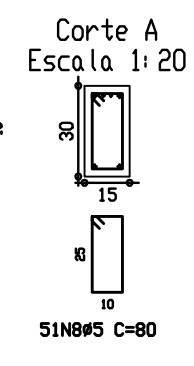
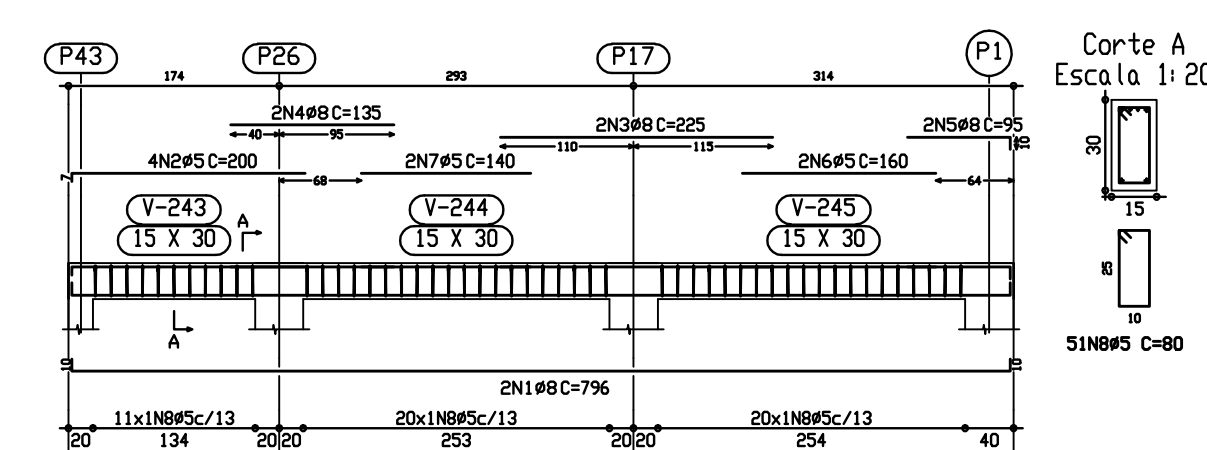


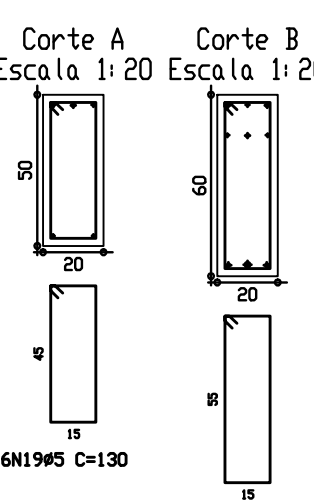
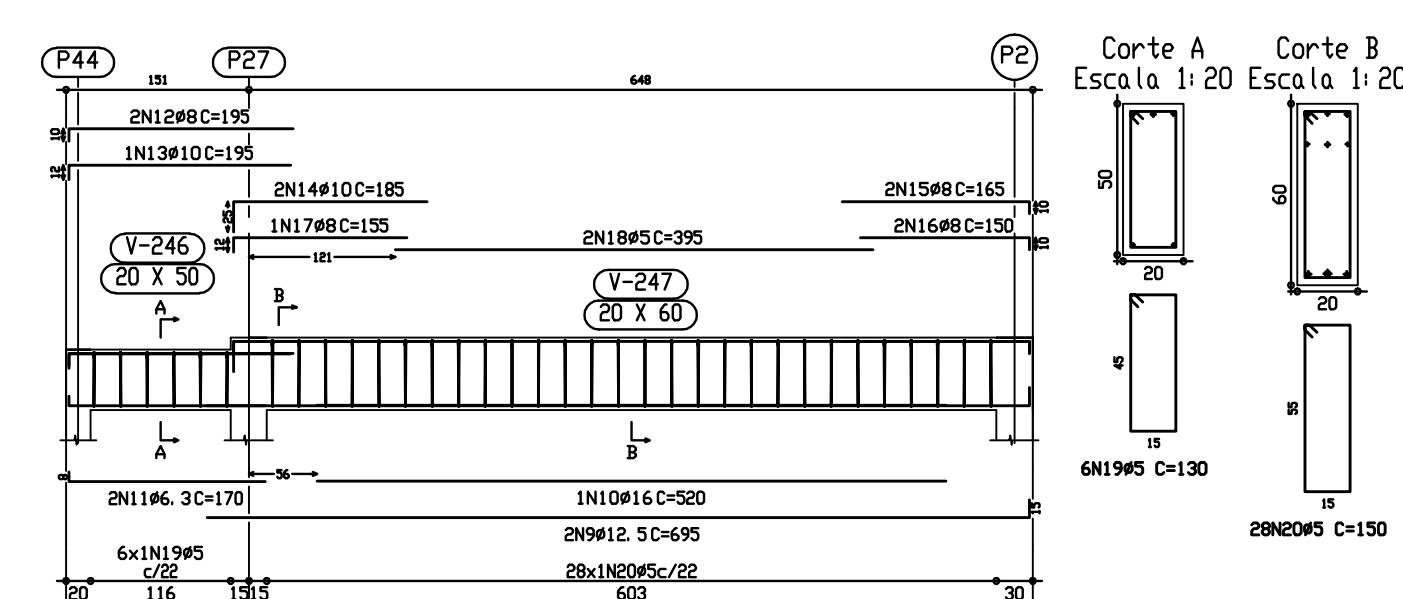
Pórtico 7  
Escala 1:50



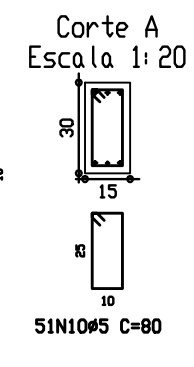
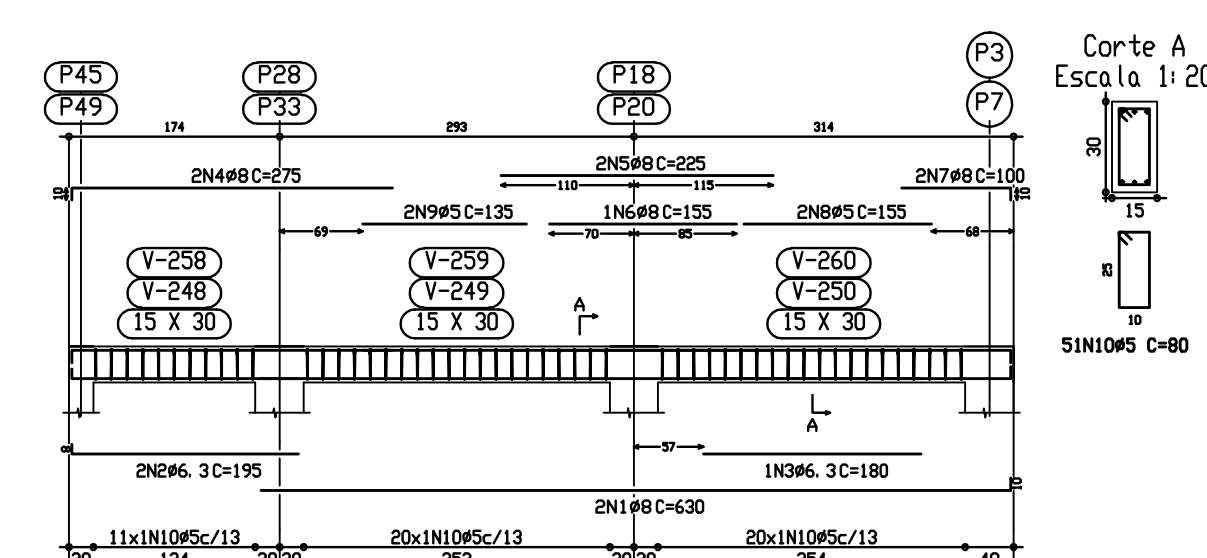
TE10  
Desenho de vigas  
Betoão C20, em geral  
Aço CA-50-A e CA-60-B  
Escala pórticos 1:50  
Escala seções 1:20

Elemento	Pos.	Diam.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Tota (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 7	1	#8	2	776	10	796	1592	6.2	1.3
	2	#8	2	193	10	203	800	1.8	0.4
	3	#8	2	225	10	235	800	1.8	0.4
	4	#8	2	193	10	203	800	1.8	0.4
	5	#8	2	65	10	75	190	0.7	0.4
	6	#5	2	160	10	170	320	0.5	0.4
	7	#5	2	140	10	150	300	0.4	0.4
	8	#5	2	80	10	90	400	0.6	0.4
Total+10%							10.8	9.9	
Pórtico 8	9	#12	3	660	15	675	1320	13.6	
	10	#16	3	520	15	535	1040	8.2	
	11	#6	3	162	10	172	340	0.8	
	12	#8	10	185	10	195	370	1.5	
	13	#10	12	163	10	173	320	1.2	
	14	#10	25	160	10	170	320	2.3	
	15	#8	18	155	10	165	300	1.3	
	16	#8	12	140	10	150	300	1.2	
	17	#8	12	143	10	153	300	1.2	
	18	#5	2	395	10	405	790	1.2	
	19	#5	2	130	10	140	280	0.6	
20	#5	2	150	10	160	320	0.6		
Total+10%							33.8	9.9	
	#5	0.0	19.4						
	#6	3	0.9						
	#8	15	0.0						
	#10	3	0.0						
	#12	5	0.0						
	#16	9	0.0						
	Total		44.6						

Pórtico 8  
Escala 1:50



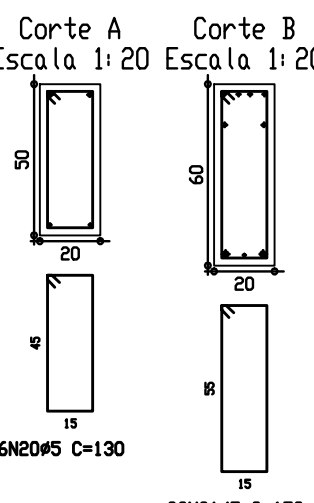
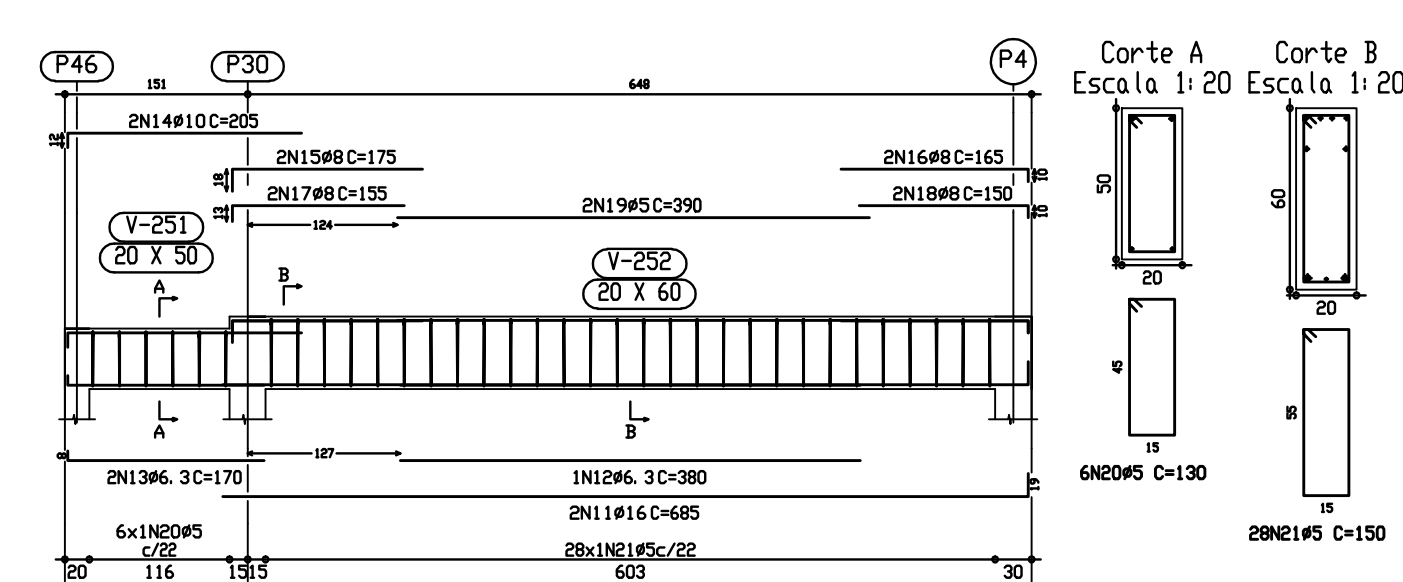
Pórtico 9  
Escala 1:50



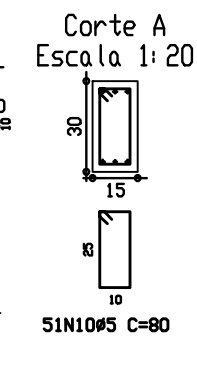
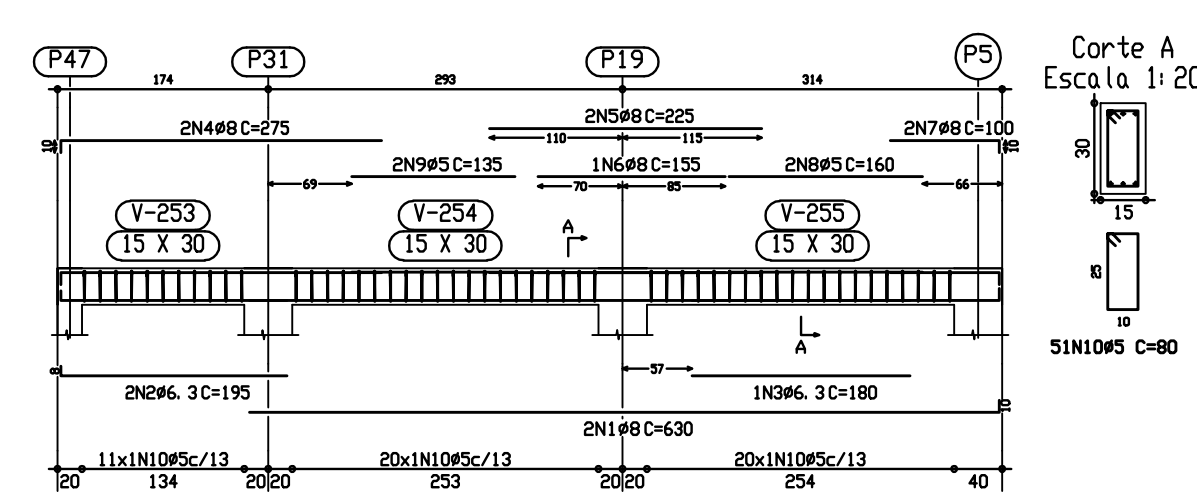
TE10  
Desenho de vigas  
Betoão C20, em geral  
Aço CA-50-A e CA-60-B  
Escala pórticos 1:50  
Escala seções 1:20

Elemento	Pos.	Diam.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Tota (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 9/Pórtico 13	1	#8	2	620	10	630	1260	4.9	
	2	#6	3	187	10	197	390	1.0	
	3	#8	2	180	10	190	380	0.4	
	4	#8	2	265	10	275	550	2.2	
	5	#8	2	225	10	235	450	1.8	
	6	#8	2	155	10	165	320	0.6	
	7	#8	2	100	10	110	200	0.8	
	8	#5	2	175	10	185	350	0.8	
	9	#5	2	135	10	145	270	0.4	
	10	#5	2	80	10	90	400	0.4	
Total+10%							12.9	8.0	
Pórtico 10	11	#16	3	666	15	681	1330	21.3	
	12	#6	3	380	10	390	760	0.9	
	13	#6	3	162	10	172	340	0.8	
	14	#10	12	193	10	203	410	2.6	
	15	#8	18	157	10	167	310	1.4	
	16	#8	12	125	10	135	250	1.3	
	17	#8	13	142	10	152	310	1.2	
	18	#8	12	140	10	150	300	1.2	
	19	#5	2	390	10	400	780	1.2	
	20	#5	2	130	10	140	280	0.6	
	21	#5	2	150	10	160	320	0.6	
Total+10%							34.0	9.9	
	#5	0.0	25.9						
	#6	3	5.0						
	#8	28	0.0						
	#10	2	0.0						
	#16	23	0.0						
	Total		59.8						

Pórtico 10  
Escala 1:50



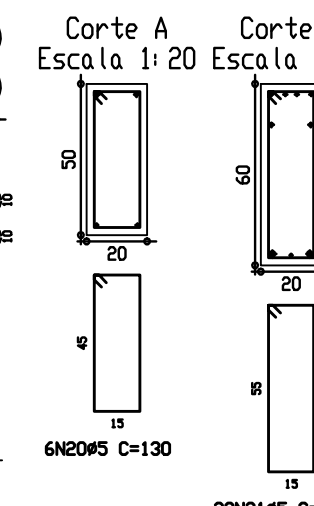
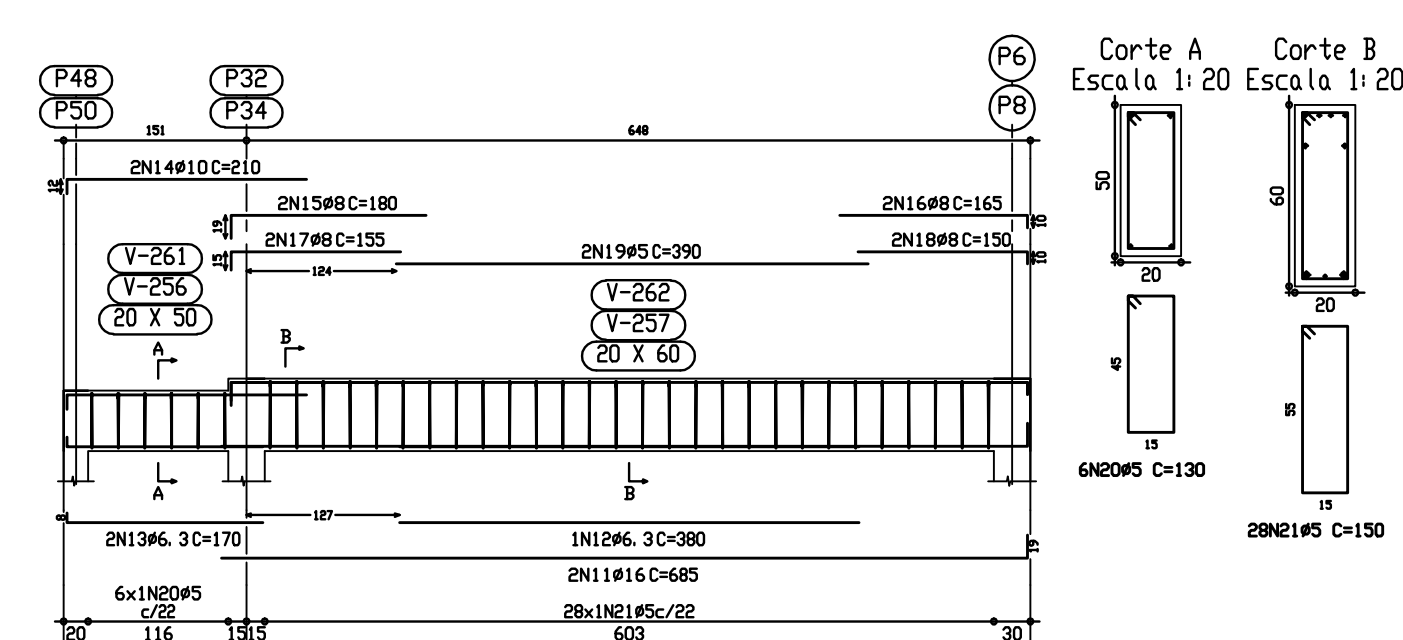
Pórtico 11  
Escala 1:50



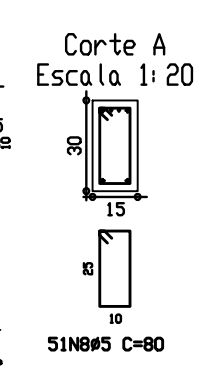
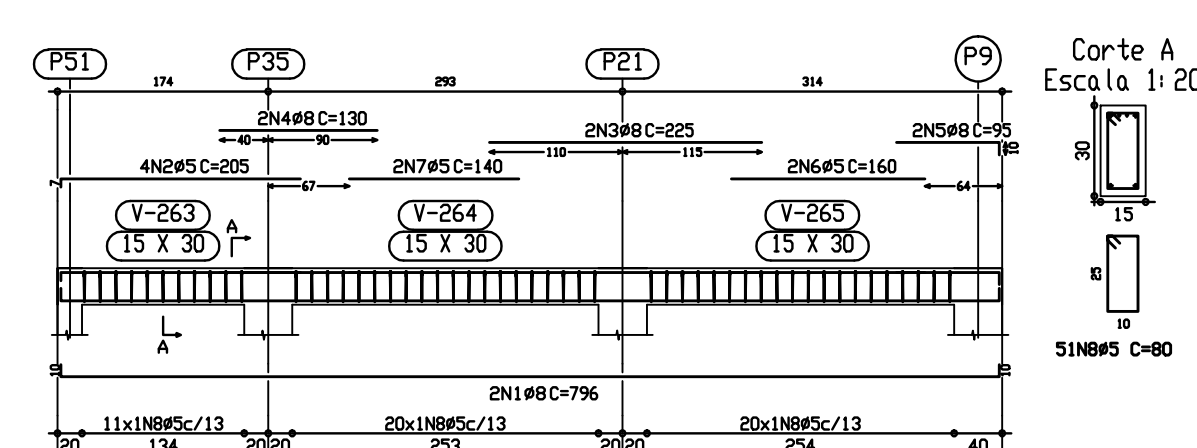
TE10  
Desenho de vigas  
Betoão C20, em geral  
Aço CA-50-A e CA-60-B  
Escala pórticos 1:50  
Escala seções 1:20

Elemento	Pos.	Diam.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Tota (cm)	CA-50-A (Kg)	CA-60-B (Kg)
Pórtico 11	1	#8	2	620	10	630	1260	4.9	
	2	#6	3	187	10	197	390	1.0	
	3	#6	3	180	10	190	380	0.4	
	4	#8	2	265	10	275	550	2.2	
	5	#8	2	225	10	235	450	1.8	
	6	#8	2	155	10	165	320	0.6	
	7	#8	2	100	10	110	200	0.8	
	8	#5	2	175	10	185	350	0.8	
	9	#5	2	135	10	145	270	0.4	
	10	#5	2	80	10	90	400	0.4	
Total+10%							12.9	8.0	
Pórtico 12/Pórtico 14	11	#16	3	666	15	681	1330	21.3	
	12	#6	3	380	10	390	760	0.9	
	13	#6	3	162	10	172	340	0.8	
	14	#10	12	193	10	203	410	2.6	
	15	#8	19	161	10	171	320	1.4	
	16	#8	12	155	10	165	300	1.2	
	17	#8	15	140	10	150	310	1.2	
	18	#8	12	140	10	150	300	1.2	
	19	#5	2	390	10	400	780	1.2	
	20	#5	2	130	10	140	280	0.6	
	21	#5	2	150	10	160	320	0.6	
Total+10%							34.0	9.9	
	#5	0.0	27.8						
	#6	3	5.2						
	#8	28	0.0						
	#10	3	0.0						
	#16	47	0.0						
	Total		80.9						

Pórtico 12  
Pórtico 14  
Escala 1:50



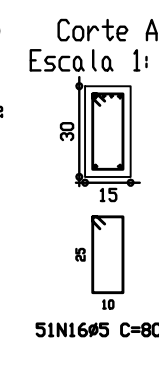
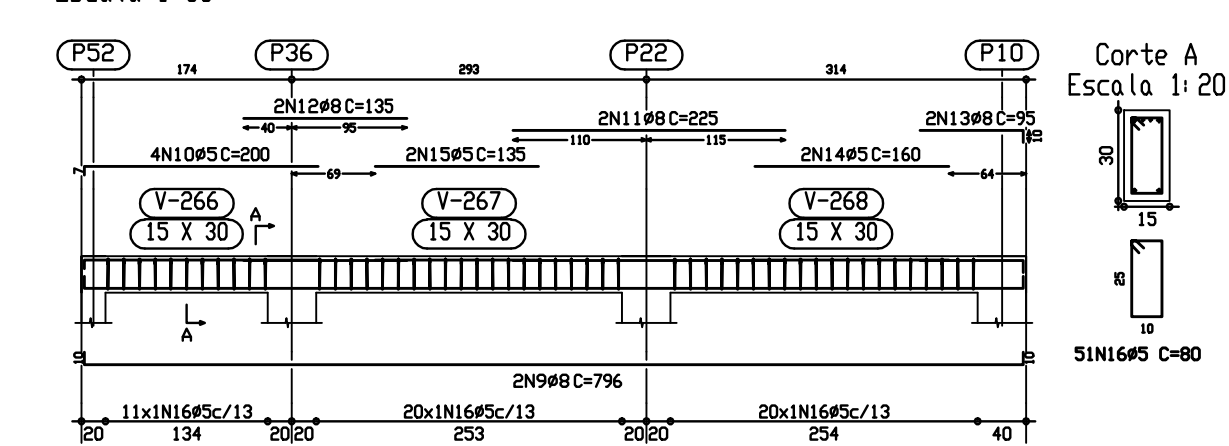
Pórtico 15  
Escala 1:50



TE10  
Desenho de vigas  
Betoão C20, em geral  
Aço CA-50-A e CA-60-B  
Escala pórticos 1:50  
Escala seções 1:20

Elemento	Pos.	Diam.	Pat. (cm)	Recta (cm)	Pat. (cm)	Comp. (cm)	Tota (cm)	CA-50-A (Kg)	CA-60-B (Kg)	
Pórtico 15	1	#8	2	776	10	796	1592	6.2	1.3	
	2	#6	3	187	10	197	390	1.0		
	3	#8	2	180	10	190	380	0.4		
	4	#8	2	265	10	275	550	2.2		
	5	#8	2	225	10	235	450	1.8		
	6	#8	2	155	10	165	320	0.6		
	7	#5	2	140	10	150	300	0.4		
Total+10%							10.7	9.5		
Pórtico 16	9	#8	2	776	10	796	1592	6.2	1.3	
	10	#5	2	200	10	210	400	0.8		
	11	#8	2	225	10	235	450	1.8		
	12	#8	2	125	10	135	270	1.1		
	13	#8	2	85	10	95	190	0.7		
	14	#5	2	160	10	170	320	0.5		
	15	#5	2	150	10	160	300	0.4		
	16	#5	2	80	10	90	400	0.4		
	Total+10%							10.8	9.5	
		#5	0.0	19.0						
		#8	21	0.0						
	Total		21.5							

Pórtico 16  
Escala 1:50



Ministério da Educação

**FNDE** Fundo Nacional de Desenvolvimento da Educação

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**ESPAÇO EDUCATIVO URBANO II - 06 SALAS DE AULA**

ENDEREÇO: DIVERSOS

PROPRIETÁRIO: FUNDO DE FORTALECIMENTO PARA A ESCOLA

AUTOR DO PROJETO: MANOEL FERNANDO PEREIRA SANTOS

RESPONSÁVEL TÉCNICO:

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PROPRIETÁRIO \_\_\_\_\_

AUTOR DO PROJETO \_\_\_\_\_

AUTOR DO PROJETO \_\_\_\_\_

RESP. TÉCNICO \_\_\_\_\_

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DLFO	CREA	

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<b>EST</b>	PROJETO ESTRUTURAL	FOLHA
	BLOCO PEDAGÓGICO DETALHE DE VIGAS	<b>16</b>
REVISÃO: 01-2008	DATA: ABRIL/2008	ESCALA: INDICADA
	DESENHO:	VISTO: