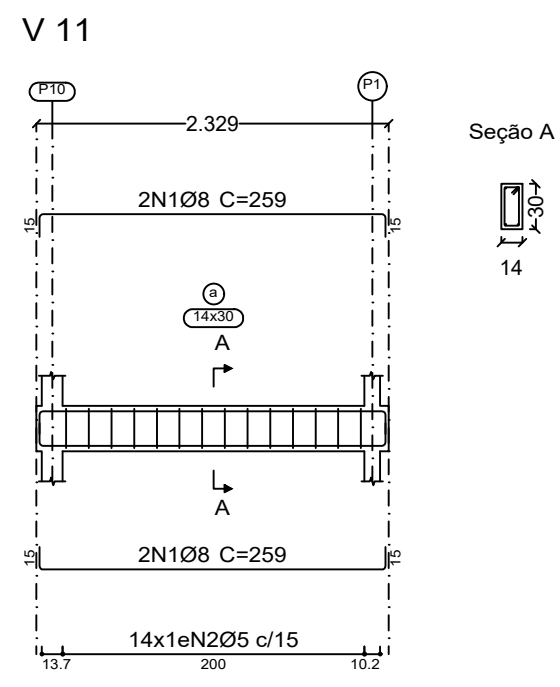
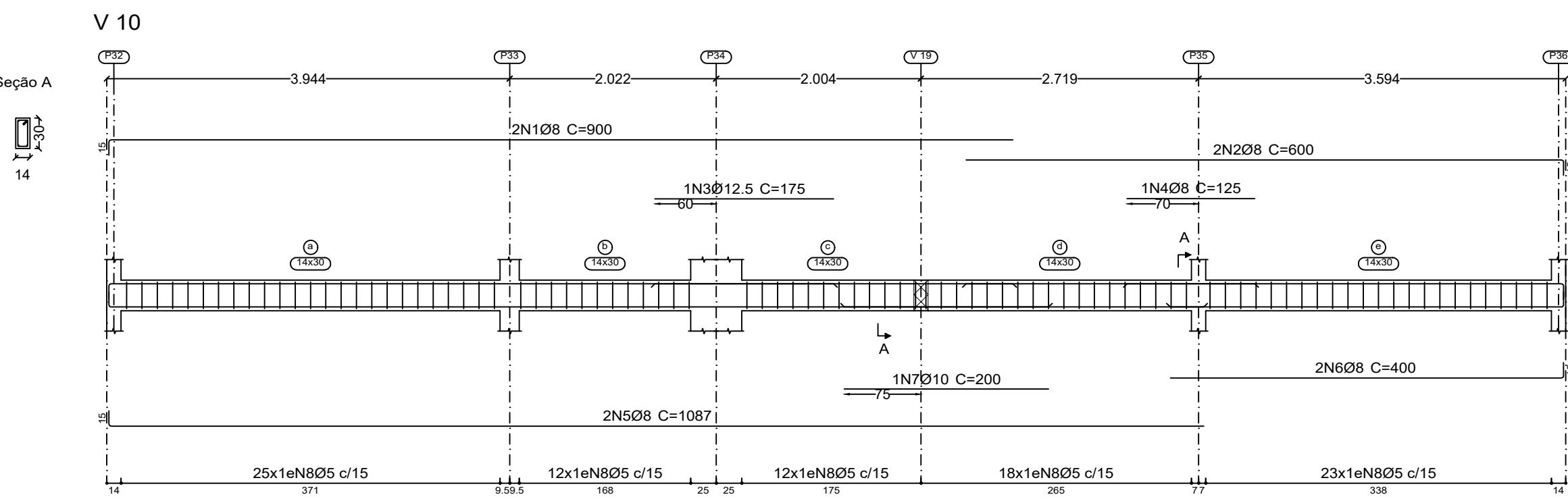
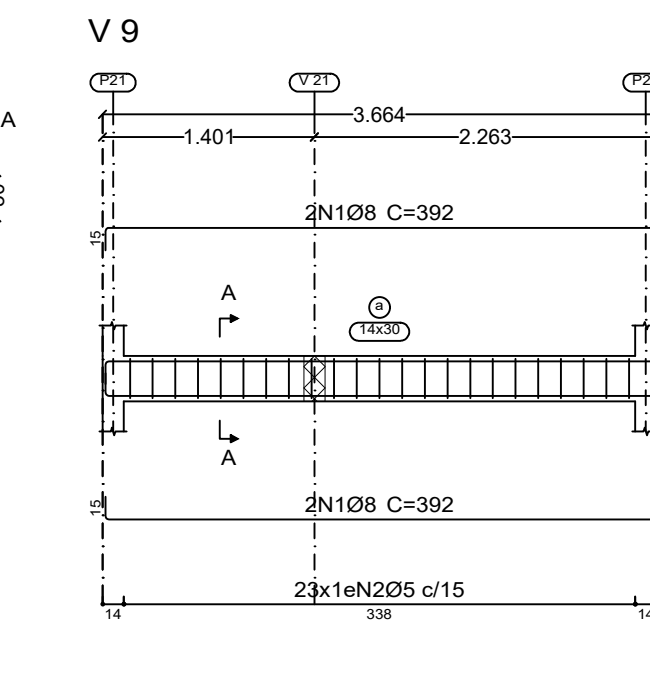
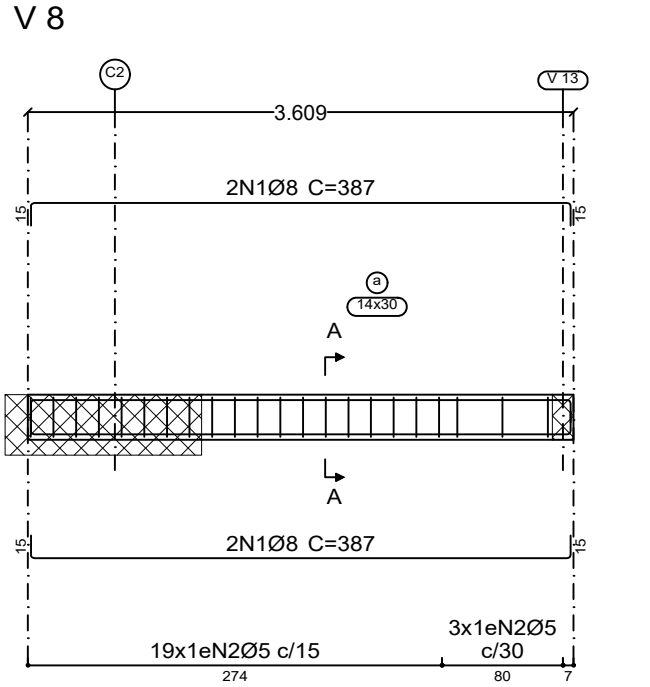
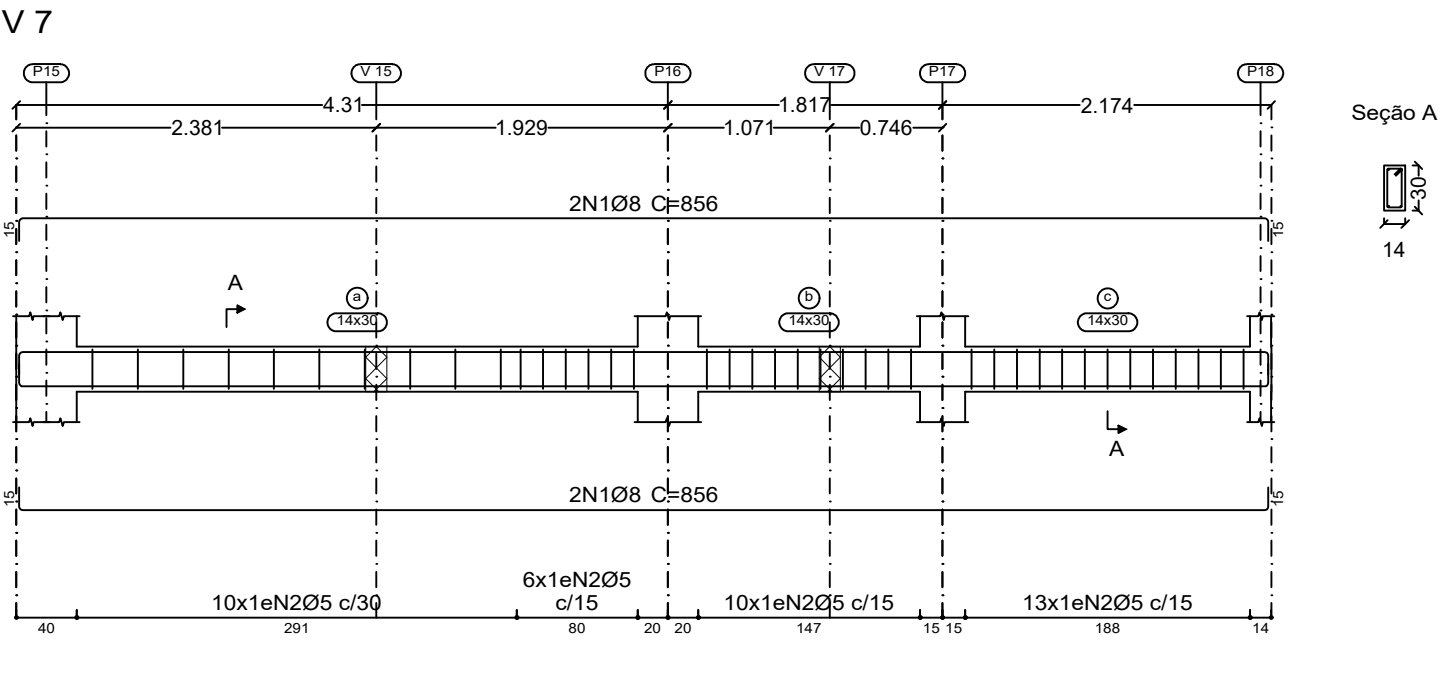
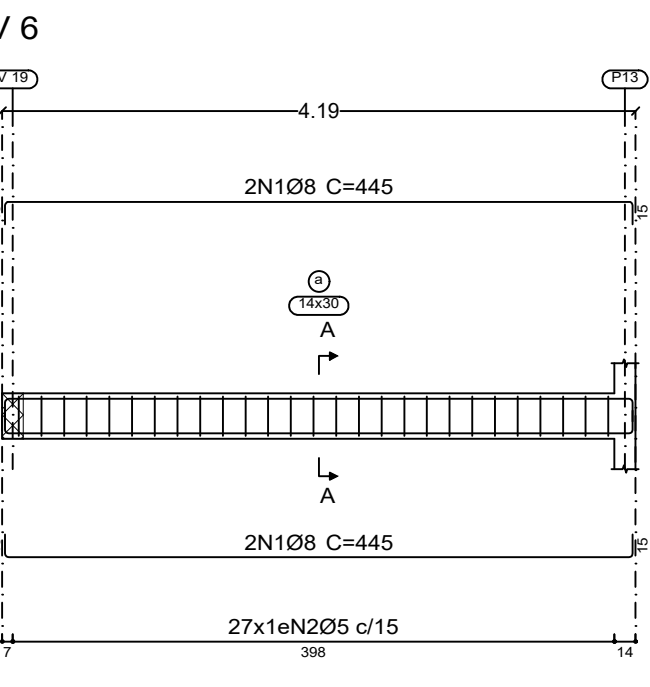
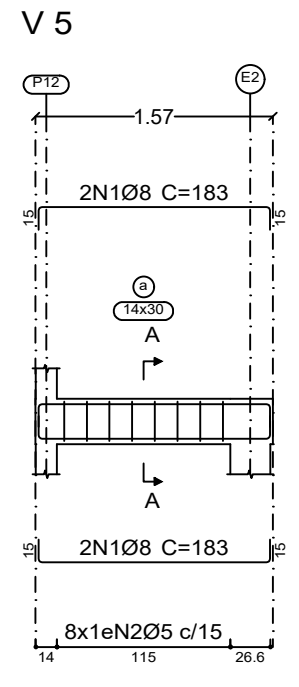
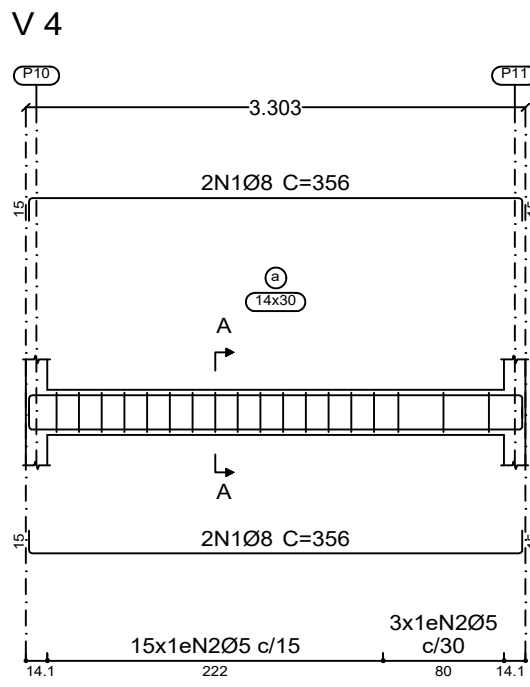
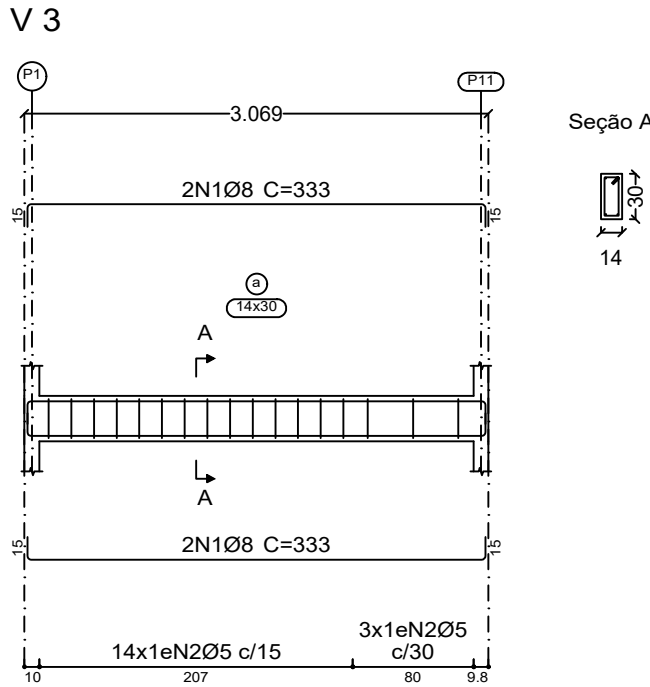
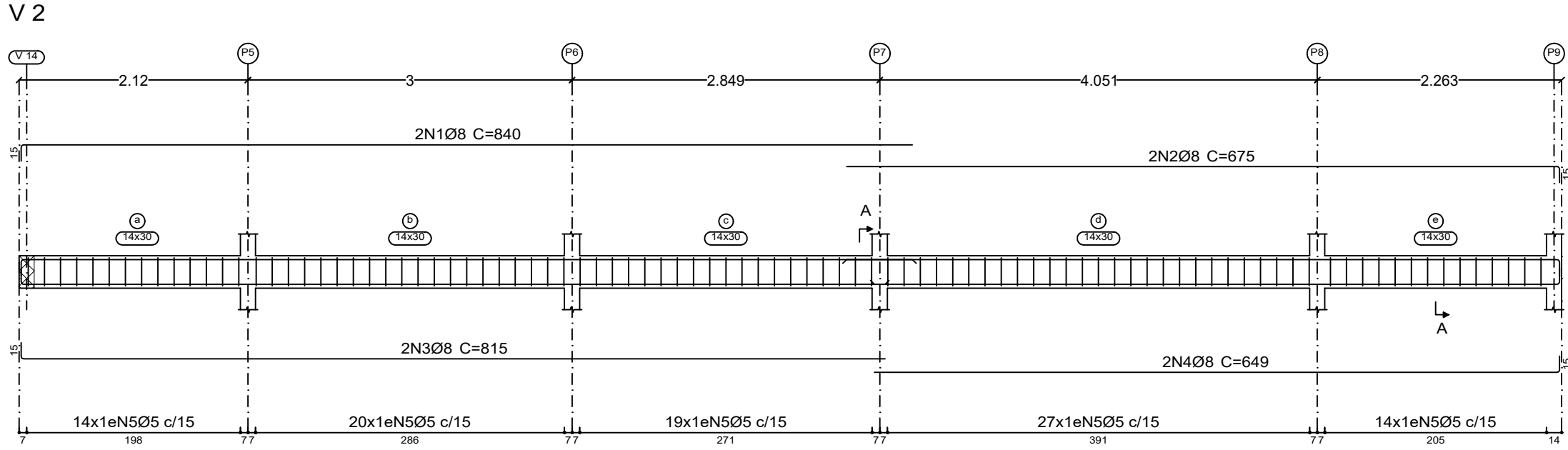
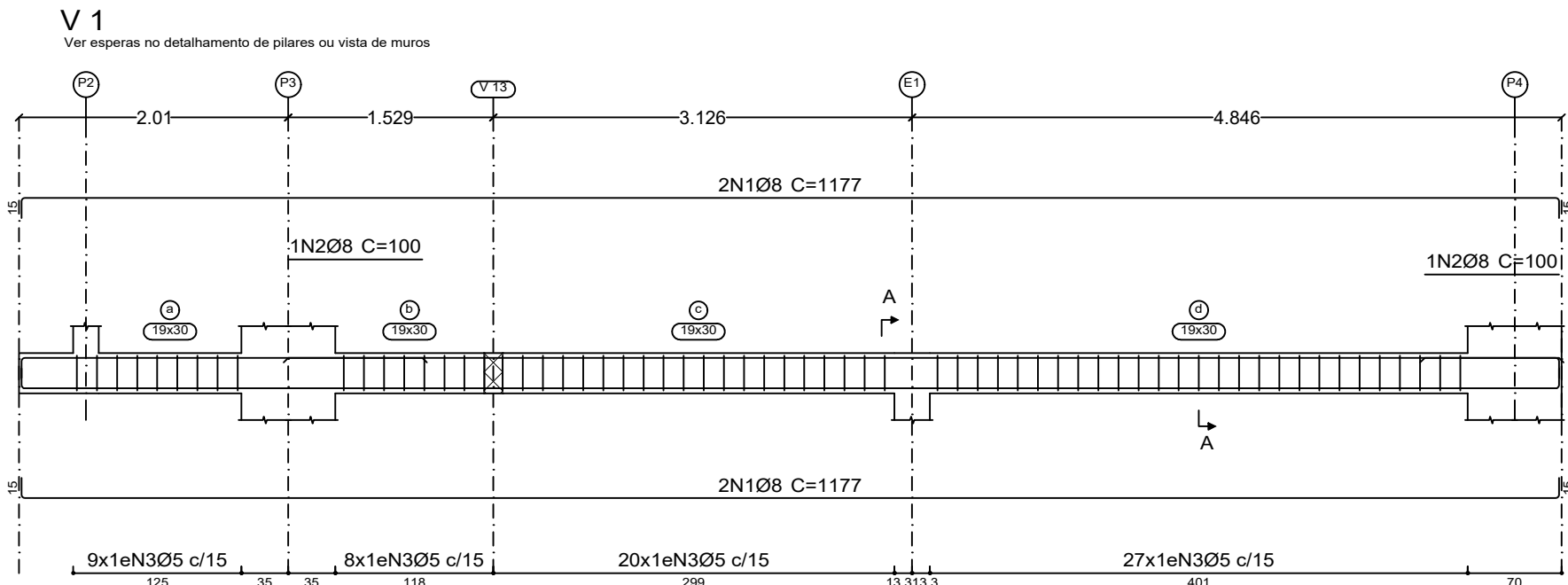


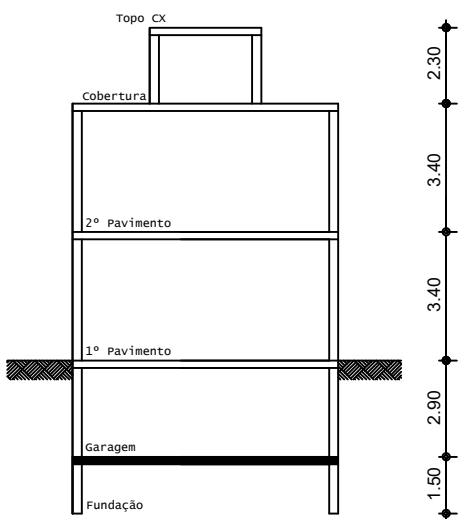


Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 1	1	Ø8	4	15	147.1	15	1177	4708	18.6	
	2	Ø8	2		100		200	5760	0.8	
	3	Ø5	64	5	80	5	90			9.0
Total+10%:									21.3	9.9
V 2	1	Ø8	2	15	825		840	1680	6.6	
	2	Ø8	2		660	15	675	1350	5.3	
	3	Ø8	2	15	799.9		815	1630	6.4	
	4	Ø8	2		634.4	15	649	1298	5.1	
	5	Ø5	94	5	70	5	80	7520		11.8
Total+10%:									25.7	13.0
V 3	1	Ø8	4	15	302.9	15	333	1332	5.3	
	2	Ø5	17	5	70		80	1360		2.1
Total+10%:									5.8	2.3
V 4	1	Ø8	4	15	326.3	15	356	1424	5.6	
	2	Ø5	18	5	70		80	1440		2.3
Total+10%:									6.2	2.5
V 5	1	Ø8	4	15	153	15	183	732	2.9	
	2	Ø5	8	5	70		80	640		1.0
Total+10%:									3.2	1.1
V 6	1	Ø8	4	15	415	15	445	1780	7.0	
	2	Ø5	27	5	70		80	2160		3.4
Total+10%:									7.7	3.7
V 7	1	Ø8	4	15	826.1	15	856	3424	13.5	
	2	Ø5	39	5	70		80	3120		4.9
Total+10%:									14.9	5.4
V 8	1	Ø8	2	15	356.9	15	387	1548	6.1	
	2	Ø5	22	5	70		80	1760		2.8
Total+10%:									6.7	3.1
V 9	1	Ø8	4	15	362.4	15	392	1568	6.2	
	2	Ø5	23	5	70		80	1840		2.9
Total+10%:									6.8	3.2
V 10	1	Ø8	2	15	885		900	1800	7.1	
	2	Ø8	2		585	15	600	1200	4.7	
	3	Ø12.5	1		175		175	175	1.7	
	4	Ø8	1		125		125	125	0.5	
	5	Ø8	2	15	1071.9		1087	2174	8.6	
	6	Ø8	2		385	15	400	800	3.2	
	7	Ø10	1		200		200	200	1.2	
	8	Ø5	90	5	70		80	7200		11.3
Total+10%:									29.7	12.4
V 11	1	Ø8	4	15	228.9	15	259	1036	4.1	
	2	Ø5	14	5	70		80	1120		1.8
Total+10%:									4.5	2.0
									Ø5:	0.0
									Ø8:	58.6
									Ø10:	0.0
									Ø12.5:	0.0
									Total:	58.6

Garagem - Nível -2,90
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:50
Escala aberturas 1:50

- NOTAS
- 1 - Concreto Fck 20 MPa na fundação
 - 2 - Concreto Fck 25 MPa em pilares, vigas e lajes
 - 3 - Ao executar as formas, verificar a existência de lajes rebaxadas em relação ao nível indicado. Verificar os cortes.
 - 4 - Conferir sempre os níveis das lajes no projeto arquitetônico.
 - 5 - Em caso de dúvida consultar o Eng. calculista.
 - 6 - Sempre conferir as dimensões e níveis na arquitetura.
 - 7 - Consulte sempre o projeto arquitetônico.

Corte esquemático
Esc.: 1:200



PROJETO	A.R.T. Nº	ENDEREÇO OBRA	
OBRA RESIDENCIAL			
RESPONSÁVEL TÉCNICO (A) ENG. GABRIEL V. GIBRAM		C.R.E.A. 244.002/D	
PROPRIETÁRIO (A)			
CONTEÚDO VIGAS V1 A V11 - Garagem - Nível -2,90			PRANCHA 07