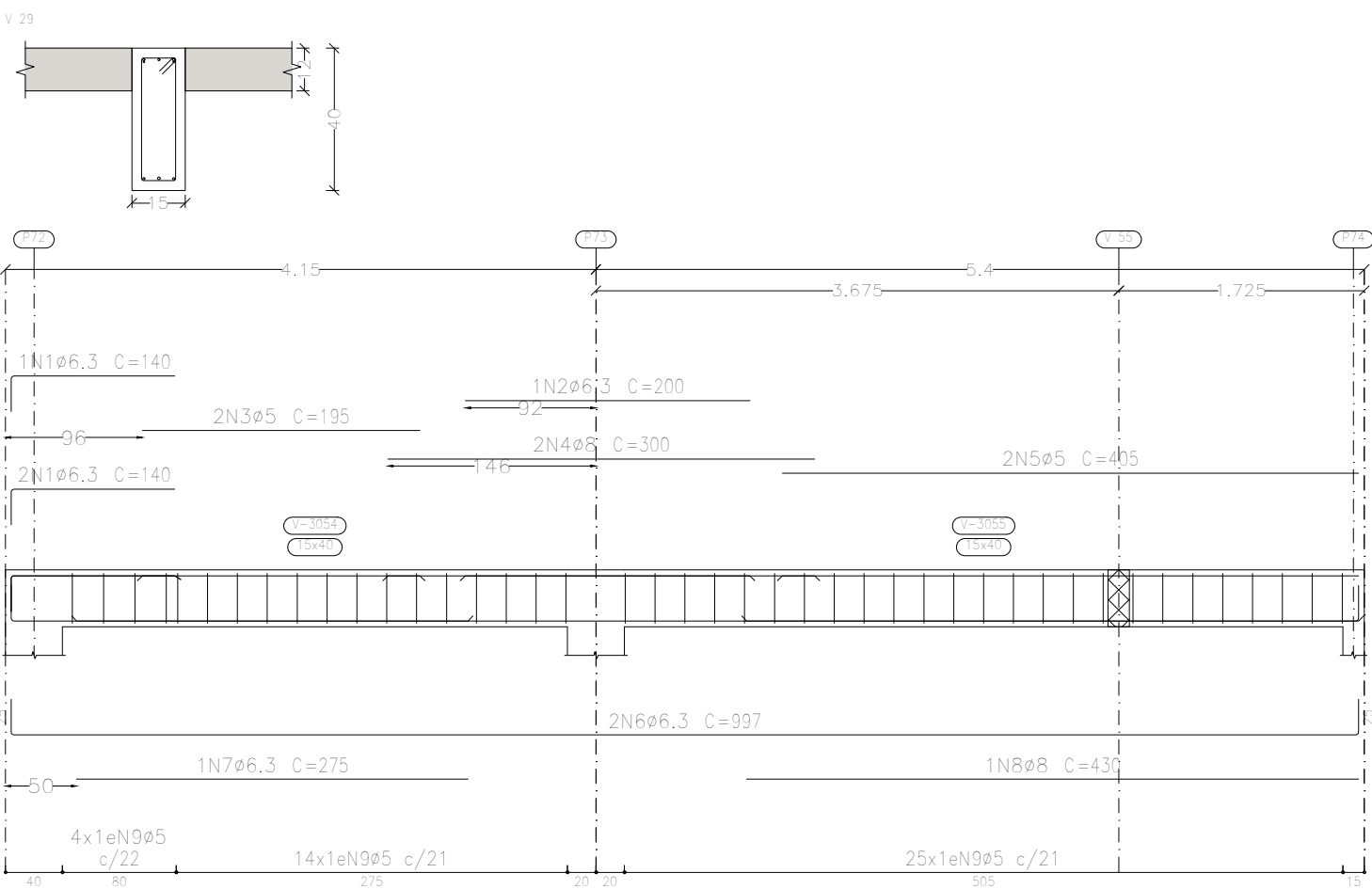
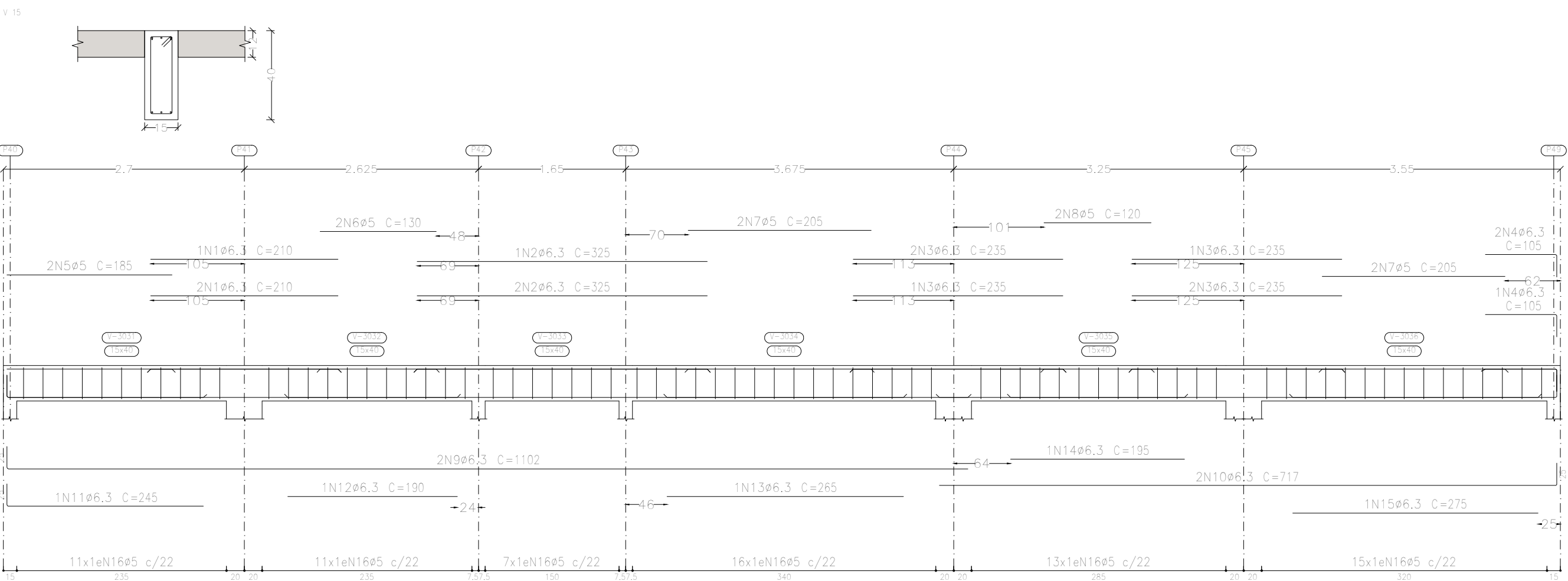
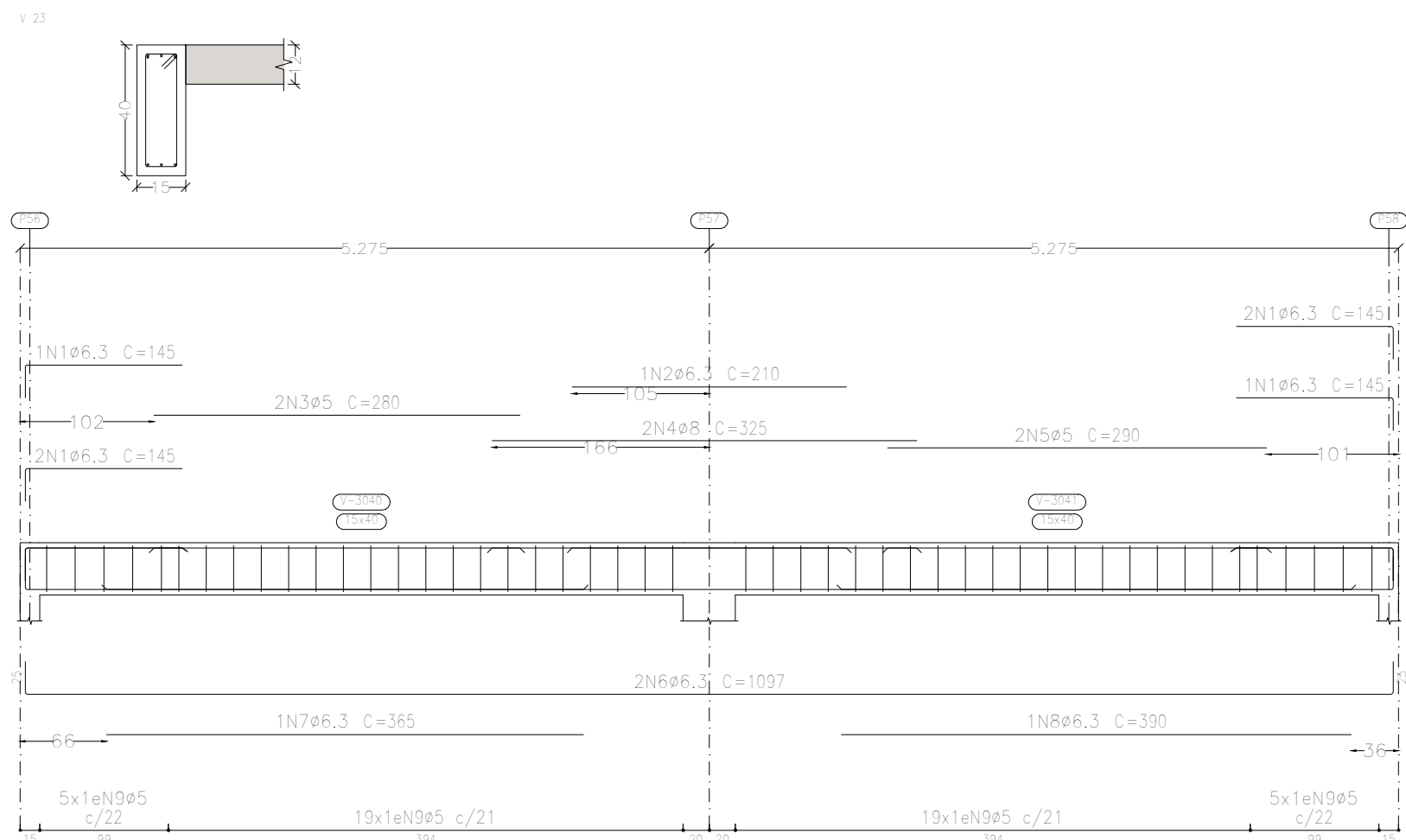
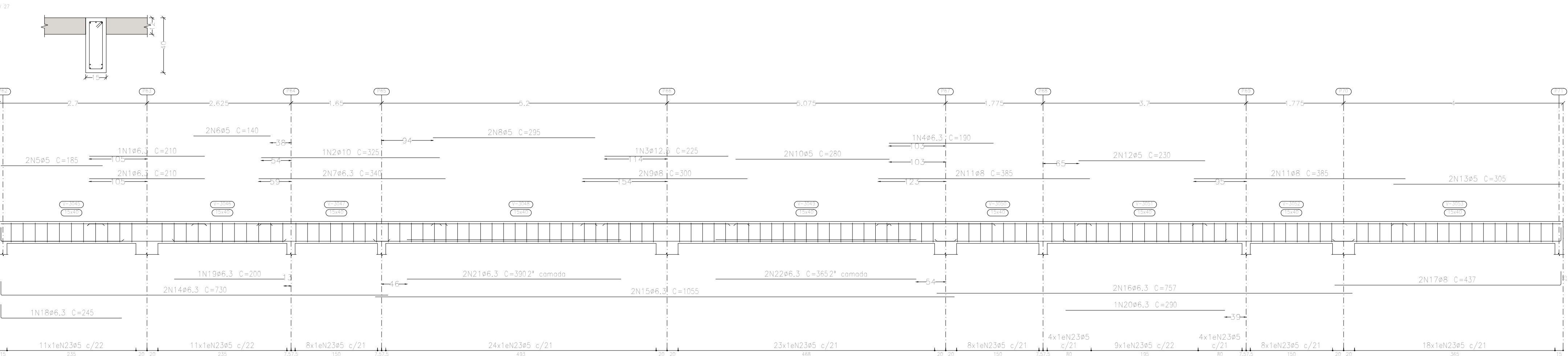
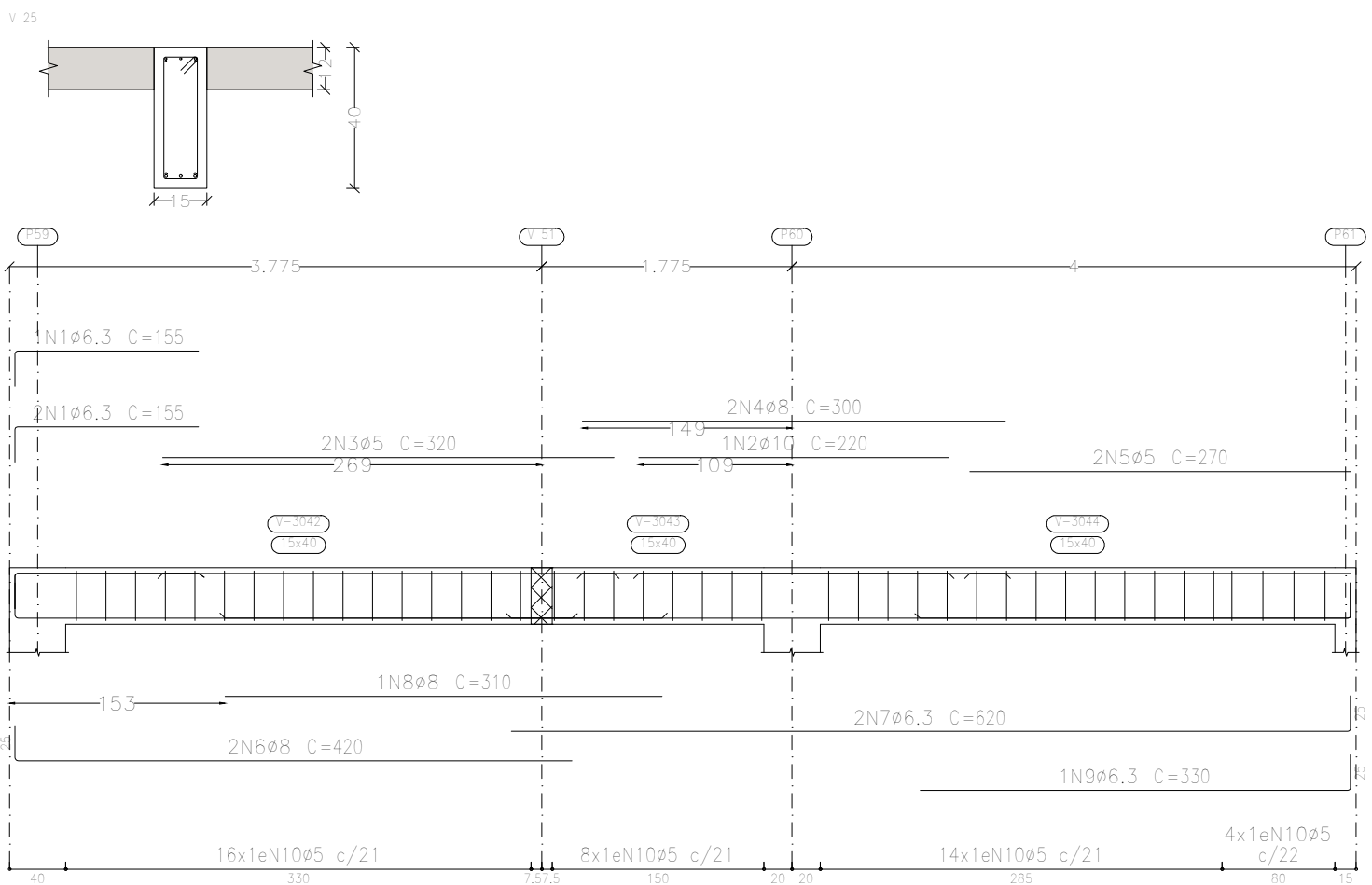
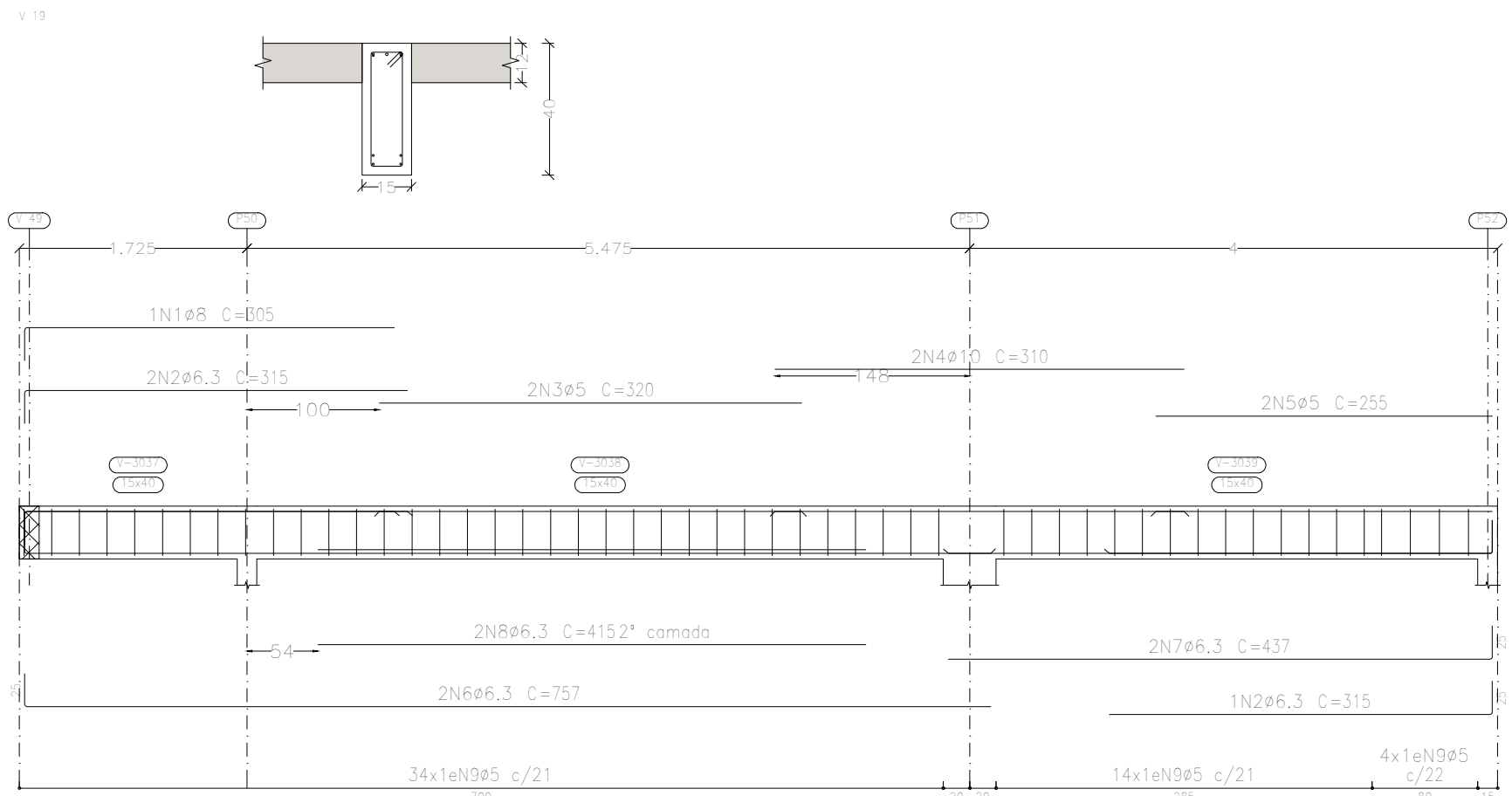


Piso 3
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:20
Escala aberturas 1:20



Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 29	1	ø6.3	3		140	420	1.0	
	2	ø6.3	1		200	200	0.5	
	3	ø5	2		195	390		0.6
	4	ø8	2		300	600	2.4	
	5	ø5	2		405	810		1.3
	6	ø6.3	2		997	1994	4.9	
	7	ø6.3	1		275	275	0.7	
	8	ø8	1		430	430	1.7	
	9	ø5	43		98	4214		6.6
Total+10%:						12.3	9.4	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 14	1	ø6.3	1		205	205	0.5	
	2	ø10	1		275	275	1.7	
	3	ø8	2		320	640	2.5	
	4	ø5	2		320	640		1.0
	5	ø6.3	2		310	620	1.5	
	6	ø5	2		255	510		0.8
	7	ø6.3	2		757	1514	3.7	
	8	ø6.3	2		437	874	2.1	
	9	ø8	1		405	405	1.6	
	10	ø6.3	1		315	315	0.8	
	11	ø5	52		98	5096		8.0
Total+10%:						15.8	10.8	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 19	1	ø8	1		305	305	1.2	
	2	ø6.3	3		315	945	2.3	
	3	ø5	2		320	640		1.0
	4	ø10	2		310	620	3.8	
	5	ø5	2		255	510		0.8
	6	ø6.3	2		757	1514	3.7	
	7	ø6.3	2		437	874	2.1	
	8	ø6.3	2		415	830	2.0	
	9	ø5	52		98	5096		8.0
Total+10%:						16.6	10.8	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 23	1	ø6.3	6		145	870	2.1	
	2	ø6.3	1		210	210	0.5	
	3	ø5	2		280	560		0.9
	4	ø8	2		325	650	2.6	
	5	ø5	2		290	580		0.9
	6	ø6.3	2		1097	2194	5.4	
	7	ø6.3	1		365	365	0.9	
	8	ø6.3	1		390	390	1.0	
	9	ø5	48		98	4704		7.4
Total+10%:						13.8	10.1	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 25	1	ø6.3	3		155	465	1.1	
	2	ø10	1		220	220	1.4	
	3	ø5	2		320	640		1.0
	4	ø8	2		300	600	2.4	
	5	ø5	2		270	540		0.8
	6	ø8	2		420	840	3.3	
	7	ø6.3	2		620	1240	3.0	
	8	ø8	1		310	310	1.2	
	9	ø6.3	1		330	330	0.8	
	10	ø5	42		98	4116		6.5
Total+10%:						14.5	9.1	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 27	1	ø6.3	3		210	630	1.5	
	2	ø10	1		325	325	2.0	
	3	ø12.5	1		225	225	2.2	
	4	ø6.3	1		190	190	0.5	
	5	ø5	2		185	370		0.6
	6	ø5	2		140	280		0.4
	7	ø6.3	2		340	680	1.7	
	8	ø5	2		295	590		0.9
	9	ø8	2		300	600	2.4	
	10	ø5	2		280	560		0.9
V 15	11	ø8	4		385	1540	6.1	
	12	ø5	2		230	460		0.7
	13	ø5	2		305	610		1.0
	14	ø6.3	2		730	1460	3.6	
	15	ø6.3	2		1055	2110	5.2	
	16	ø6.3	2		757	1514	3.7	
	17	ø8	2		437	874	3.5	
	18	ø6.3	1		245	245	0.6	
	19	ø6.3	1		200	200	0.5	
	20	ø6.3	1		290	290	0.7	
	21	ø6.3	2		390	780	1.9	
	22	ø6.3	2		365	730	1.8	
	23	ø5	128		98	12544		19.7
Total+10%:						41.7	26.6	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 15	1	ø6.3	3		210	630	1.5	
	2	ø6.3	3		325	975	2.4	
	3	ø6.3	6		235	1410	3.5	
	4	ø6.3	3		105	315	0.8	
	5	ø5	2		185	370		0.6
	6	ø5	2		130	260		0.4
	7	ø5	4		205	820		1.3
	8	ø5	2		120	240		0.4
	9	ø6.3	2		1102	2204	5.4	
	10	ø6.3	2		717	1434	3.5	
	11	ø6.3	1		245	245	0.6	
	12	ø6.3	1		190	190	0.5	
	13	ø6.3	1		265	265	0.8	
	14	ø6.3	1		195	195	0.5	
	15	ø6.3	1		275	275	0.7	
Total+10%:						22.0	15.3	

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V 15	1	ø6.3	3		210	630	1.5	
	2	ø6.3	3		325	975	2.4	
	3	ø6.3	6		235	1410	3.5	
	4	ø6.3	3		105	315	0.8	
	5	ø5	2		185	370		0.6
	6	ø5	2		130	260		0.4
	7	ø5	4		205	820		1.3
	8	ø5	2		120	240		0.4
	9	ø6.3	2		1102	2204	5.4	
	10	ø6.3	2		717	1434	3.5	
	11	ø6.3	1		245	245	0.6	
	12	ø6.3	1		190	190	0.5	
	13	ø6.3	1		265	265	0.8	
	14	ø6.3	1		195	195	0.5	
	15	ø6.3	1		275	275	0.7	
Total+10%:						22.0	15.3	

	9	ø6,3	2		1102	2204	5,4	
	10	ø6,3	2		717	1434	3,5	
	11	ø6,3	1		245	245	0,6	
	12	ø6,3	1		190	190	0,5	
	13	ø6,3	1		265	265	0,6	
	14	ø6,3	1		195	195	0,5	
	15	ø6,3	1		275	275	0,7	
	16	ø5	73		98	7154		11,2
						Total=103%	22,0	15,3
						ø5=	0,0	92