

3º PAVTO
Desenho de vigas
Concreto: C25, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

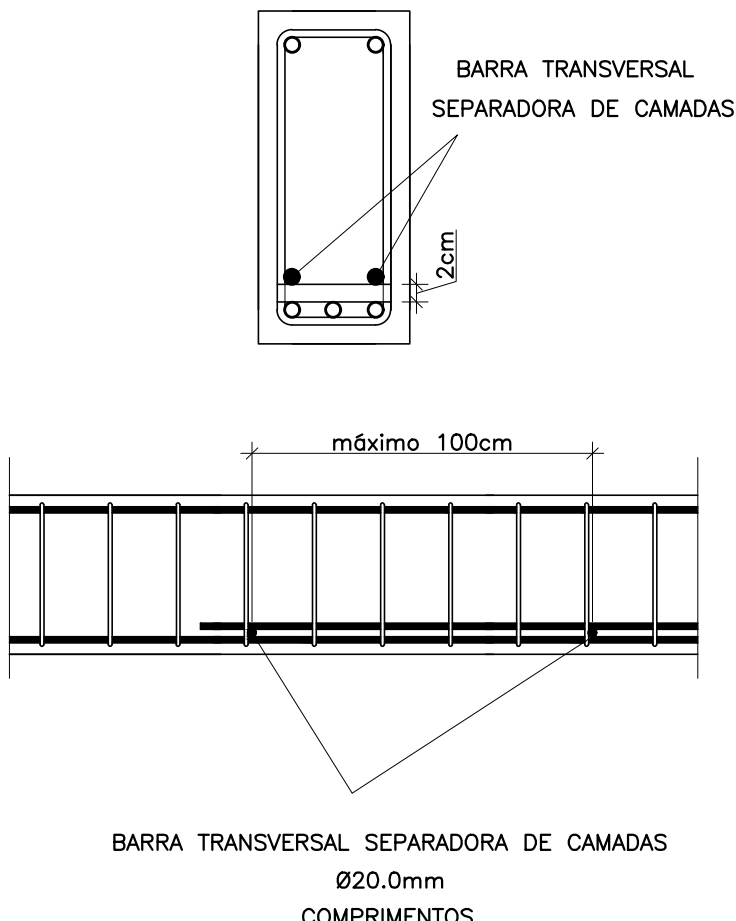
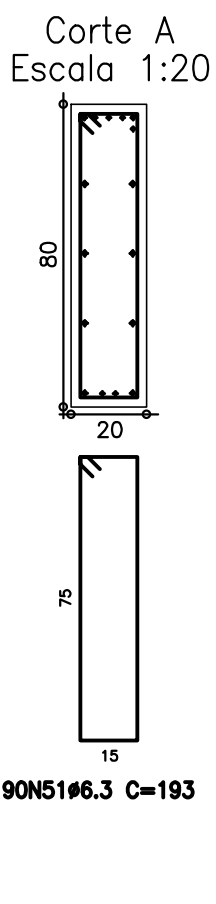
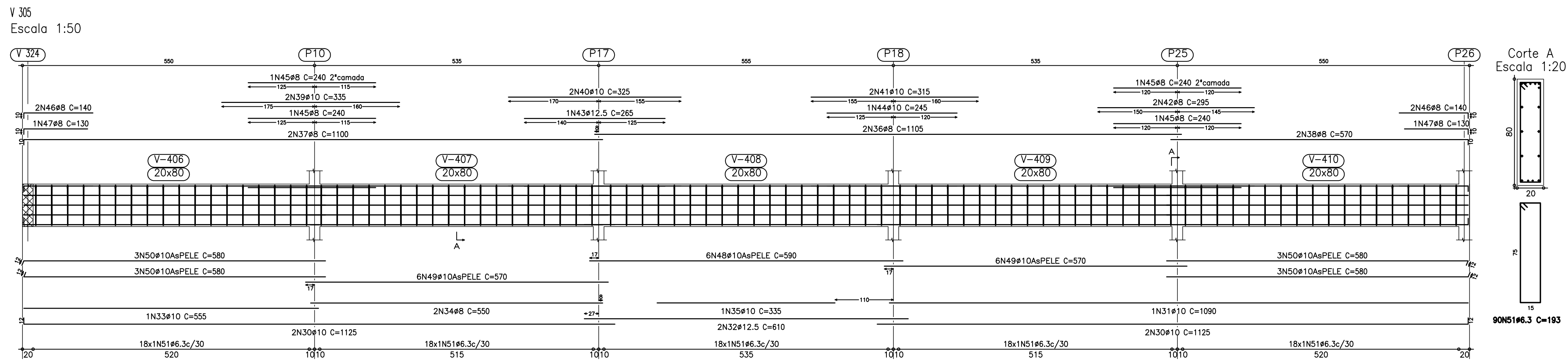
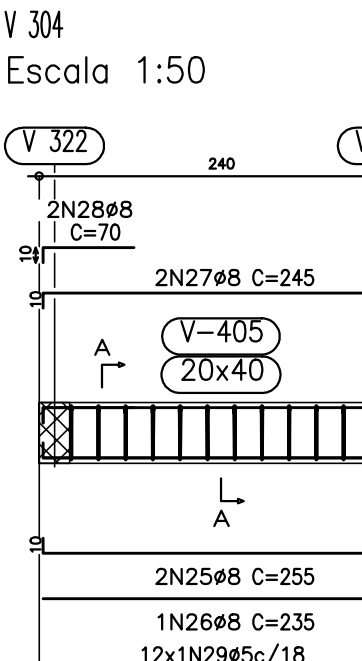
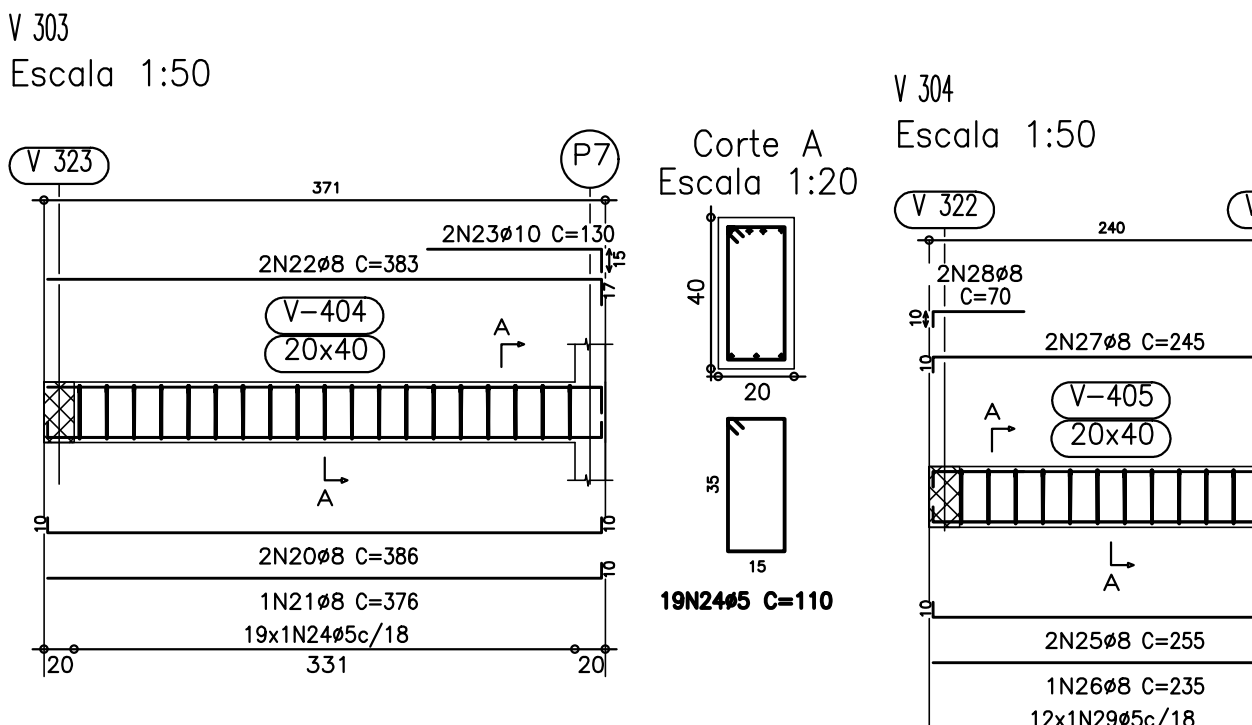
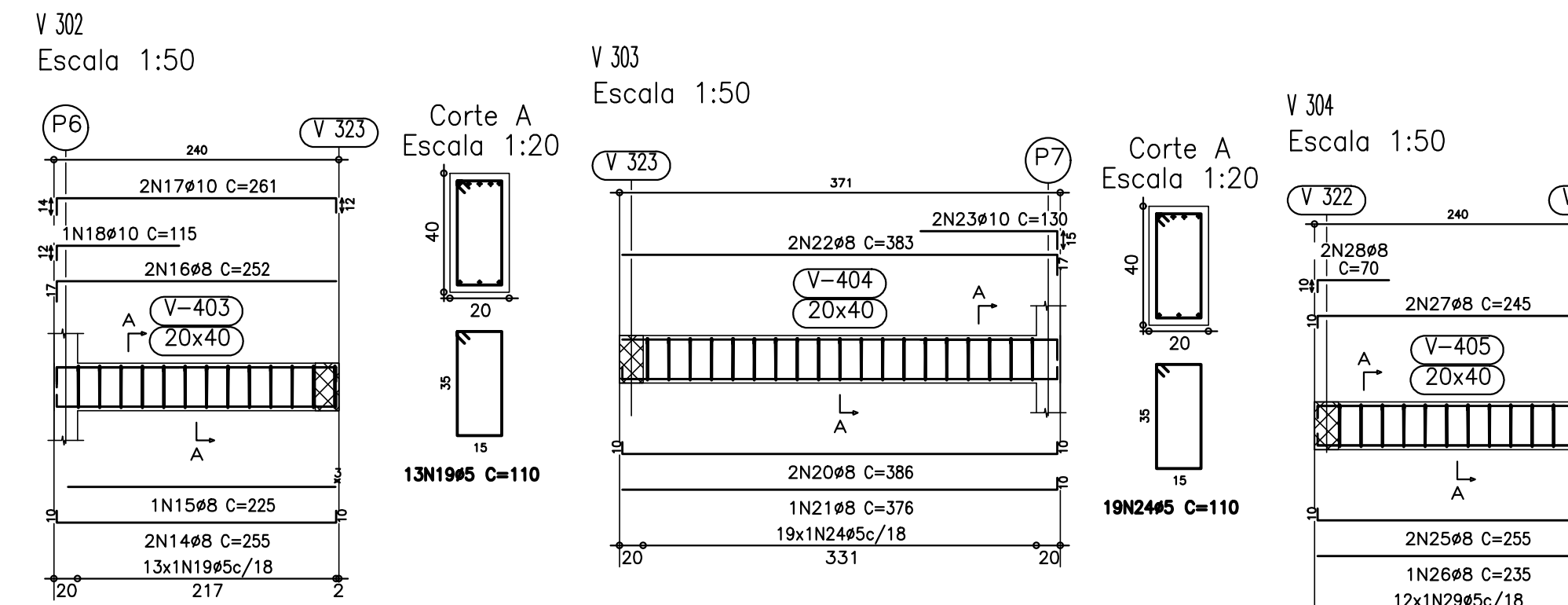
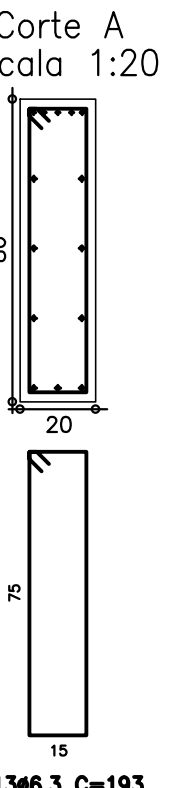
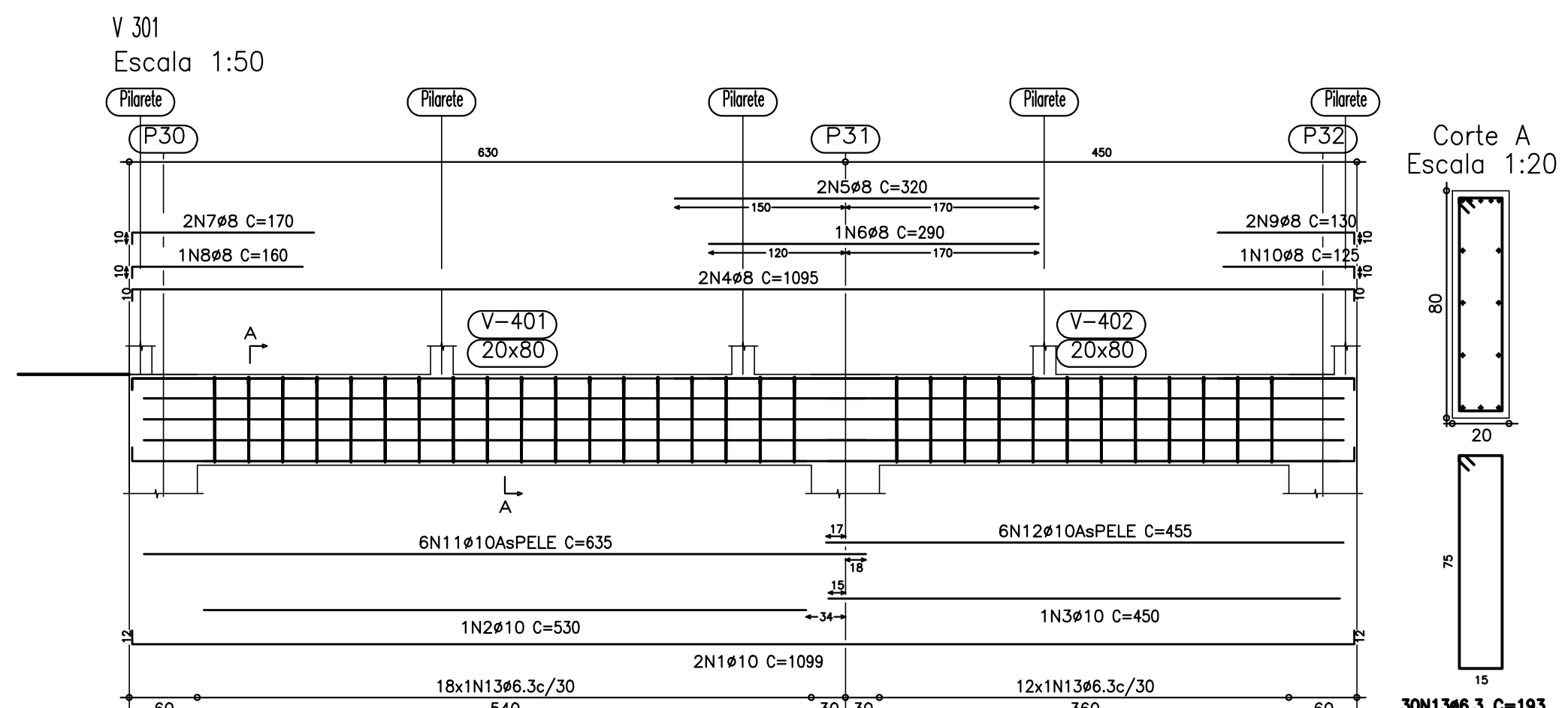
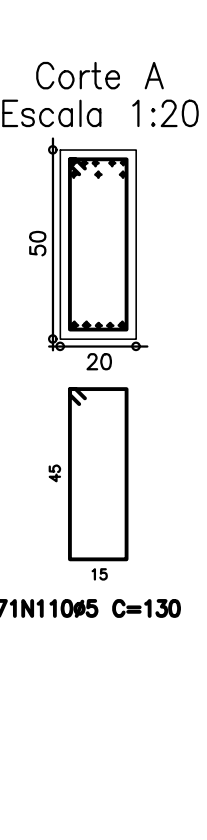
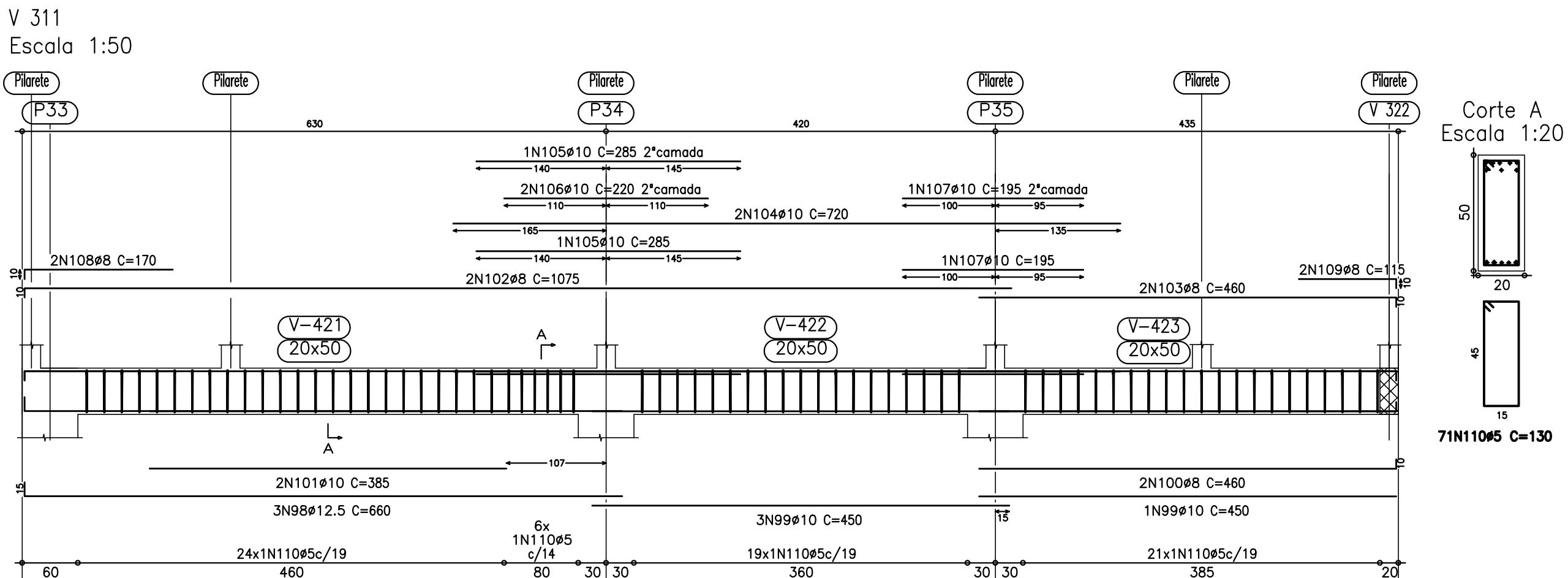
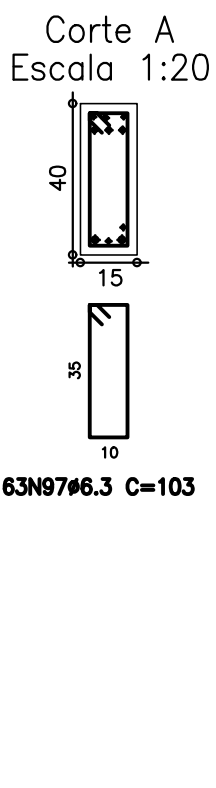
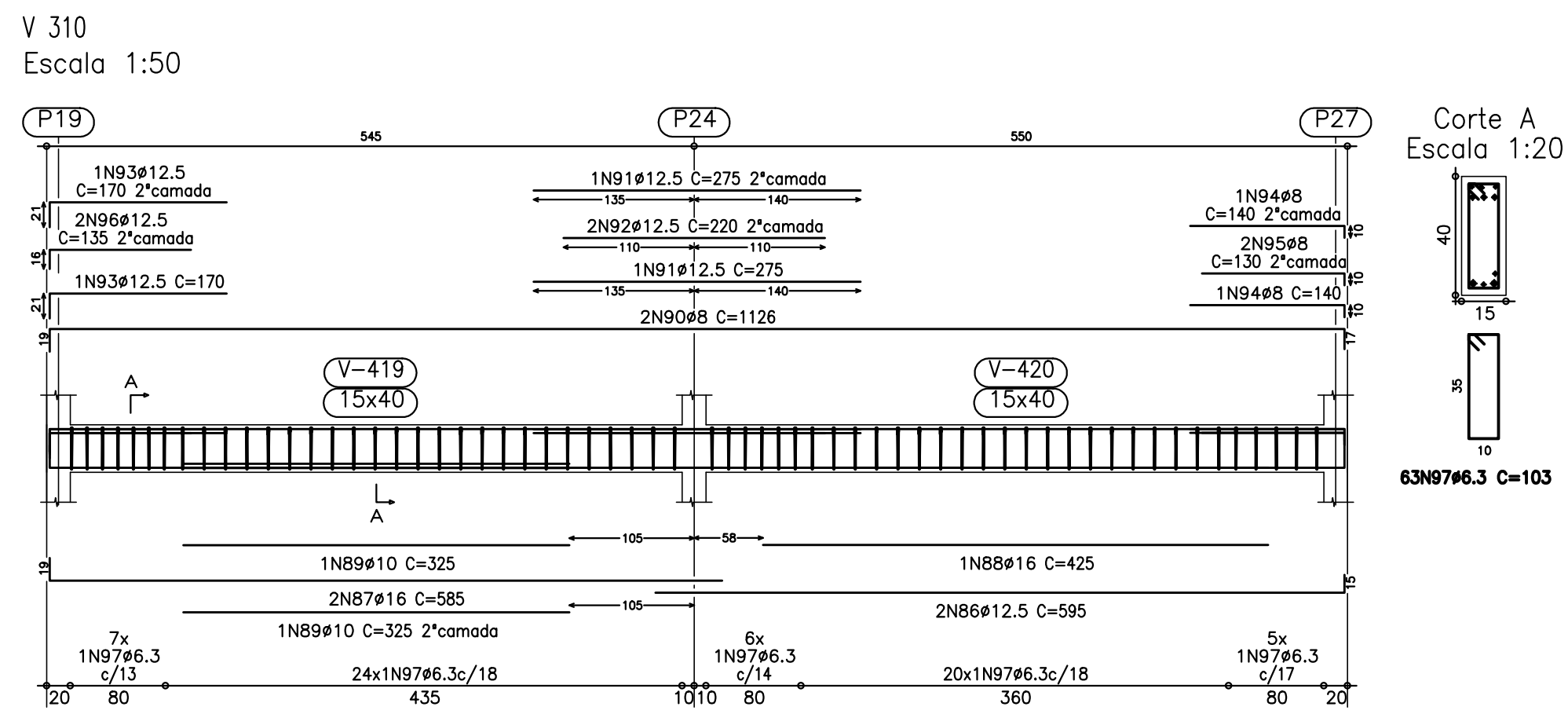
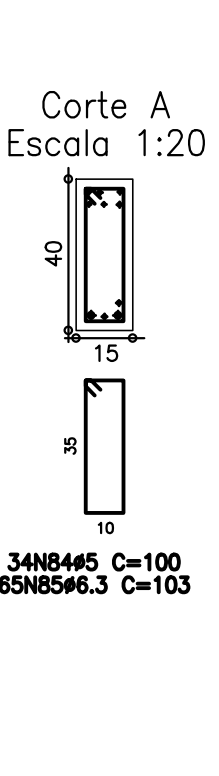
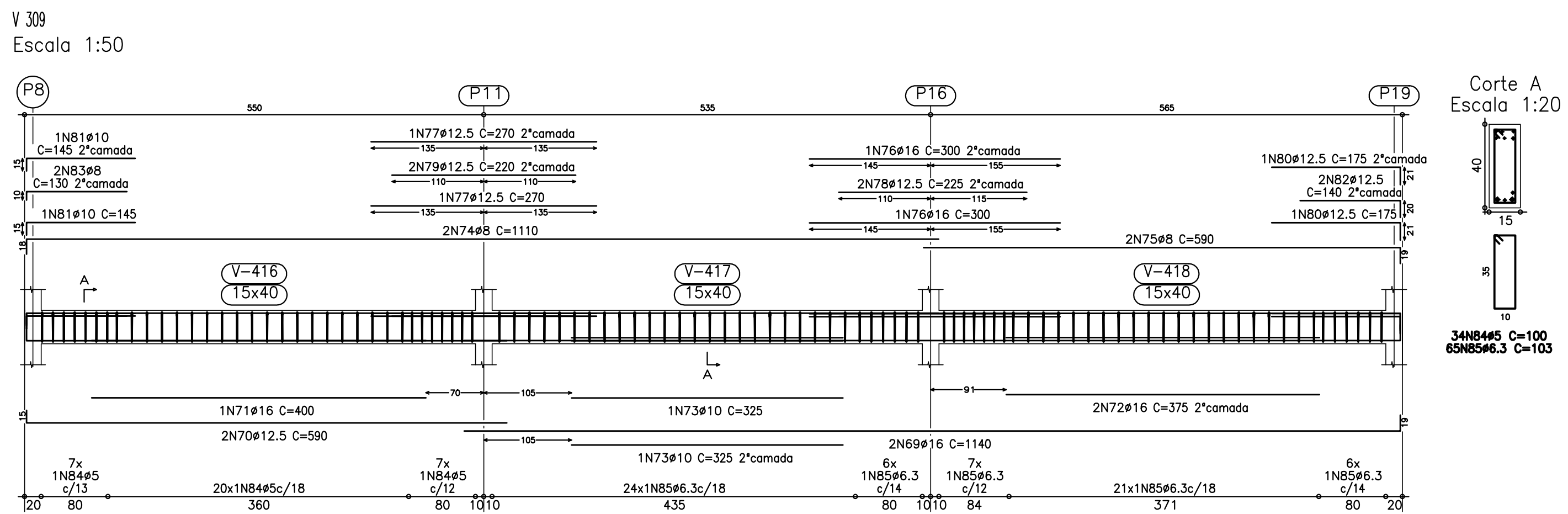
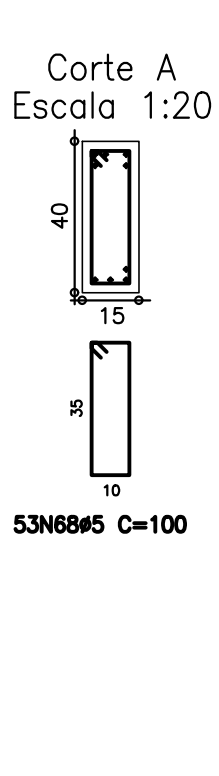
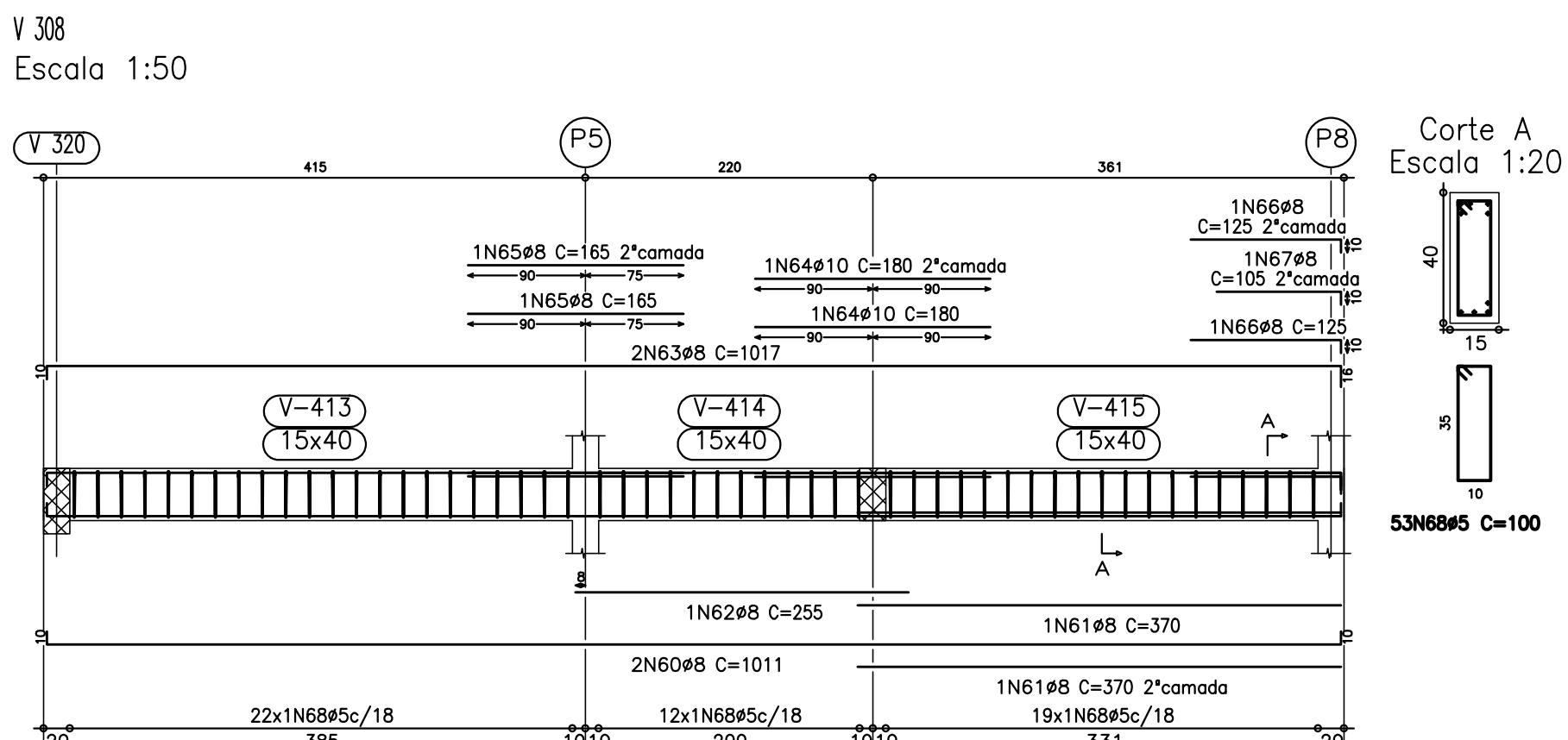
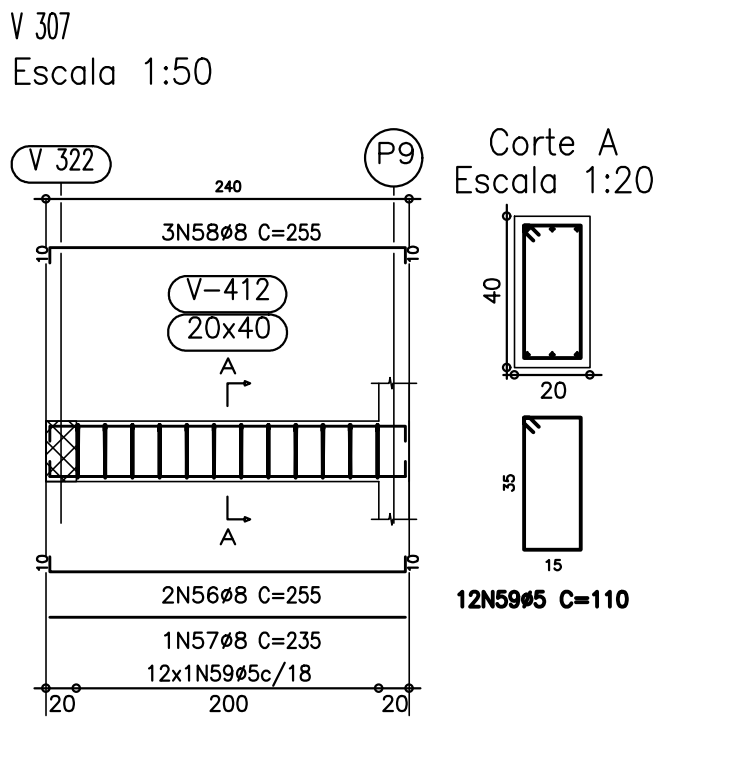
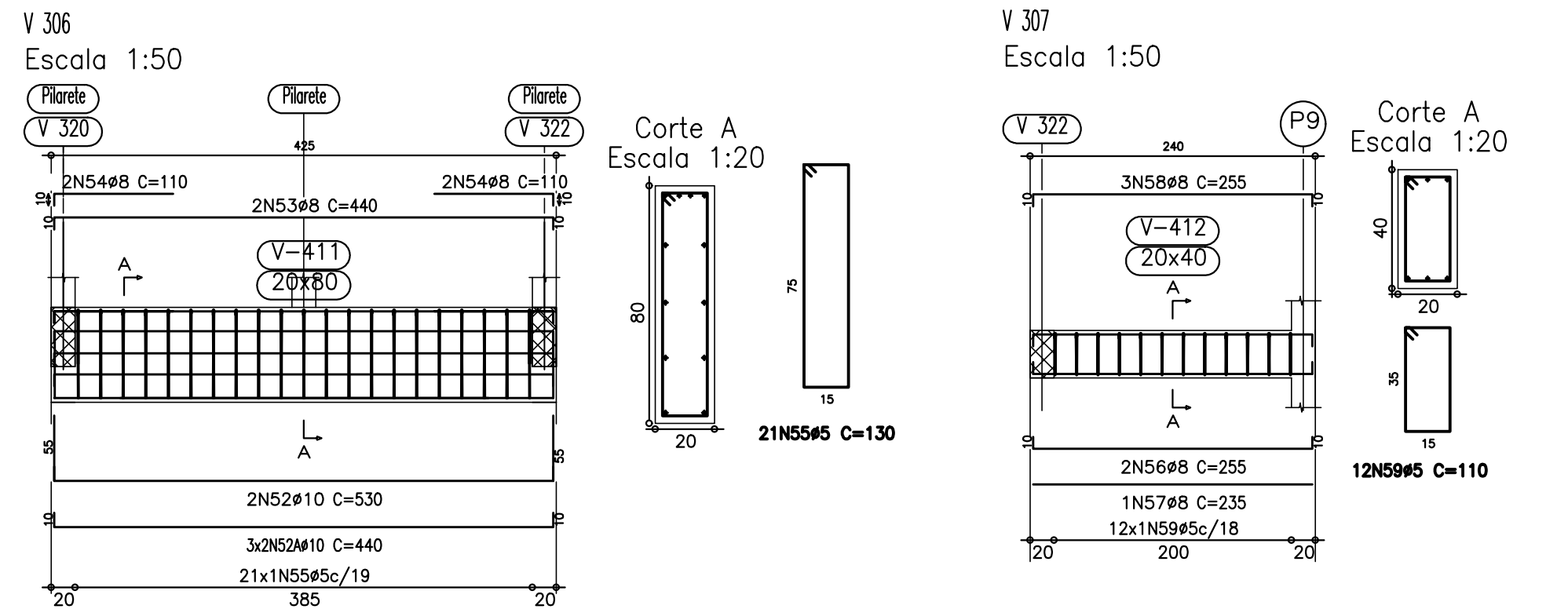
Resumo Aço 3" PAVTO Vigas	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A	622.9	169	
ø6.3	1103.2	476	
ø8	1359.8	939	
ø10	310.5	335	
ø12.5	160.6	277	
ø16	38.4	104	
ø20	1089.4	188	2300
CA-60-B			188
ø5			
Total			2488

Elemento	Pos.	Diam. (°)	Dob. (Ret.) (cm)	Comp. (Tot.) (cm)	CA-50 (A-60) (kg)		
x001	1 ϕ 10	2	12	1075	1999 2198 13.8		
	2 ϕ 8	2	10	520	1050 550 4.3		
	3 ϕ 10	2	10	405	450 200 2.8		
	4 ϕ 8	2	10	1075	1050 450 2.8		
	5 ϕ 8	2	320	320	340 64.5		
	6 ϕ 8	7	10	10	290 1.1		
	7 ϕ 8	2	10	160	170 34.0		
	8 ϕ 8	2	10	160	160 16.8		
	9 ϕ 8	2	10	130	130 26.6		
	10 ϕ 8	1	115	10	125 0.5		
	11 ϕ 10	6	455	455	3810 20.6		
	12 ϕ 10	6	455	455	2730 17.1		
	13 ϕ 6.3 30			193	223 14.3		
Total=1075					99.9		
x002	14 ϕ 8	2	10	235	250 510 2.0		
	15 ϕ 8	2	10	235	250 510 2.0		
	16 ϕ 8	2	17	235	252 504 2.0		
	17 ϕ 10	4	12	10	261 14.4		
	18 ϕ 10	4	12	10	115 11.5		
	19 ϕ 10	4	12	10	115 11.5		
	20 ϕ 8	1.3		110	110 43.0		
Total=1075					9.8		
x003	20 ϕ 8	2	10	366	10	376 77.2	
	21 ϕ 8	1		366	10	376 17.6	
	22 ϕ 8	2	10	386	10	386 20.0	
	23 ϕ 10	2	115	15	130	260 1.6	
	24 ϕ 8	5	19	110	110	260 1.6	
Total=1075					3.3		
x004	25 ϕ 8	2	10	235	250 510 2.0		
	26 ϕ 8	2	10	235	250 510 2.0		
	27 ϕ 8	2	10	235	250 510 2.0		
Total=1075					2.1		
x005	30 ϕ 10	4	12	1113	1125 2550 18.8		
	31 ϕ 10	4	12	1113	1125 2550 18.8		
	32 ϕ 12.5	2	10	610	810 1220 12.0		
	33 ϕ 10	1	10	550	550 55.0		
	34 ϕ 8	2	10	550	550 110.0 4.3		
	35 ϕ 10	3.5	335	335	335 2.1		
	36 ϕ 8	2	1105	1105	2210 8.6		
	37 ϕ 8	2	10	1010	1010 26.6		
	38 ϕ 8	2	560	10	570 1140 4.5		
	39 ϕ 10	2	560	10	570 610 4.2		
	40 ϕ 10	2	325	325	620 6.1		
	41 ϕ 10	2	315	315	630 4.0		
	42 ϕ 8	2	295	295	560 2.3		
	43 ϕ 12.5	1	265	265	265 2.6		
	44 ϕ 10	1	245	245	245 2.6		
	45 ϕ 8	4	240	240	960 3.8		
	46 ϕ 8	4	240	240	960 3.8		
	47 ϕ 8	2	120	10	130 26.0		
	48 ϕ 8	6	590	590	340 22.2		
	49 ϕ 8	6	590	590	340 22.2		
	50 ϕ 10	12	568	12	580 690 37.7		
	51 ϕ 6.3 90			183	137.0 10.0		
Total=1075					282.0		
x006	52 ϕ 10	2	12	530	12	640 888 5.6	
	53 ϕ 10	6	10	10	10	560 10.0	
	54 ϕ 8	2	10	420	10	440 880 5.5	
	54 ϕ 8	4	10	10	10	440 880 5.5	
	55 ϕ 5	21		200	270 33.0		
	55 ϕ 5	21		200	270 33.0		
Total=1075					29.4		
x007	56 ϕ 8	2	10	235	10	245 51.0	
	57 ϕ 8	1	235	235	235 23.0		
	58 ϕ 8	2	10	235	10	245 51.0	
	59 ϕ 5	12		110	110	50 5.0	
	59 ϕ 5	12		110	110	50 5.0	
Total=1075					6.5		
x008	60 ϕ 8	2	10	991	10	1011 2022 9.9	
	61 ϕ 8	2	370	370	740 2.9		
	62 ϕ 8	1	255	255	255 1.0		
	63 ϕ 8	2	991	16	1017 2034 8.0		
	64 ϕ 10	2	180	180	360 2.3		
	65 ϕ 8	2	160	160	320 1.3		
	66 ϕ 8	2	115	10	125 25.0		
	67 ϕ 8	5	95	10	105 24.0		
	68 ϕ 8	5.3		100	5300 8.4		
	68 ϕ 8	5.3		100	5300 8.4		
Total=1075					27.3		
x009	69 ϕ 16	2	1121	19	1140 2260 18.8		
	70 ϕ 12.5	2	15	575	590 1180 11.6		
	71 ϕ 16		400	400	400 6.3		
	72 ϕ 16	2	375	375	750 18.8		
	73 ϕ 10	2	325	325	650 4.7		
	74 ϕ 12.5	2	18	1020	1120 2220 18.8		
	75 ϕ 8	2	571	19	590 1180 4.6		
	76 ϕ 16	2	560	560	1120 8.4		
	77 ϕ 12.5	2	270	270	540 5.3		
	78 ϕ 12.5	2	270	270	540 5.3		
	79 ϕ 12.5	2	220	220	440 4.4		
	80 ϕ 12.5	2	154	21	175 350 3.4		
	81 ϕ 10	2	15	130	145 290 2.8		
	82 ϕ 12.5	2	120	20	140 280 2.7		
	83 ϕ 10	2	120	10	130 260 1.0		
	84 ϕ 5	34		100	3400 14.3		
	85 ϕ 6.3 64			103	6592 16.6		
	Total=1075					5.8	
	x010	86 ϕ 12.5	2	19	580	15	595 1180 11.7
		87 ϕ 16	2	19	580	15	595 1180 11.7
		88 ϕ 10	2	19	425	425 6.7	
		89 ϕ 10	2	325	325	650 4.7	
90 ϕ 10		2	19	1090	1120	2250 18.8	
91 ϕ 12.5		2	275	275	550 5.4		
92 ϕ 12.5		2	420	420	840 4.3		
93 ϕ 12.5		2	21	149	170 340 3.3		
94 ϕ 10		2	10	130	145 290 2.8		
95 ϕ 8		2	120	10	130 260 1.0		
96 ϕ 12.5		2	16	119	130	270 2.8	
97 ϕ 6.3 62				103	6386 15.8		
Total=1075					91.5		
x011	98 ϕ 12.5	2	15	660	1980 19.4		
	99 ϕ 10	4	450	450	1800 11.3		
	100 ϕ 8	2	450	450	900 3.6		
	101 ϕ 10	2	770	770	1540 8.4		
	102 ϕ 8	2	10	1085	1075 210 8.4		
	103 ϕ 10	2	285	285	570 3.6		
	104 ϕ 10	2	720	720	1440 9.0		
	105 ϕ 10	2	285	285	570 3.6		
	106 ϕ 10	2	220	220	440 2.8		
	107 ϕ 10	2	195	195	390 2.4		
	108 ϕ 8	2	10	160	170 34.0		
	109 ϕ 8	2	105	10	115 230 0.9		
	110 ϕ 5	70		110	9100 14.3		
Total=1075					78.2		
Total=1075					45.9		
Total=1075					96.4		
Total=1075					0.9		
Total=1075					158.0		
Total=1075					0.9		
Total=1075					127.2		
Total=1075					104.5		
Total=1075					0.9		
Total=1075					78.74		
Total=1075					45.9		

Nota:

Planta de referência: Prancha 16/64

AVALIAÇÃO DA QUALIDADE DA ESTRUTURA		
RECEBIMENTO PROVISÓRIO		ACEITAÇÃO DEFINITIVA PRANCHA REVISADA.
AVALIADOR/CREA:		RT DO PROJETO ORIGINAL:
BRUNO SILVEIRA MARTINS - 148751/D		KÊNIO ÁVILA FERNANDES
		AVALIADOR
BRUNO SILVEIRA MARTINS - 148751/D		
REVISÃO	DESCRIÇÃO	DATA
00	EMISSÃO INICIAL	15/09/17
01	NADA A REVISAR	
02	NADA A REVISAR	
03	NADA A REVISAR	
04	REVISÃO MUROS EM BLOCO - PRANCHA S/ MODIFICAÇÃO	03/07/18
05	NADA A REVISAR	
06	NADA A REVISAR	
07	LICIT RESIDUAL: SOMENTE NUMERAÇÃO SEM REVISÃO PROJETO	05/05/21
REVISÕES		
MINISTÉRIO PÚBLICO DO ESTADO DE MINAS GERAIS SEDE DAS PROMOTORIAS DE JUSTIÇA DE PATOS DE MINAS		
ENDEREÇO:	ÁREA TERRENO:	
AVENIDA ANGRA DOS REIS, S/N - BAIRRO COPACABANA	10.293,06m²	
PATOS DE MINAS - MG	ÁREA CONSTRUÍDA:	
	2.860,04m²	
PROPRIETÁRIO:	CNPJ:	
	20.971.057/0001-45	
PROCURADORIA GERAL DE JUSTIÇA DO ESTADO DE MINAS GERAIS		
PROJETO DE ESTRUTURA DE CONCRETO ARMADO		
EMPRESA:	CNPJ:	
	14.920.928/0001-07	
PRIMEIRA ENGENHARIA LTDA	CREA:	
RESPONSÁVEIS TÉCNICOS:	MG - 70.918/D	
KÊNIO ÁVILA FERNANDES		
CONTEÚDO:	DATA:	FOLHA:
DETALHAMENTO DE VIGAS - 3º PAVIMENTO	15/09/17	48/64
	ESCALA:	
	INDICADA	



Resumo Aço	Comp. total (m)	Peso+10% (kg)	Total
FIXAÇÃO DAS ARMADURAS DE 2ª CAMADA			
CA-50-A Ø20	5,08	13,8	13,8
Total			13,8

FIXAÇÃO DAS BARRAS DE 2ª CAMADA
DETALHE TÍPICO