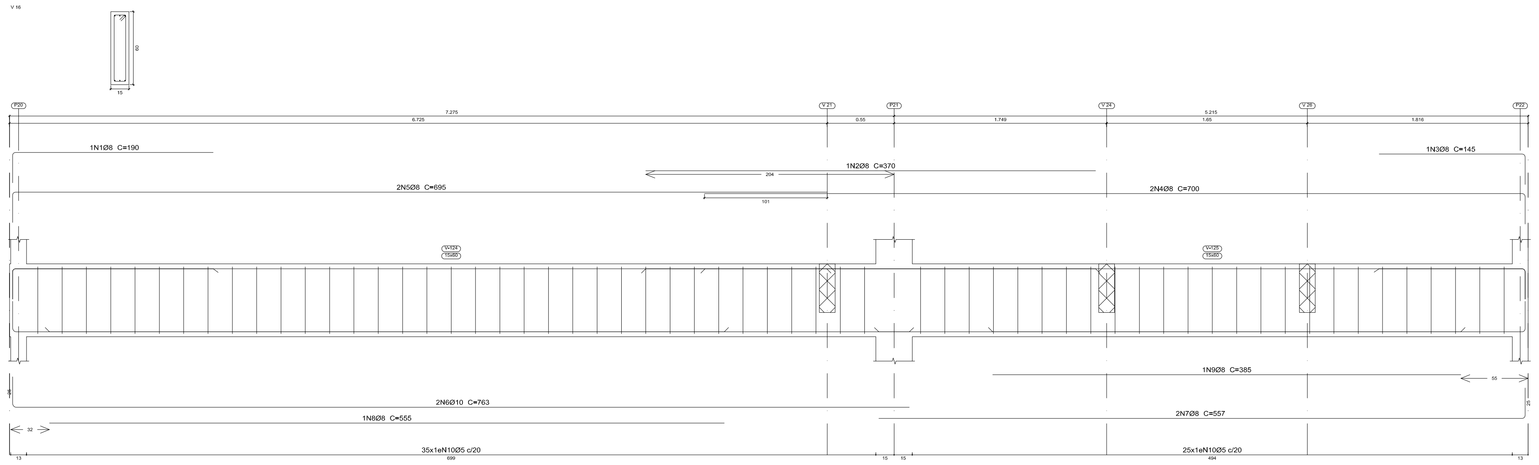
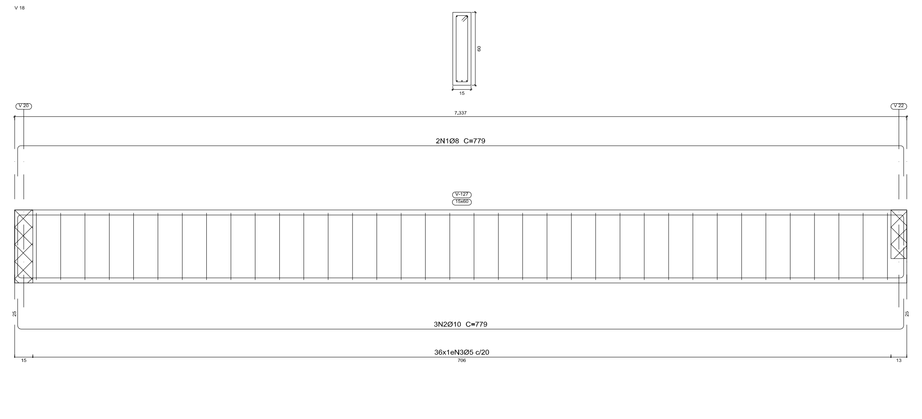
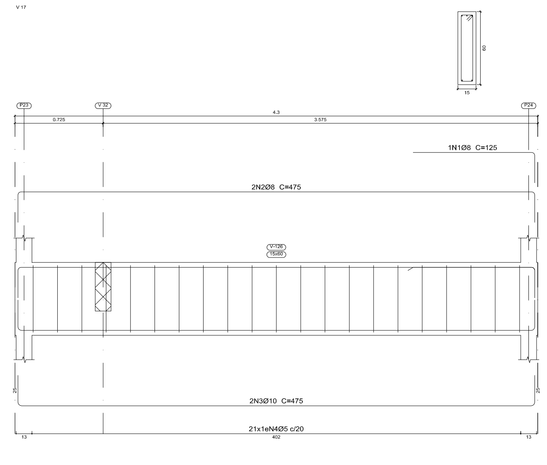
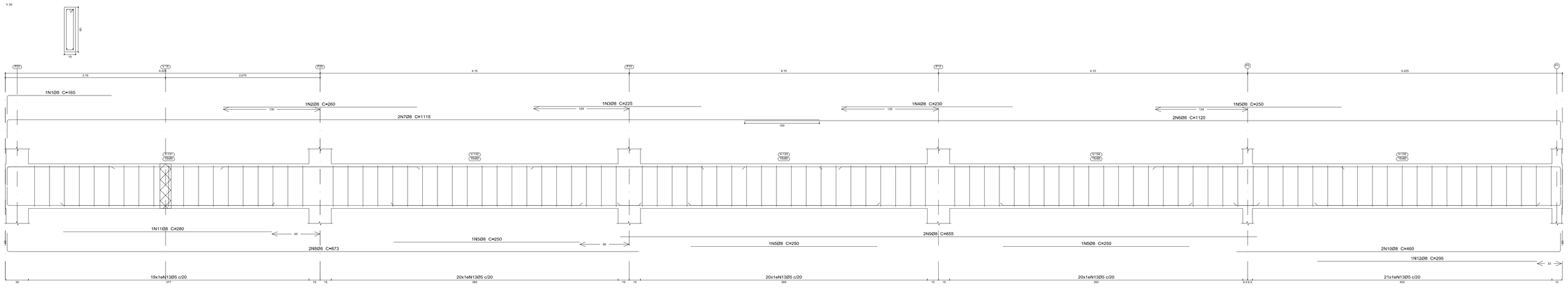
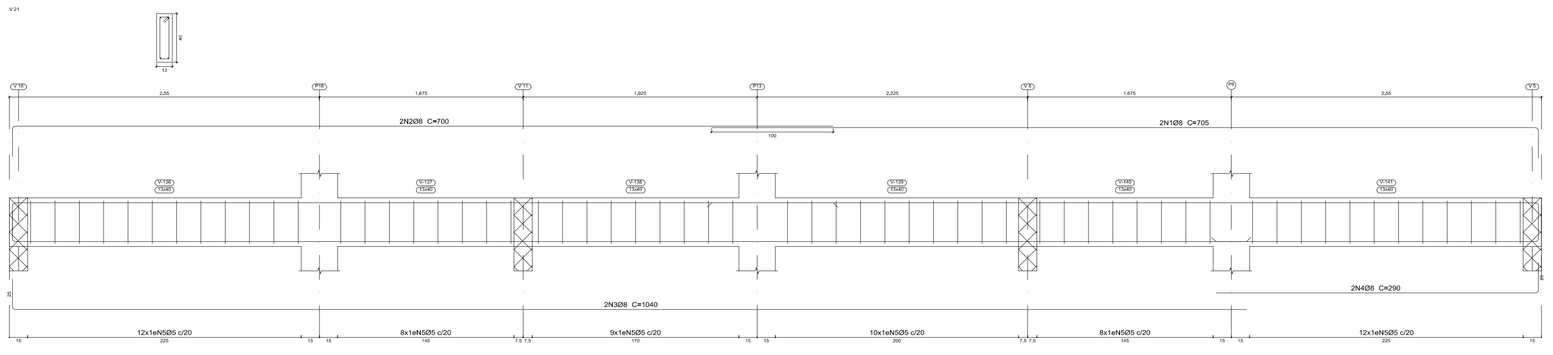
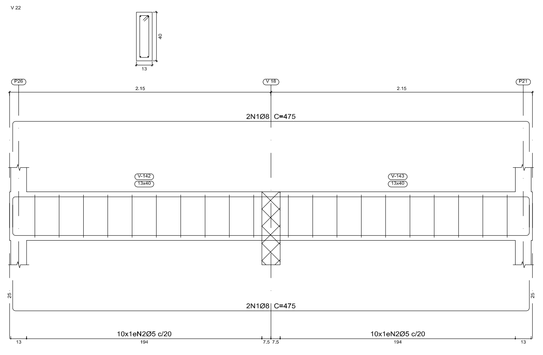


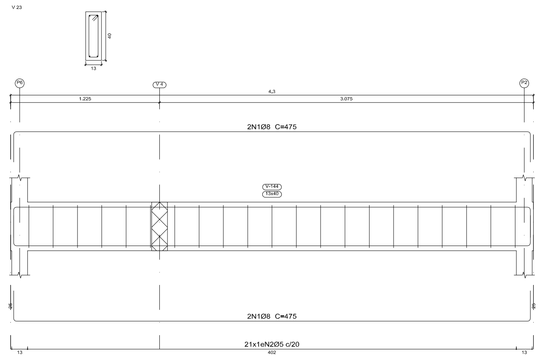






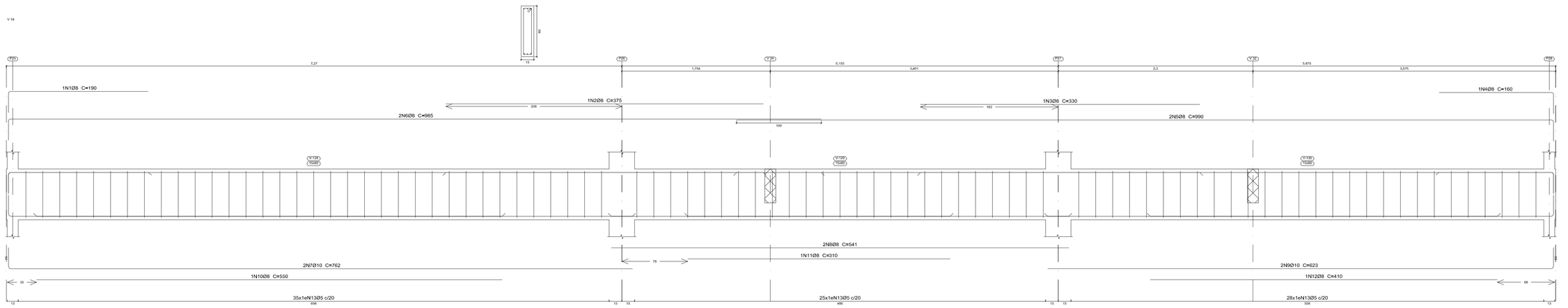




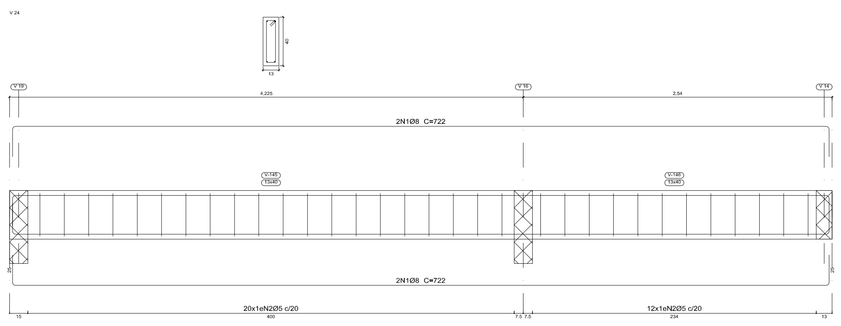


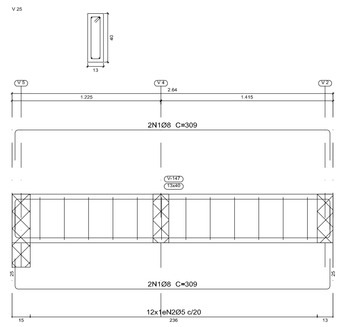
Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 19	1	ø8	1	165 / 10	190	190	0.8	
	2	ø8	1	370 / 10	375	370	1.5	
	3	ø8	1	330 / 10	330	330	1.3	
	4	ø8	1	135 / 10 / 15	160	160	0.6	
	5	ø8	2	965 / 10 / 15	990	1980	7.8	
	6	ø8	2	960 / 10	985	1970	7.8	
	7	ø10	2	70 / 737	762	1524	9.4	
	8	ø8	2	541 / 10	541	1082	4.3	
	9	ø10	2	598 / 10 / 15	623	1246	7.7	
	10	ø8	1	550 / 10	550	550	2.2	
	11	ø8	1	310 / 10	310	310	1.2	
	12	ø8	1	410 / 10	410	410	1.6	
	13	ø5	88	20 / 5 / 8 / 10	138	12144		19.1
						Total+10%:	50.8	21.0
V 20	1	ø8	1	140 / 10	165	165	0.7	
	2	ø8	1	260 / 10	260	260	1.0	
	3	ø8	1	225 / 10	225	225	0.9	
	4	ø8	1	230 / 10	230	230	0.9	
	5	ø8	4	250 / 10	250	1000	3.9	
	6	ø8	2	1095 / 10 / 15	1120	2240	8.8	
	7	ø8	2	1090 / 10	1115	2230	8.8	
	8	ø8	2	70 / 848	873	1746	6.9	
	9	ø8	2	830 / 10	855	1710	6.8	
	10	ø8	2	435 / 10 / 15	460	920	3.6	
	11	ø8	1	280 / 10	280	280	1.1	
	12	ø8	1	295 / 10	295	295	1.2	
	13	ø5	100	20 / 5 / 8 / 10	138	13800		21.7
						Total+10%:	49.1	23.9
V 21	1	ø8	2	680 / 10 / 15	705	1410	5.6	
	2	ø8	2	670 / 10	700	1400	5.5	
	3	ø8	2	70 / 1010 / 10	1040	2080	8.2	
	4	ø8	2	265 / 10 / 15	290	580	2.3	
	5	ø5	59	20 / 5 / 8 / 10	94	5546		8.7
						Total+10%:	23.8	9.6
V 22	1	ø8	4	425 / 10 / 15	475	1900	7.5	
	2	ø5	20	20 / 5 / 8 / 10	94	1880		3.0
						Total+10%:	8.3	3.3
V 23	1	ø8	4	425 / 10 / 15	475	1900	7.5	
	2	ø5	21	20 / 5 / 8 / 10	94	1974		3.1
						Total+10%:	8.3	3.4
V 24	1	ø8	4	672 / 10 / 15	722	2888	11.4	
	2	ø5	32	20 / 5 / 8 / 10	94	3008		4.7
						Total+10%:	12.5	5.2
V 25	1	ø8	4	259 / 10 / 15	309	1236	4.9	
	2	ø5	12	20 / 5 / 8 / 10	94	1128		1.8
						Total+10%:	5.4	2.0
V 26	1	ø8	4	257 / 10 / 15	307	1228	4.8	
	2	ø5	12	20 / 5 / 8 / 10	94	1128		1.8
						Total+10%:	5.3	2.0
V 27	1	ø8	4	425 / 10 / 15	475	1900	7.5	
	2	ø8	1	115 / 10	115	115	0.5	
	3	ø5	24	20 / 5 / 8 / 10	94	2256		3.5
						Total+10%:	8.8	3.9
						ø5:	0.0	74.3
						ø8:	153.5	0.0
						ø10:	18.8	0.0
						Total:	172.3	74.1

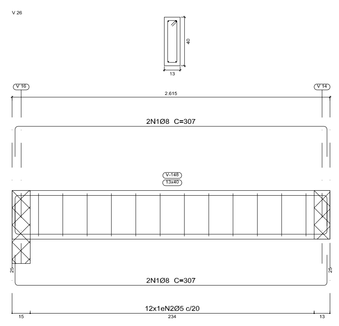
Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 16	1	ø8	1	165 / 10	190	190	0.8	
	2	ø8	1	370 / 10	370	370	1.5	
	3	ø8	1	120 / 10 / 15	145	145	0.6	
	4	ø8	2	670 / 10 / 15	700	1400	5.5	
	5	ø8	2	670 / 10	695	1390	5.5	
	6	ø10	2	70 / 738	763	1526	9.4	
	7	ø8	2	532 / 10 / 15	557	1114	4.4	
	8	ø8	1	555 / 10	555	555	2.2	
	9	ø8	1	365 / 10	385	385	1.5	
	10	ø5	60	20 / 5 / 8 / 10	138	8280		13.0
						Total+10%:	34.5	14.3
V 17	1	ø8	1	100 / 10 / 15	125	125	0.5	
	2	ø8	2	420 / 10 / 15	475	950	3.8	
	3	ø10	2	70 / 425 / 10	475	950	5.9	
	4	ø5	21	20 / 5 / 8 / 10	138	2898		4.5
						Total+10%:	11.2	5.0
V 18	1	ø8	2	729 / 10 / 15	779	1558	6.2	
	2	ø10	3	70 / 729 / 10	779	2337	14.4	
	3	ø5	36	20 / 5 / 8 / 10	138	4968		7.8
						Total+10%:	22.7	8.6
V 30	1	ø8	4	425 / 10 / 15	475	1900	7.5	
	2	ø5	21	20 / 5 / 8 / 10	94	1974		3.1
						Total+10%:	8.3	3.4
						ø5:	0.0	31.3
						ø8:	44.0	0.0
						ø10:	32.7	0.0
						Total:	76.7	31.3

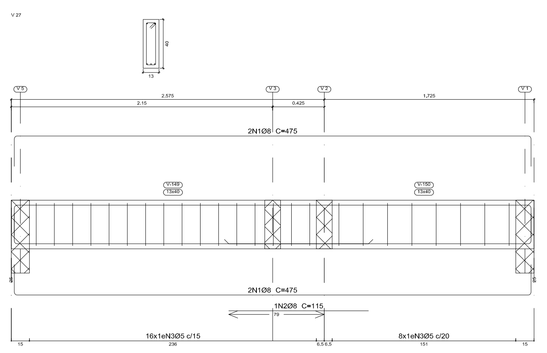


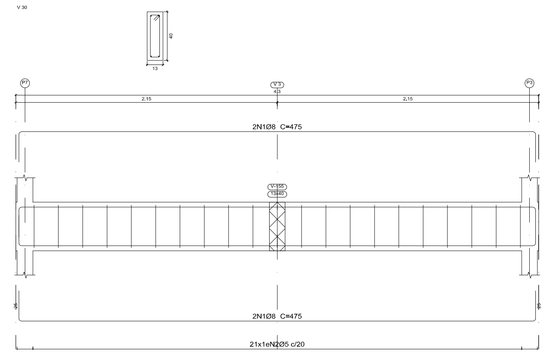
Térreo
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50
Aço dos estribos: CA-60
Escala vigas 1:25
Escala seções 1:25
Escala aberturas 1:25











P.M.B.M. | SECRETARIA MUNICIPAL DE PLANEJAMENTO URBANO

PROJETO ESTRUTURAL

FOLHA : 8/19

DESCRIÇÃO : DETALHAMENTO DAS VIGAS BALDRAMES

PROPRIETÁRIO : PREFEITURA MUNICIPAL DE BARRA MANSA

LOCAL : VILA URSULINO

QUADRO DE ÁREAS

DATA: 18/11/2022

SELO DE APROVAÇÃO PMBM

SECRETÁRIO	AUTOR DO PROJETO	DESENHO
EROS DOS SANTOS	ENG.º ARLENIO P. DE OLIVEIRA CREA/RJ 2018107043	ENG.º ARLENIO P. DE OLIVEIRA
REVISÃO 1	REVISÃO 2	Nº ART/RRT:
REVISÃO 3	REVISÃO 4	Nº DO PROJETO:

CARIMBO

APROVAÇÃO SMPU