	4	680	2720				
32	32	8.0	3	381	1143				
33	32	8.0	3	381	1143				
34	34	8.0	2	629	1258				
35	35	8.0	4	680	2720				
36	36	8.0	3	425	1275				
37	37	8.0	3	425	1275				
38	38	8.0	3	562	1686				
39	39	8.0	2	126	252				
40	40	10.0	72	126	9072				
41	41	10.0	24	85	2040				
42	42	10.0	28	86	2408				
43	43	10.0	2	369	738				
44	44	10.0	2	318	636				
45	45	10.0	2	318	636				
46	46	10.0	2	377	754				
47	47	12.5	3	263	789				
48	48	12.5	4	348	2088				
49	49	16.0	6	581	2284				

RESUMO DO AÇO			
AÇO	DIAM	C.TOTAL	PESO-0%
CA50	6.3	220.6	54.1
	8.0	384.3	151.9
	10.0	167.6	103.3
	12.5	28.8	27.8
CA60	16.0	23.2	36.7
	5.0	474.9	73.1
PESO TOTAL			
CA50		373.7	
CA60		73.1	

Vol de concreto por blocos (C20) = 7.7 m³
Vol de concreto para pilares (C20) = 3.4 m³
Área de forma total = 114.98 m²

PROJETO ESTRUTURAL		PROJETO ESTRUTURAL	
CONFERRIR MEDIDAS NA OBRA		CONFERRIR MEDIDAS NA OBRA	
AMPLIAÇÃO BIBLIOTECA CAMPUS TEÓFILO OTONI		AMPLIAÇÃO BIBLIOTECA CAMPUS TEÓFILO OTONI	
FERRAGEM DOS BALDRAMES FERRAGEM DOS PILARES - FERRAGEM DOS BLOCOS		FERRAGEM DOS BALDRAMES FERRAGEM DOS PILARES - FERRAGEM DOS BLOCOS	
CARLOS HENRIQUE DE SOUZA GONÇALVES		CARLOS HENRIQUE DE SOUZA GONÇALVES	
CEFA 739210 - P1		CEFA 739210 - P1	
ESCALA: INDICADA		ESCALA: INDICADA	
VERSÃO: 1		VERSÃO: 1	
DATA: 02/07/2013		DATA: 02/07/2013	
FOLHA: 02/06		FOLHA: 02/06	
ARQUIVO:		ARQUIVO:	

AS BUILT	AS BUILT
DEP 6259-435 - Curitiba - Paraná	DEP 6259-435 - Curitiba - Paraná
asb@asb.com.br	asb@asb.com.br
(41) 3586-9496	(41) 3586-9496
PROJETO ESTRUTURAL	PROJETO ESTRUTURAL
CONFERRIR MEDIDAS NA OBRA	CONFERRIR MEDIDAS NA OBRA
AMPLIAÇÃO BIBLIOTECA CAMPUS TEÓFILO OTONI	AMPLIAÇÃO BIBLIOTECA CAMPUS TEÓFILO OTONI
UNIVERSIDADE FEDERAL DO VALE DO ITAIPAVA	UNIVERSIDADE FEDERAL DO VALE DO ITAIPAVA
116.000.315.0000.1-57	116.000.315.0000.1-57
FRANCA	FRANCA
FERRAGEM DOS BALDRAMES FERRAGEM DOS PILARES - FERRAGEM DOS BLOCOS	FERRAGEM DOS BALDRAMES FERRAGEM DOS PILARES - FERRAGEM DOS BLOCOS
AUTOR PROJETO:	AUTOR PROJETO:
CARLOS HENRIQUE DE SOUZA GONÇALVES	CARLOS HENRIQUE DE SOUZA GONÇALVES
CEFA 739210 - P1	CEFA 739210 - P1
ESCALA: INDICADA	ESCALA: INDICADA
VERSÃO: 1	VERSÃO: 1
DATA: 02/07/2013	DATA: 02/07/2013
FOLHA: 02/06	FOLHA: 02/06
ARQUIVO:	ARQUIVO: