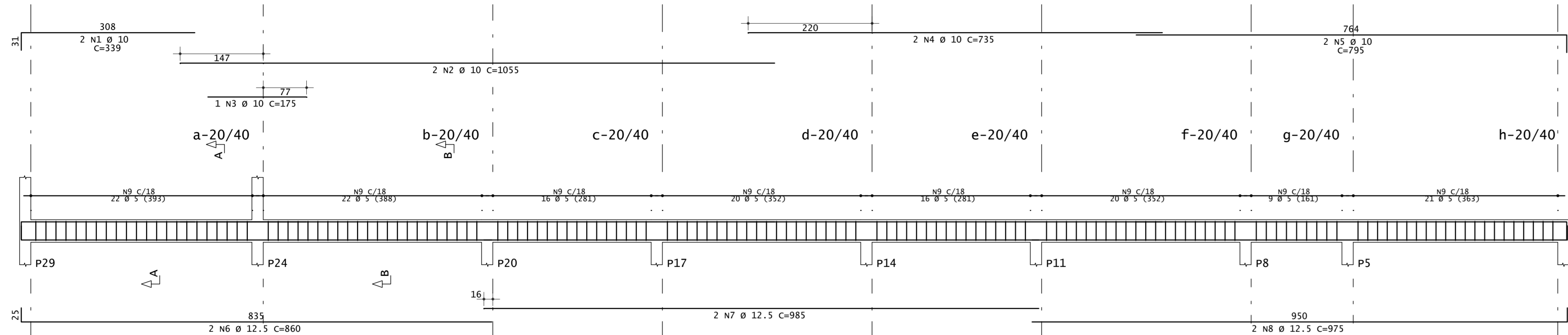
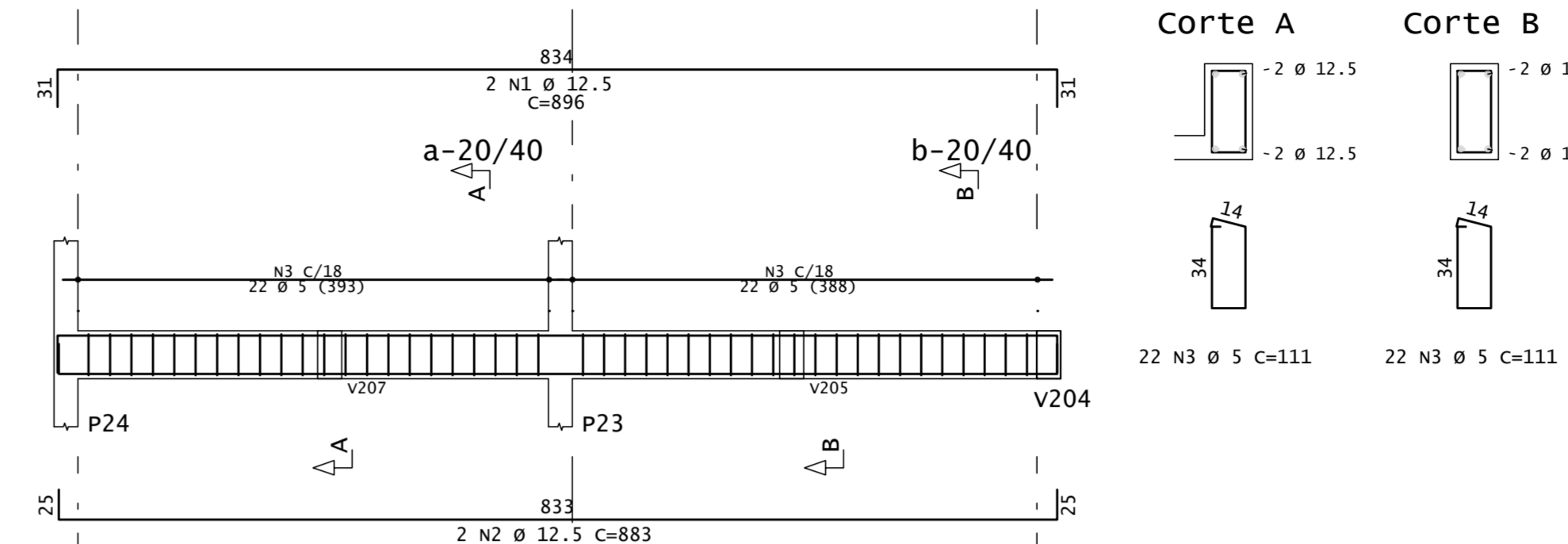


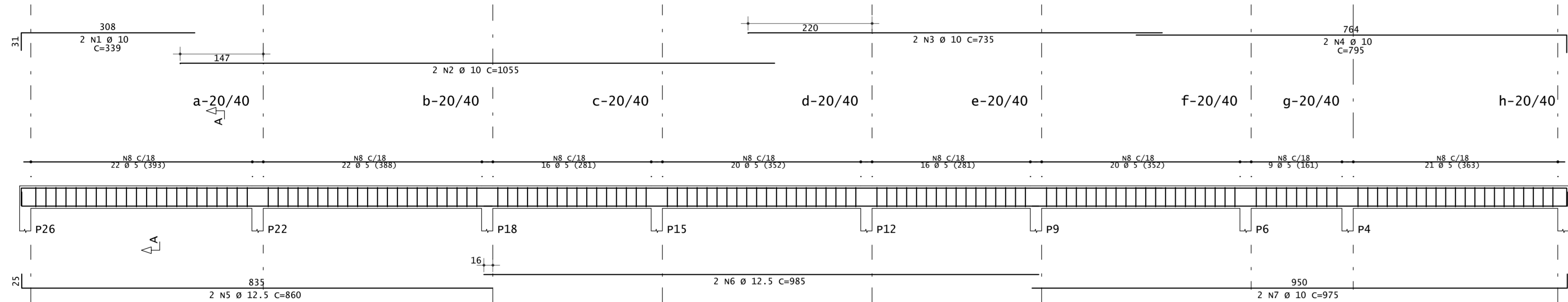
V212



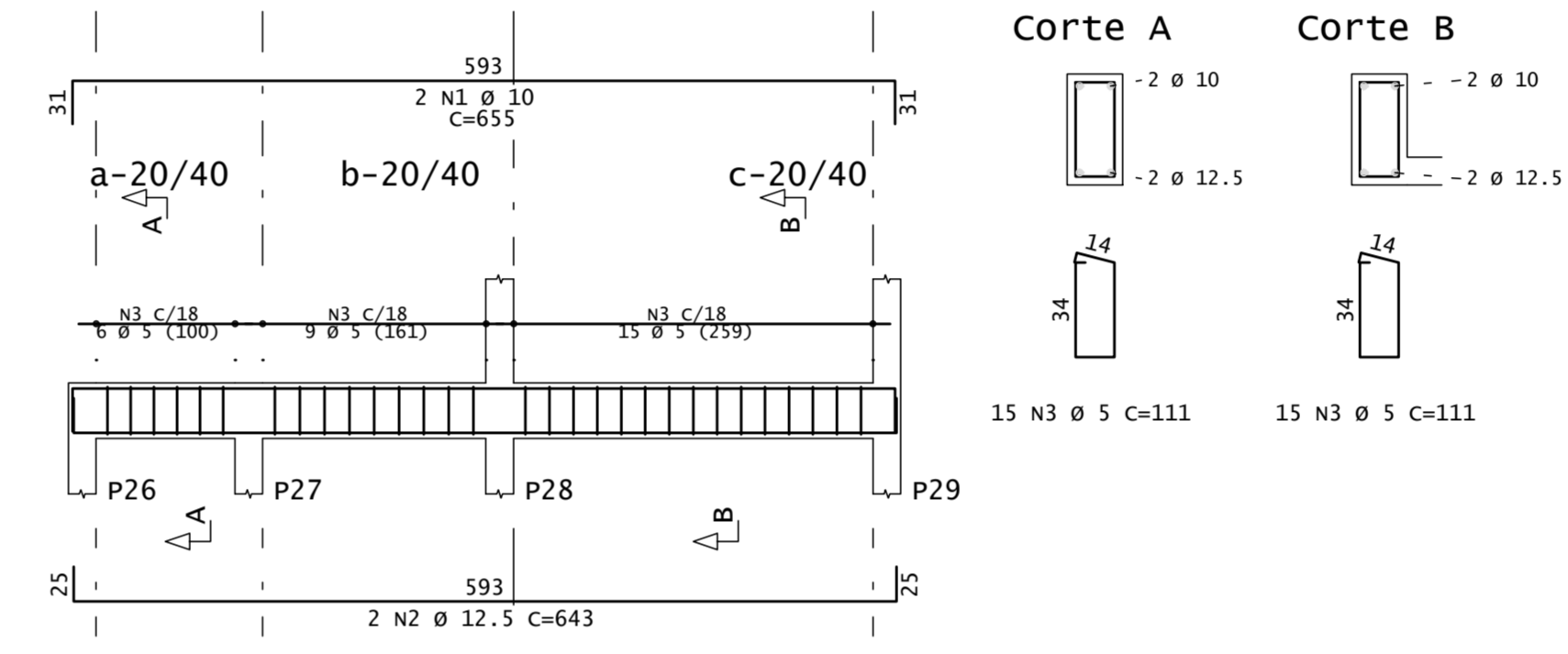
V211



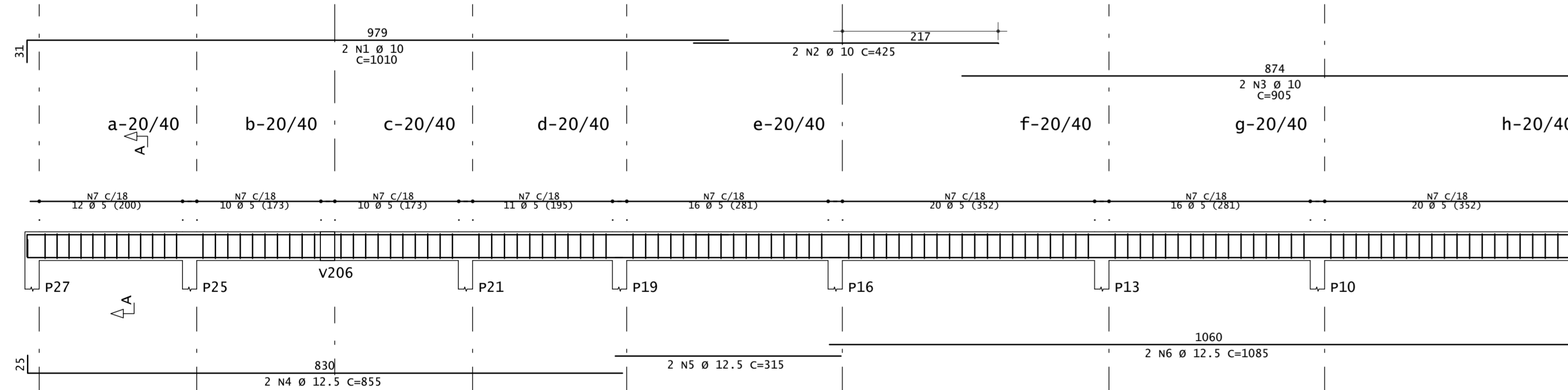
V209



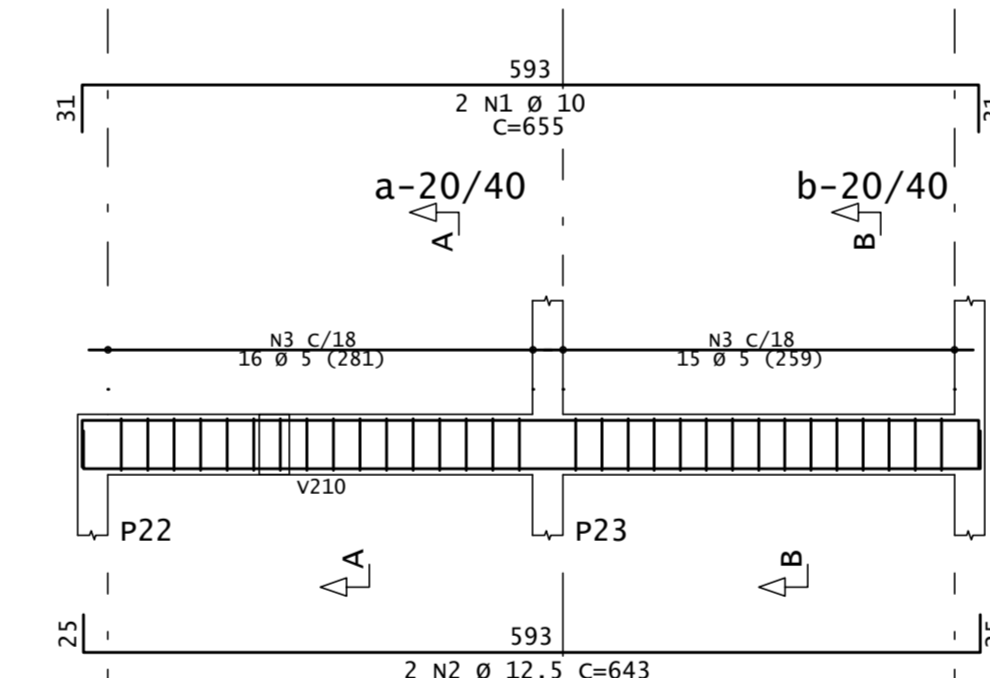
V208



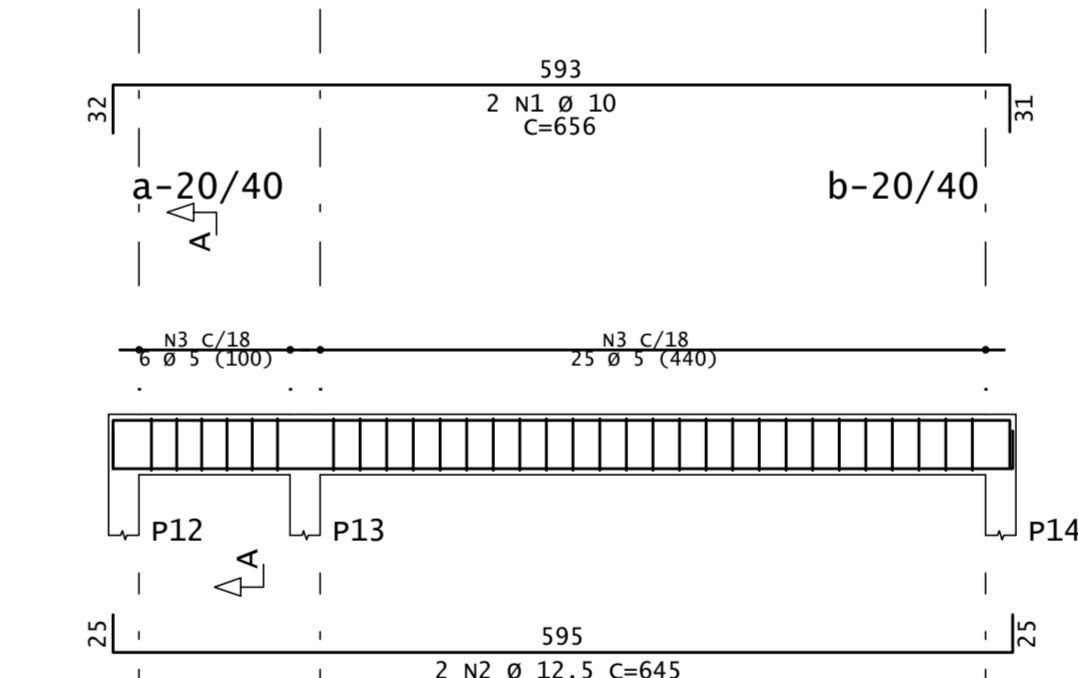
V210



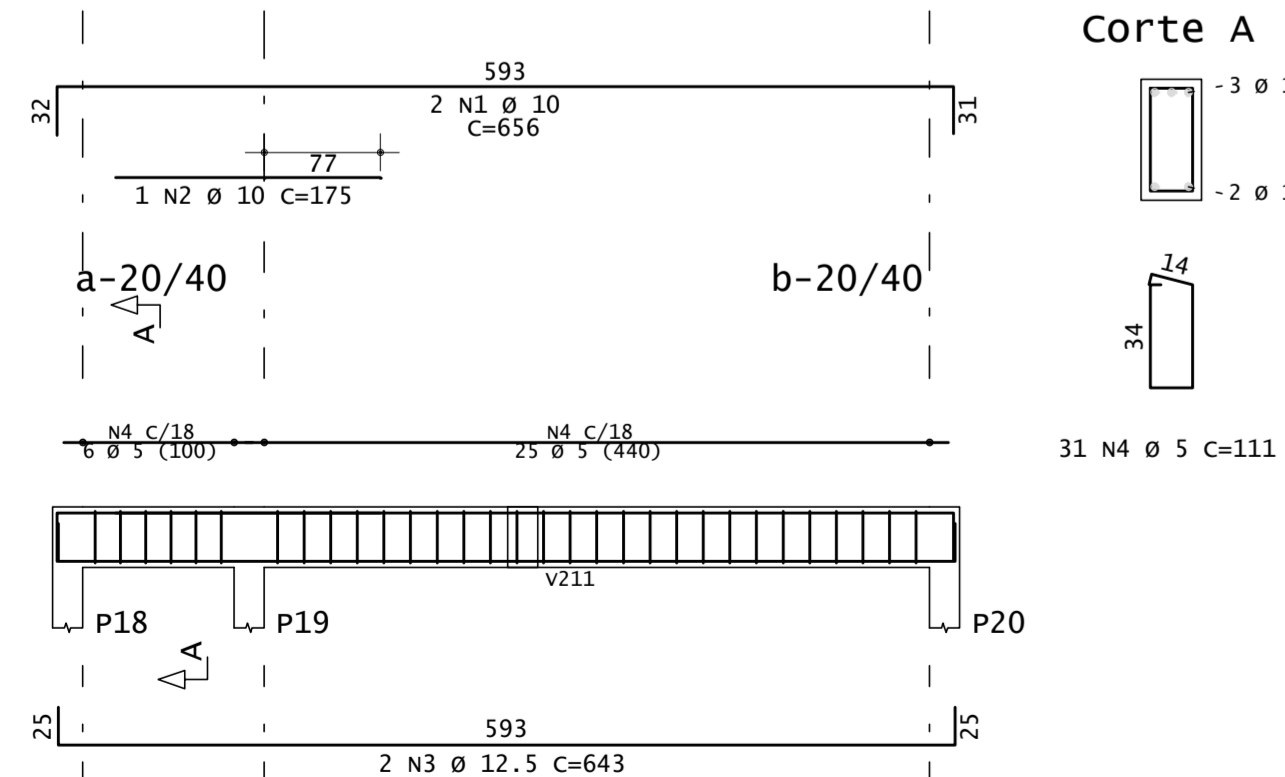
V206



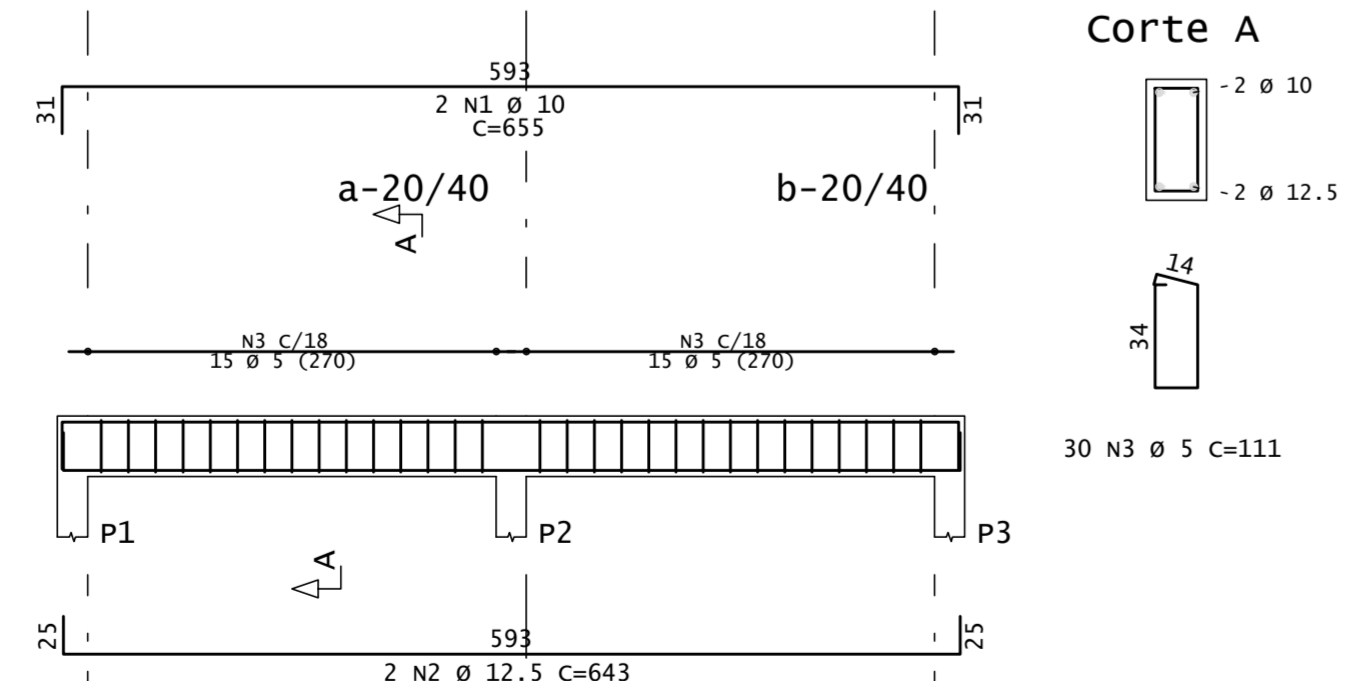
V203



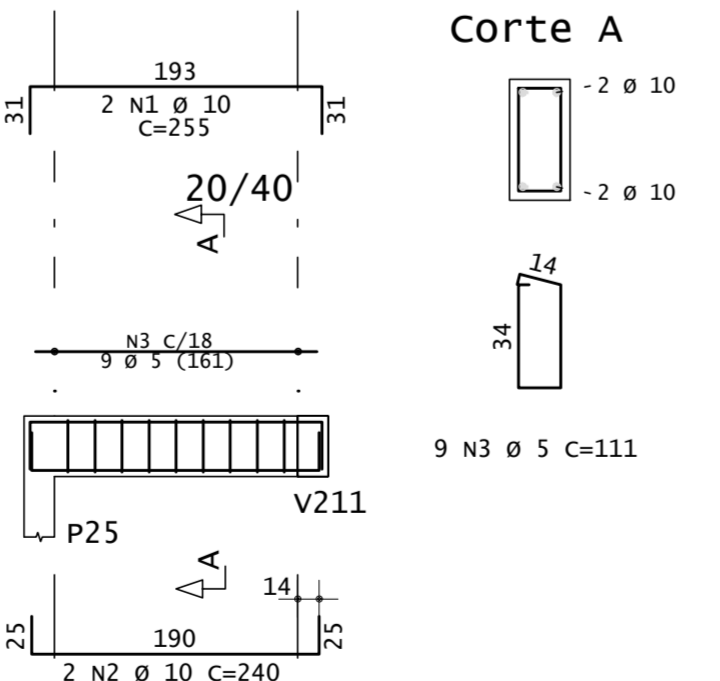
V204



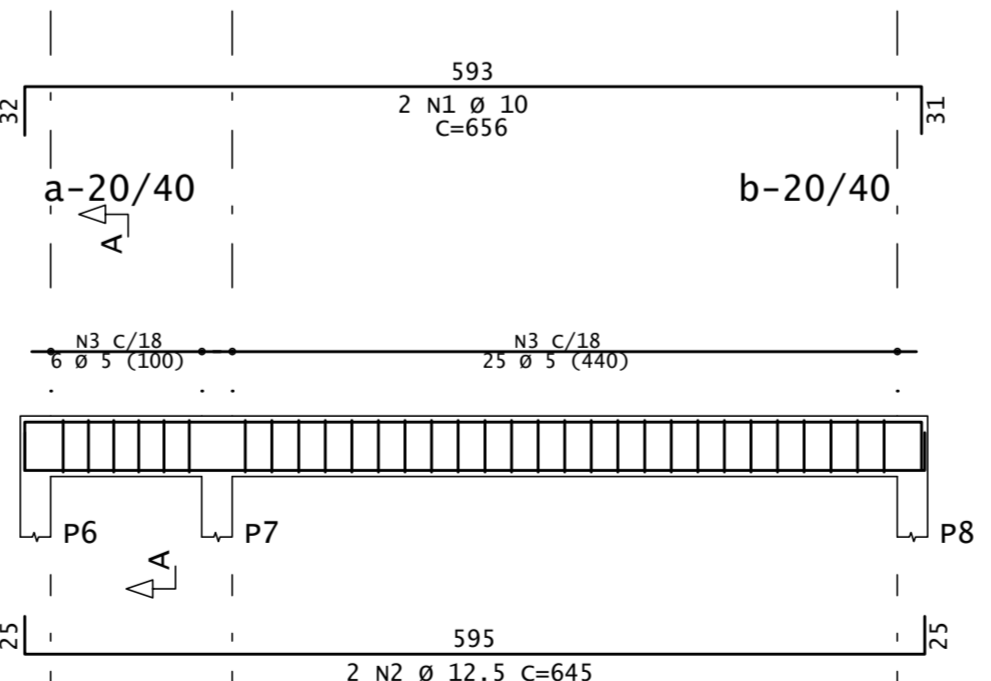
V201



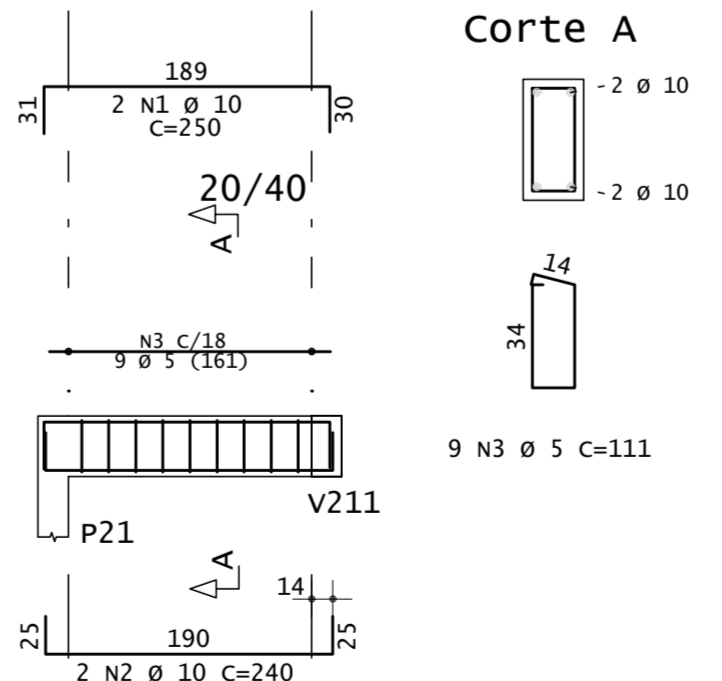
V207



V202



V205



ACO	POS	BIT (mm)	QUANT	COMPRIMENTO (cm)	UNIT (cm)	TOTAL (cm)
V201	50A	1	10	2	655	1310
	50A	2	12.5	2	643	1286
	60A	3	5	30	111	3330
V202	50A	1	10	2	656	1312
	50A	2	12.5	2	645	1290
	60A	3	5	31	111	3441
V203	50A	1	10	2	655	1312
	50A	2	12.5	2	645	1290
	60A	3	5	31	111	3441
V204	50A	1	10	2	656	1312
	50A	2	10	1	175	175
	50A	4	12.5	2	643	1286
	60A	4	5	31	111	3441
V205	50A	1	10	2	250	500
	50A	2	10	2	240	480
	60A	3	5	9	111	999
V206	50A	1	10	2	655	1310
	50A	2	12.5	2	643	1286
	60A	3	5	31	111	3441
V207	50A	1	10	2	255	510
	50A	2	10	2	240	480
	60A	3	5	9	111	999
V208	50A	1	10	2	655	1310
	50A	2	12.5	2	643	1286
	60A	3	5	30	111	3330
V209	50A	1	10	2	339	678
	50A	2	10	2	1055	2110
	50A	3	10	2	735	1470
	50A	4	10	2	795	1590
	50A	5	12.5	2	880	1760
	50A	6	12.5	2	985	1970
	50A	7	10	2	975	1950
	60A	8	5	146	111	16206
V210	50A	1	10	2	1010	2020
	50A	2	10	2	425	850
	50A	3	10	2	905	1810
	50A	4	12.5	2	855	1710
	50A	5	12.5	2	315	630
	50A	6	12.5	2	1085	2170
	60A	7	5	115	111	12765
V211	50A	1	12.5	2	896	1792
	50A	2	12.5	2	883	1766
	60A	3	5	44	111	4884
V212	50A	1	10	2	339	678
	50A	2	10	2	1055	2110
	50A	3	10	1	175	175
	50A	4	10	2	735	1470
	50A	5	10	2	795	1590
	50A	6	12.5	2	880	1760
	50A	7	12.5	2	985	1970
	50A	8	12.5	2	975	1950
	60A	9	5	146	111	16206

ACO	RESUMO	ACO	CA	50-60	PESO (kg)
50A	BIT (mm)	COMPR (m)			112
60A	5	735			176
50A	10	285			242
50A	12.5	251			
Peso Total		60A =		112	kg
Peso Total		50A =		418	kg

VOLUME TOTAL DE CONCRETO
Vigas Cobertura 9,10 m³

Notas:
Medidas em cm
Classe de Agressividade Ambiental II
Resistência Característica à Compressão do Concreto - f_{ck} > 25 MPa
Fator Água Cimento < 0,6
Cobertura das Armaduras - Pilares: 3cm
- Vigas: 3 cm
- Lajes: 2,5 cm
- Fundações: 5,0 cm
Deverão ser utilizados espaçadores plásticos para garantir o cobrimento das armaduras.



E.M.E.F. DR. BRUM DE AZEREDO

SECRETÁRIO MUNICIPAL DA EDUCAÇÃO

PROJETO: Departamento de Engenharia
PRAÇA 20 DE SETEMBRO, 366
PELOTAS - RS - CEP 96015-280
FONE: (53)3284-2618
e-mail: dpensmed@gmail.com
Eq. Técnica: Arq. Adriane S. Gonçalves, Arq. Luciana C. Garcia, Arq. Olga M. Almeida da Silva, Arq. Tamara Cunha, Eng. Civil José Henrique C. Corderiro
Apoio Técnico: Carolina Batista S. Gottinari, Glaucia Dias Vieira, Melissa Vieira dos Santos, Izadora S. Braga, Rafael Schultze

PROJETO: Ampliação - E.M.E.F. DR. BRUM DE AZEREDO
ENDEREÇO: Rua Manoel Lucas de Oliveira, nº 1290 - Fragata - Pelotas / RS
CONTEÚDO: PROJETO ESTRUTURAL
Vigas: Cobertura
LOCAL E DATA: Pelotas, janeiro de 2018.
ESCALA: 1:50

FRANCHA: 07/09