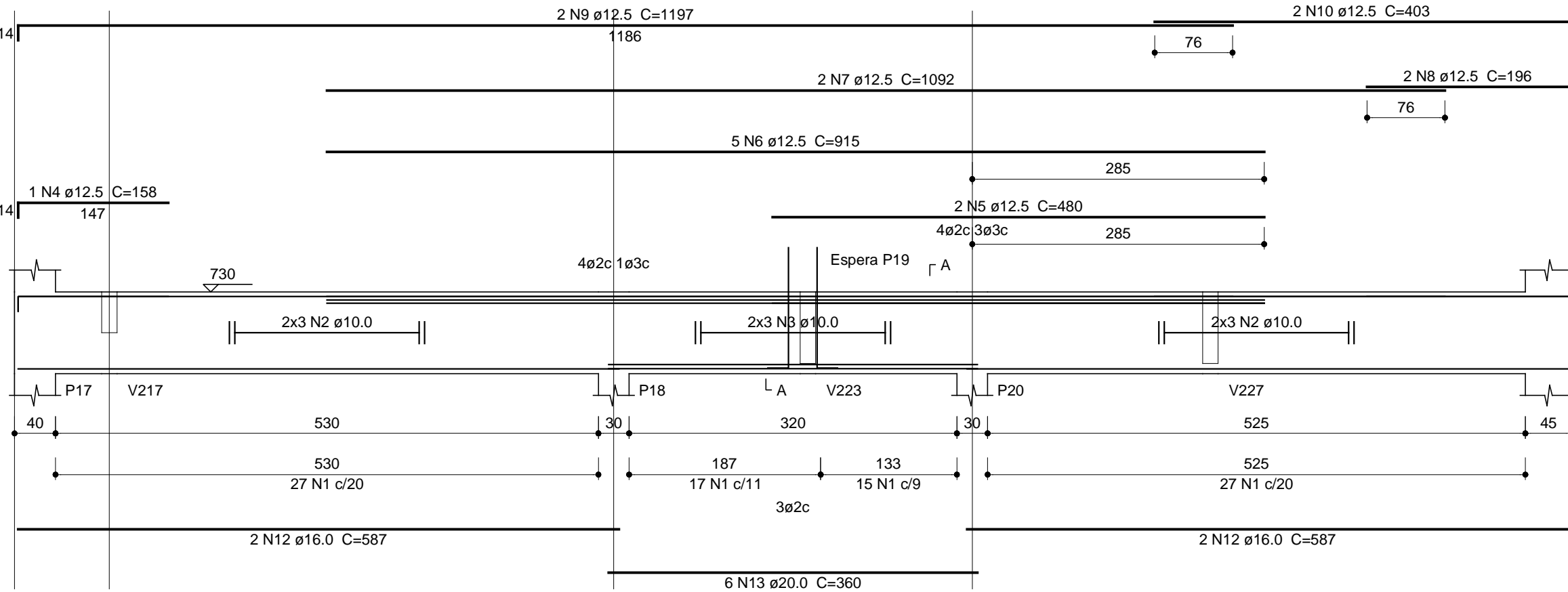
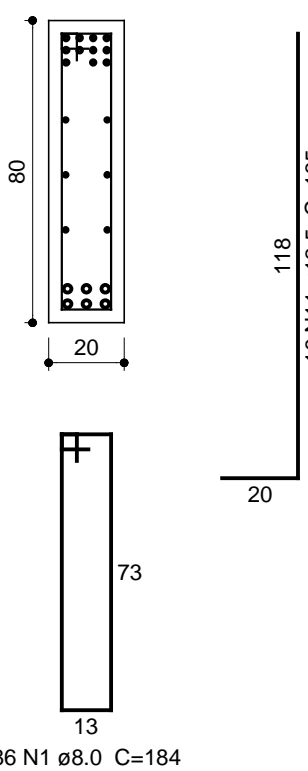


PENAS	
RED	0.1mm BLACK
YELLOW	0.2mm BLACK
GREEN	0.3mm BLACK
CYAN	0.4mm BLACK
BLUE	0.5mm BLACK
MAGENTA	0.6mm BLACK
10	0.1mm 10
42	0.1mm 42
98	0.1mm 98
156	0.1mm 156
160	0.2mm 160
254	0.1mm 254

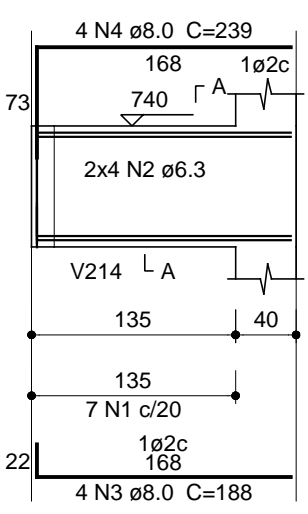
V209 (20 x 80)  
ESC 1:50



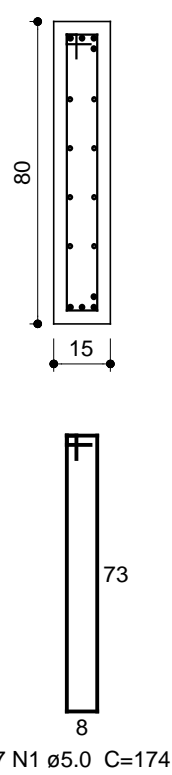
SEÇÃO A-A  
ESC 1:20



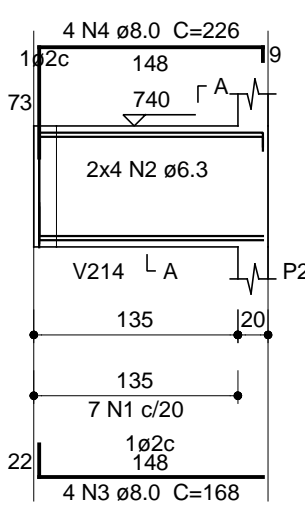
V210 (15 x 80)  
ESC 1:50



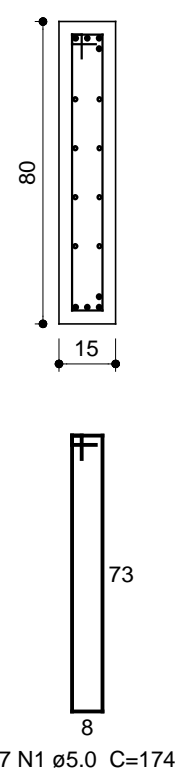
SEÇÃO A-A  
ESC 1:20



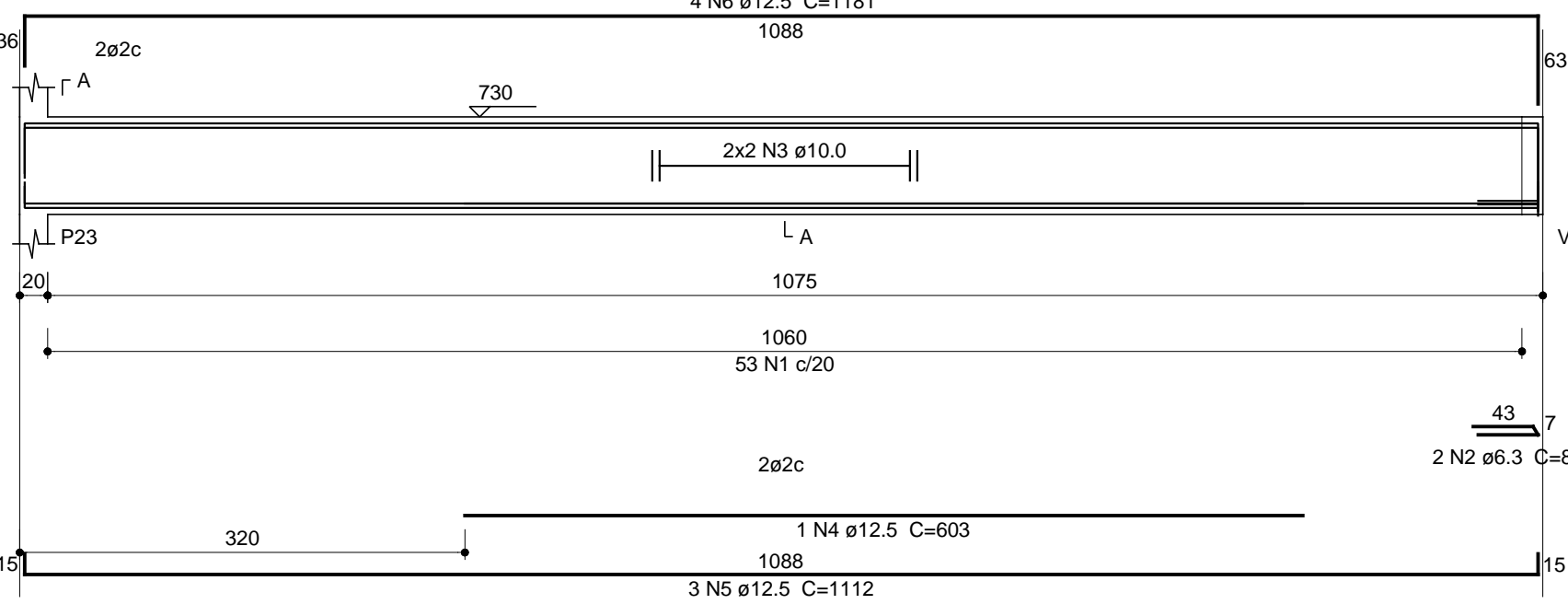
V211 (15 x 80)  
ESC 1:50



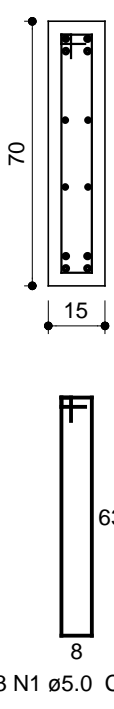
SEÇÃO A-A  
ESC 1:20



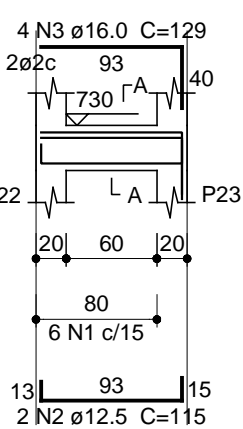
V212 (15 x 70)  
ESC 1:50



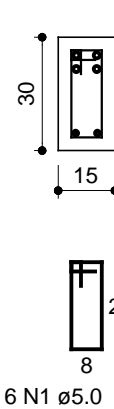
SEÇÃO A-A  
ESC 1:20



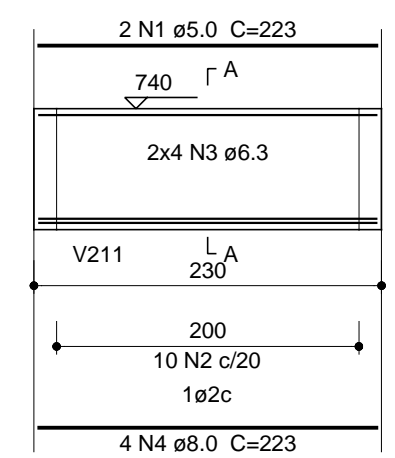
V213 (15 x 30)  
ESC 1:50



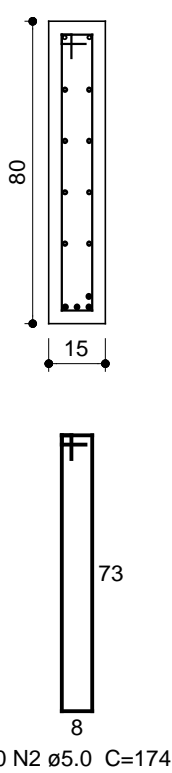
SEÇÃO A-A  
ESC 1:20



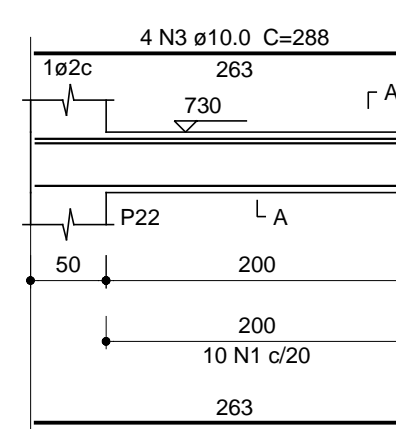
V214 (15 x 80)  
ESC 1:50



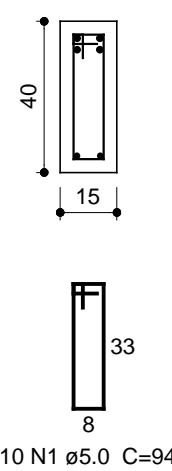
SEÇÃO A-A  
ESC 1:20



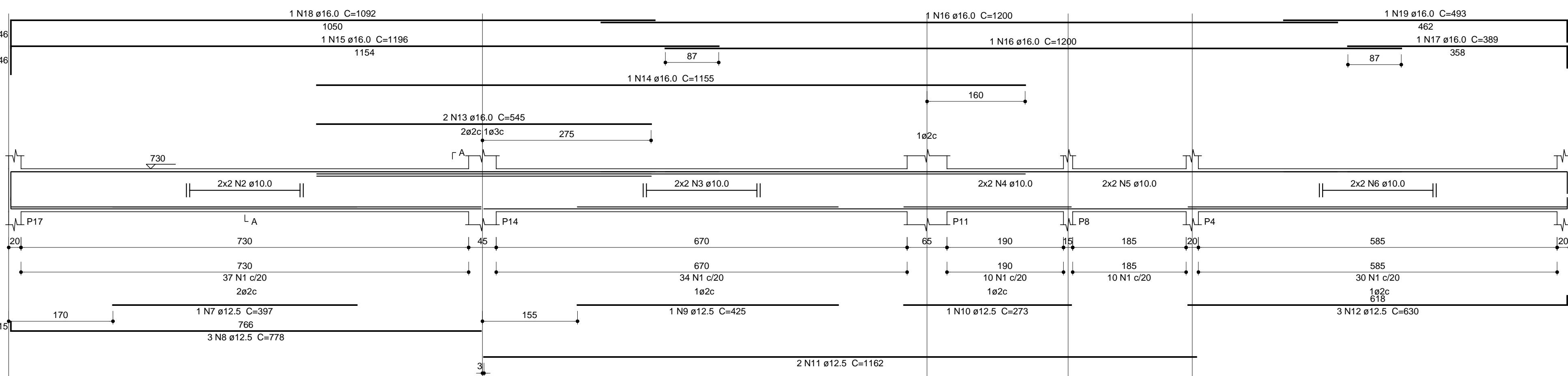
V215 (15 x 40)  
ESC 1:50



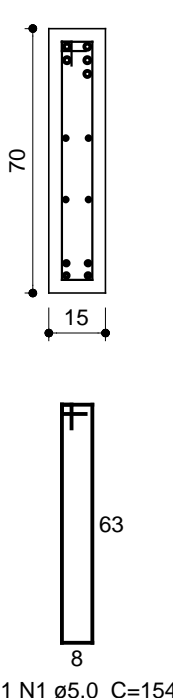
SEÇÃO A-A  
ESC 1:20



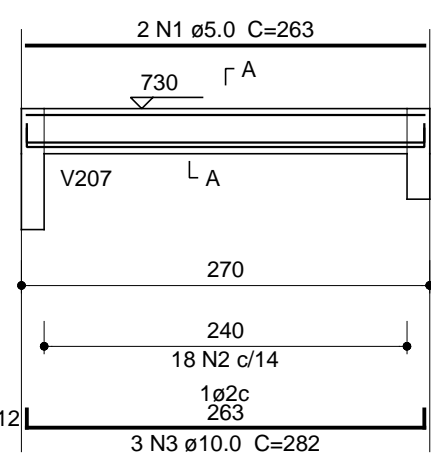
V216 (15 x 70)  
ESC 1:50



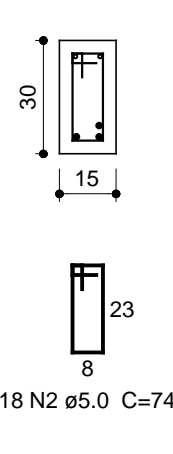
SEÇÃO A-A  
ESC 1:20



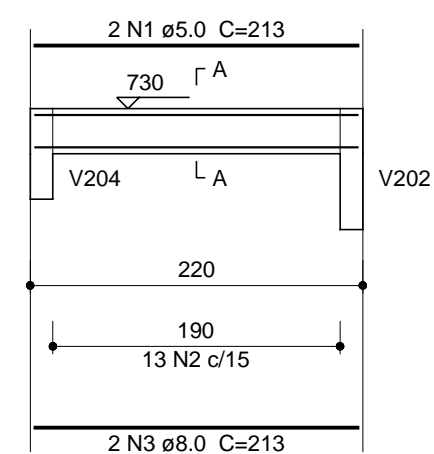
V218 (15 x 30)  
ESC 1:50



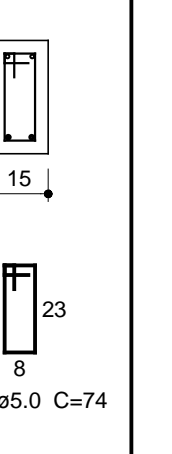
SEÇÃO A-A  
ESC 1:20



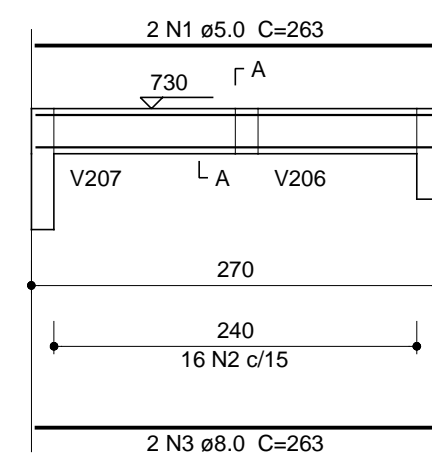
V219 (15 x 30)  
ESC 1:50



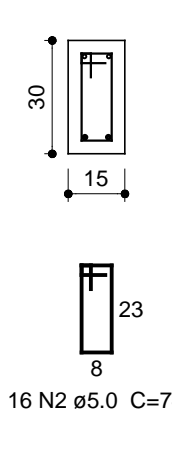
SEÇÃO A-A  
ESC 1:20



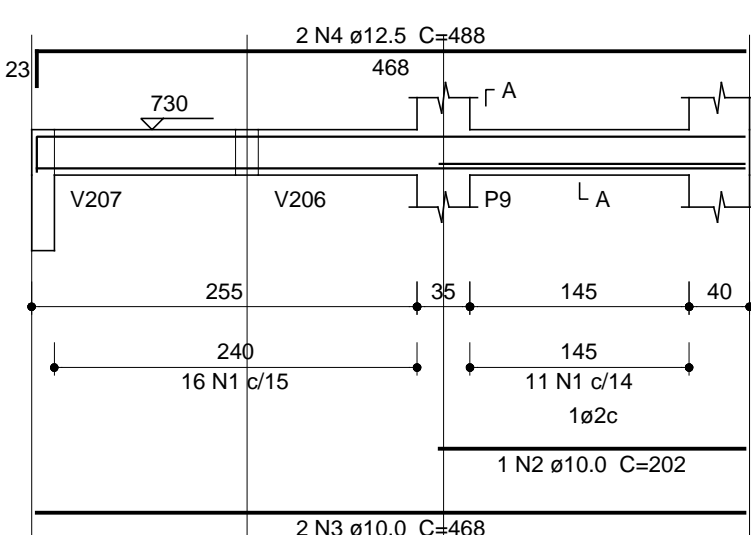
V220 (15 x 30)  
ESC 1:50



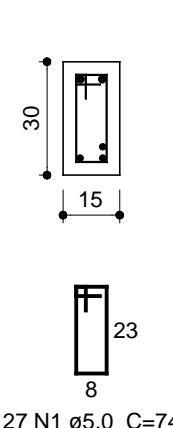
SEÇÃO A-A  
ESC 1:20



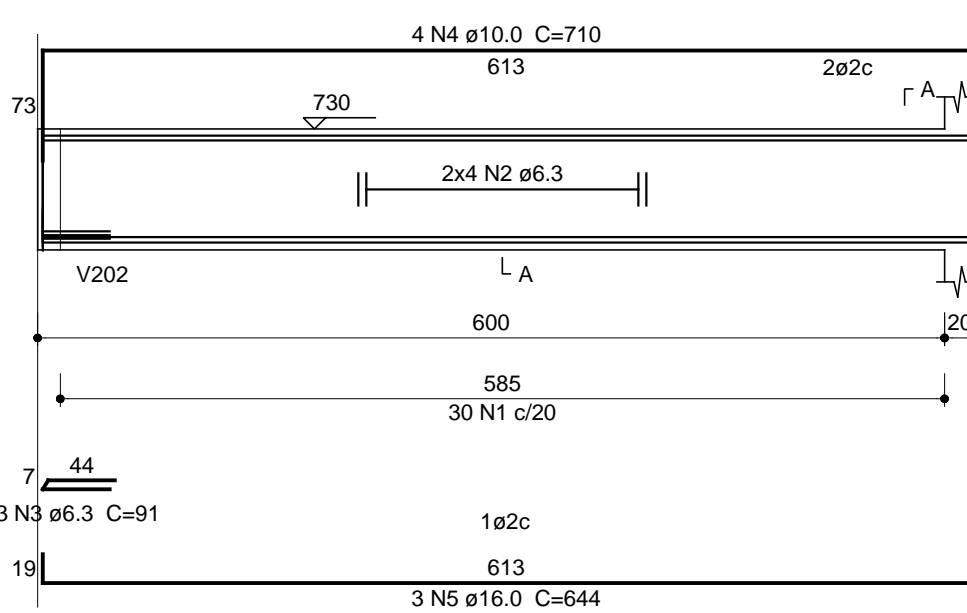
V221 (15 x 30)  
ESC 1:50



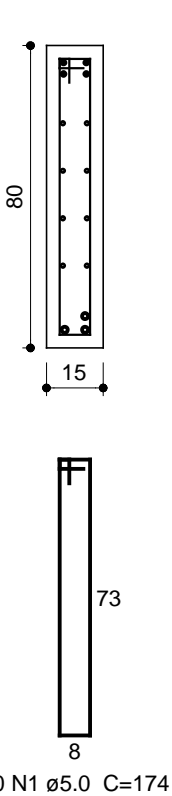
SEÇÃO A-A  
ESC 1:20



V222 (15 x 80)  
ESC 1:50



SEÇÃO A-A  
ESC 1:20



Relação do aço

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
V209	CA50	1	8.0	86	184	15824
	CA50	2	10.0	12	CORR	7116
	CA50	3	10.0	6	CORR	2238
	CA50	4	12.5	1	CORR	158
	CA50	5	12.5	2	CORR	960
	CA50	6	12.5	5	CORR	4575
	CA50	7	12.5	2	CORR	2184
	CA50	8	12.5	2	CORR	392
	CA50	9	12.5	2	CORR	2394
	CA50	10	12.5	2	CORR	806
	CA50	11	12.5	16	CORR	2160
	CA50	12	16.0	4	CORR	2348
	CA50	13	20.0	6	CORR	2160
V210	CA60	1	5.0	7	CORR	1218
	CA50	2	6.3	8	CORR	1344
	CA50	3	8.0	4	CORR	752
	CA50	4	8.0	4	CORR	239
V211	CA60	1	5.0	7	CORR	1184
	CA50	2	6.3	8	CORR	672
	CA50	3	8.0	4	CORR	904
	CA50	4	8.0	4	CORR	154
V212	CA50	2	6.3	2	CORR	178
	CA50	3	10.0	4	CORR	4352
	CA50	4	12.5	1	CORR	603
	CA50	5	12.5	3	CORR	3336
	CA50	6	12.5	4	CORR	4724
V213	CA60	1	5.0	6	CORR	444
	CA50	2	12.5	2	CORR	230
	CA50	3	16.0	4	CORR	516
V214	CA60	1	5.0	2	CORR	223
	CA60	2	5.0	10	CORR	174
	CA50	3	6.3	8	CORR	1784
	CA50	4	8.0	4	CORR	892
V215	CA60	1	5.0	10	CORR	94
	CA50	2	8.0	2	CORR	271
	CA50	3	10.0	4	CORR	1152
V216	CA60	1	5.0	121	CORR	154
	CA50	2	10.0	4	CORR	3152
	CA50	3	10.0	4	CORR	3092
	CA50	4	10.0	4	CORR	1052
	CA50	5	10.0	4	CORR	852
	CA50	6	10.0	4	CORR	2472
	CA50	7	12.5	1	CORR	397
	CA50	8	12.5	3	CORR	2334
	CA50	9	12.5	1	CORR	425
	CA50	10	12.5	1	CORR	273
	CA50	11	12.5	2	CORR	2324
	CA50	12	12.5	3	CORR	1890
	CA50	13	16.0	2	CORR	945
	CA50	14	16.0	1	CORR	1155
	CA50	15	16.0	1	CORR	1196
	CA50	16	16.0	2	CORR	2400
	CA50	17	16.0	1	CORR	389
	CA50	18	16.0	1	CORR	1092
	CA50	19	16.0	1	CORR	493
V217	CA60	1	5.0	10	CORR	94
	CA50	2	8.0	2	CORR	526
	CA50	3	10.0	4	CORR	1176
V218	CA60	1	5.0	2	CORR	263
	CA60	2	5.0	18	CORR	74
	CA50	3	10.0	3	CORR	846
V219	CA60	1	5.0	2	CORR	213
	CA60	2	5.0	13	CORR	74
	CA50	3	8.0	2	CORR	426
V220	CA60	1	5.0	2	CORR	263
	CA60	2	5.0	16	CORR	74
	CA50	3	8.0	2	CORR	526
V221	CA60	1	5.0	27	CORR	74
	CA50	2	10.0	1	CORR	202
	CA50	3	10.0	2	CORR	936
	CA50	4	12.5	2	CORR	976
V222	CA60	1	5.0	30	CORR	174
	CA50	2	6.3	8	CORR	4904
	CA50	3	6.3	3	CORR	91
	CA50	4	10.0	4	CORR	2840
	CA50	5	16.0	3	CORR	1932

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	6.3	96.7	23.7
	8.0	220.2	86.9
	10.0	314.8	194.1
	12.5	311.5	300
	16.0	126.2	199
	20.0	21.6	53.3
	5.0	459.2	70.8
CA60			
PESO TOTAL			
(kg)			
CA50		856.9	
CA60		70.8	

Volume de concreto (C35) = 8.59 m³  
Área de forma = 119.57 m²

V209	V210	V211	V212	V213	V214	V215	V216
V217	V218	V219	V220	V221	V222		

00	EMISSION INICIAL	13/06/2016
Nº	REVISÃO	DATA

ESTEL	ESTEL ENGENHARIA Rua José Quirino, 147 - São João - CEP 88305-080 - Itajaí-SC Tel: (047) 3046-2001 Fax: (047) 3046-2004 estel@estelengenharia.com.br - www.estelengenharia.com.br	PROJETO Nº
		1280/16
PROJETO		ESTRUTURAL

MUNICÍPIO DE PARANAGUÁ	CLIENTE	
	MUNICÍPIO DE PARANAGUÁ	
PRÉDIO ADM. DA PREFEITURA DE PARANAGUÁ	PROJETO	
	PRÉDIO ADM. DA PREFEITURA DE PARANAGUÁ	
ARMAÇÃO DAS VIGAS DO 1º PAVIMENTO	CONTEÚDO	
	ARMAÇÃO DAS VIGAS DO 1º PAVIMENTO	

PRANCHA Nº	RESPONSÁVEL TÉCNICO	PROPRIETÁRIO
39/75	SÉRGIO LUIZ DO AMARAL LOZOVEY CREA/SC 13708-0	PREFEITURA DE PARANAGUÁ UNIDADE DE GERENCIAMENTO DE PROGRAMAS

AUTOR DO PROJETO	CAD	DATA	REVISÃO	CONTROLE DE PROJETOS
SÉRGIO LOZOVEY	ARLINE DEPINÉ	03/2016	00	PROJETO DEFINITIVO ( X )
ÁREA	VERIFICAÇÃO	ESCALA	ARQUIVO	PROJETO NÃO DEFINITIVO ( )
1.850,00 m²	RENATO REIS	IND.	1280-EST-39-R0	