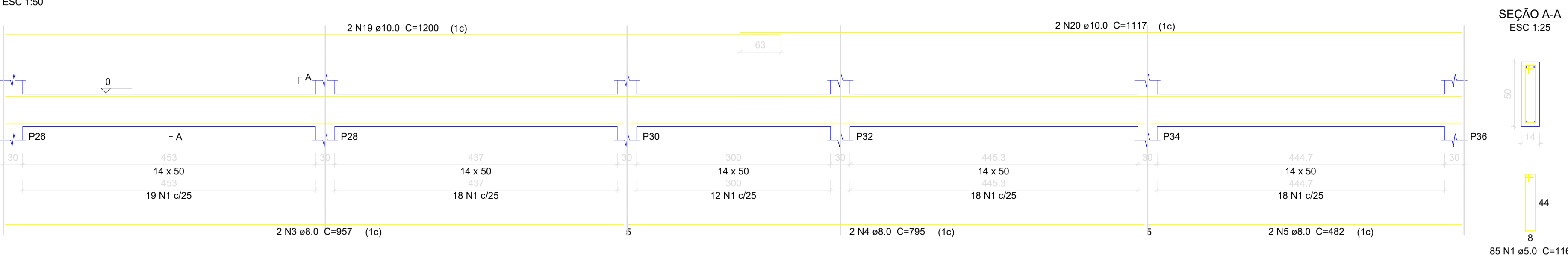
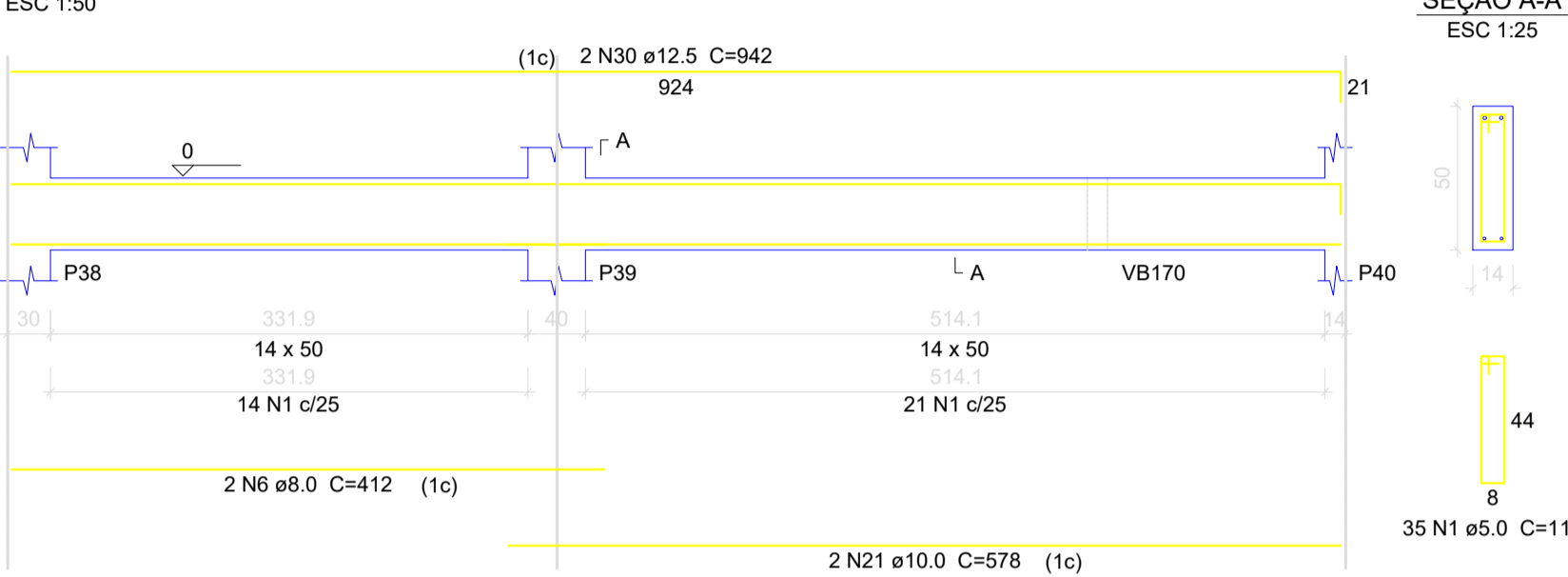


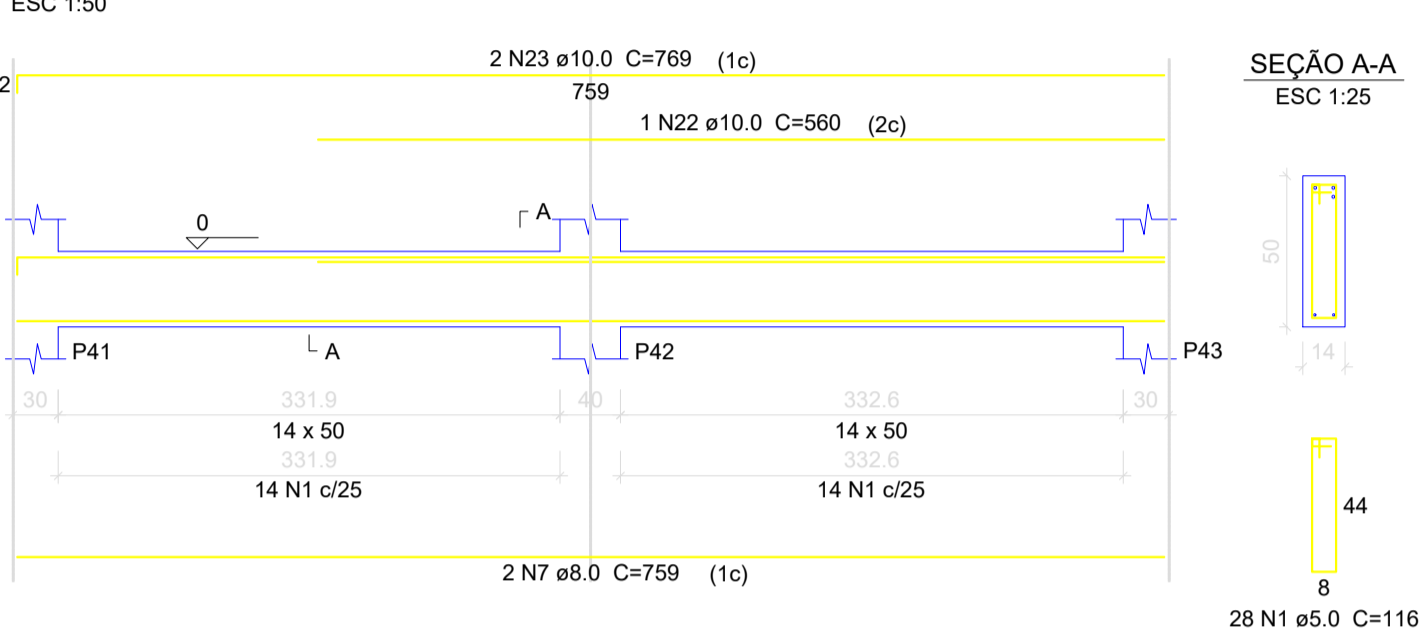
VB105



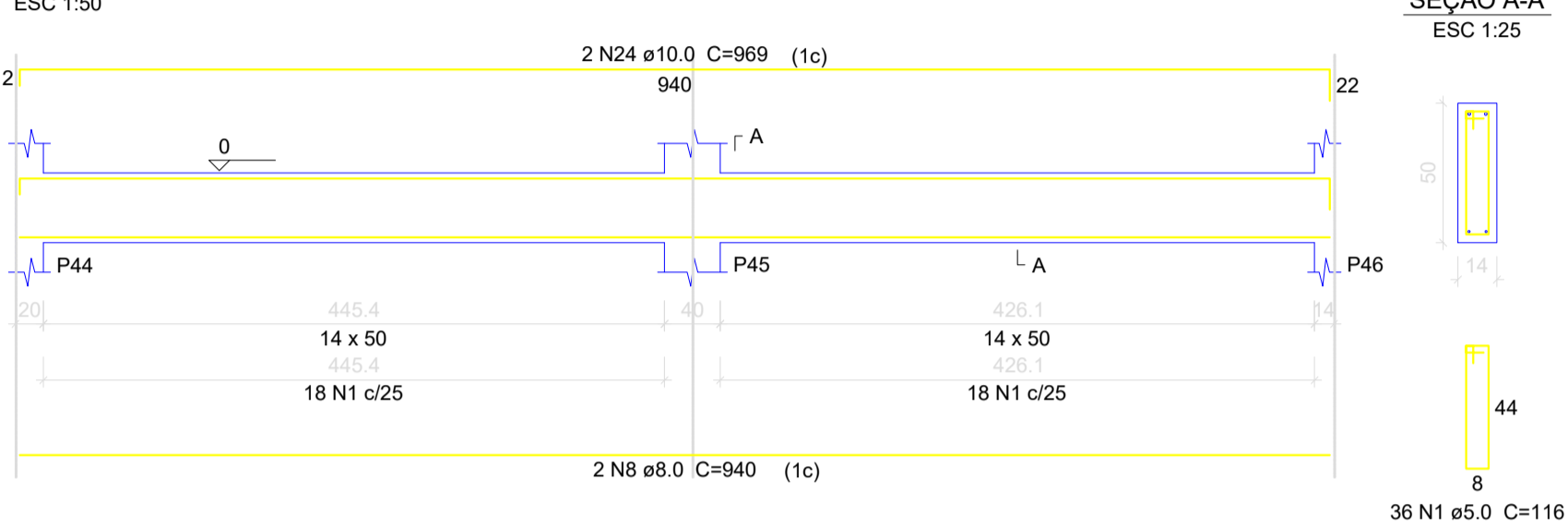
VB106



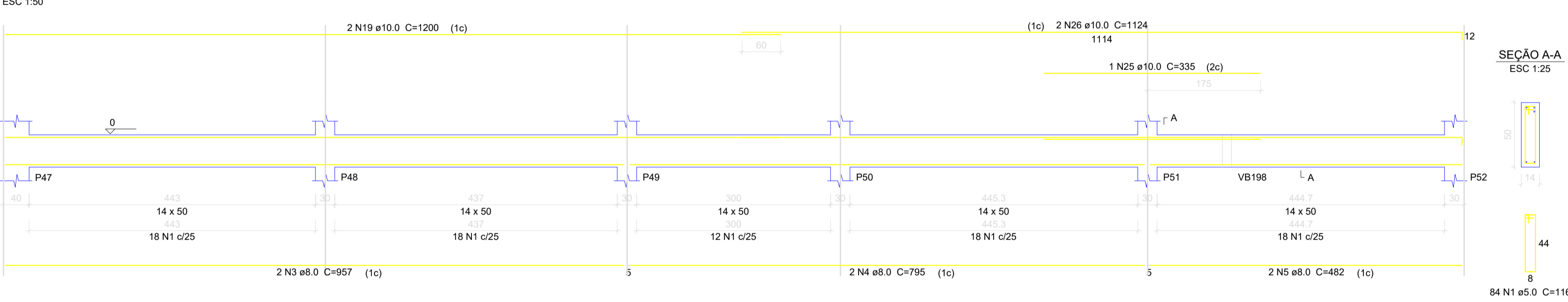
VB107



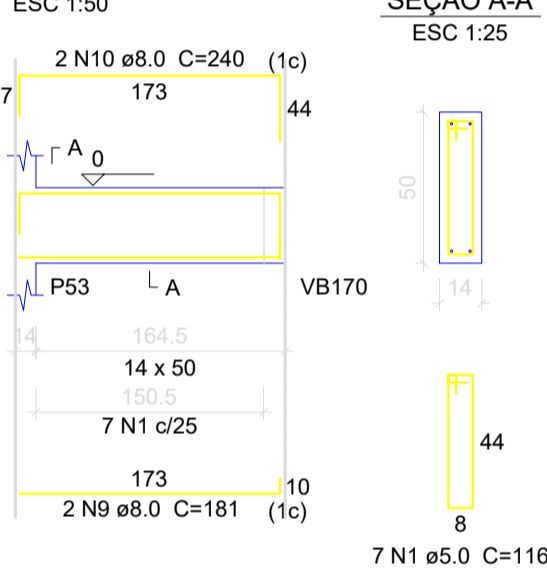
VB108



VB109



VB110



Relação do aço

VB105	VB106	VB107
VB108	VB109	VB110
VB111	VB112	VB113
VB114	VB115	VB116
VB117		

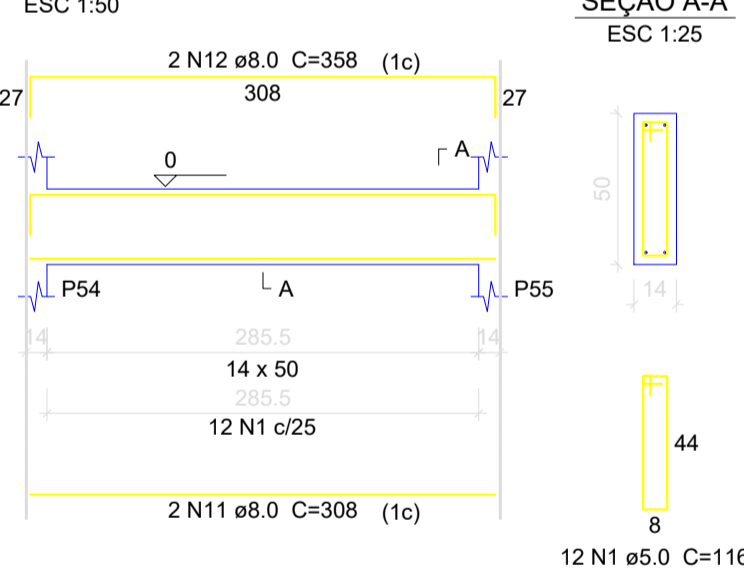
ÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	431	116	49996
CA50	2	6.3	2	67	134
	3	8.0	4	957	3828
	4	8.0	4	795	3180
	5	8.0	4	482	1928
	6	8.0	2	412	824
	7	8.0	4	759	3036
	8	8.0	2	940	1880
	9	8.0	4	181	724
	10	8.0	4	240	960
	11	8.0	2	308	616
	12	8.0	2	358	716
	13	8.0	2	990	1980
	14	8.0	2	1024	2048
	15	8.0	2	974	1948
	16	8.0	2	594	1188
	17	8.0	2	342	684
	18	8.0	2	359	718
	19	10.0	4	1200	4800
	20	10.0	2	1117	2234
	21	10.0	2	578	1156
	22	10.0	1	560	560
	23	10.0	2	769	1538
	24	10.0	2	969	1938
	25	10.0	1	335	335
	26	10.0	2	1124	2248
	27	10.0	1	434	434
	28	10.0	2	623	1246
	29	10.0	2	778	1556
	30	12.5	2	942	1884
	31	12.5	2	989	1978

Resumo do aço

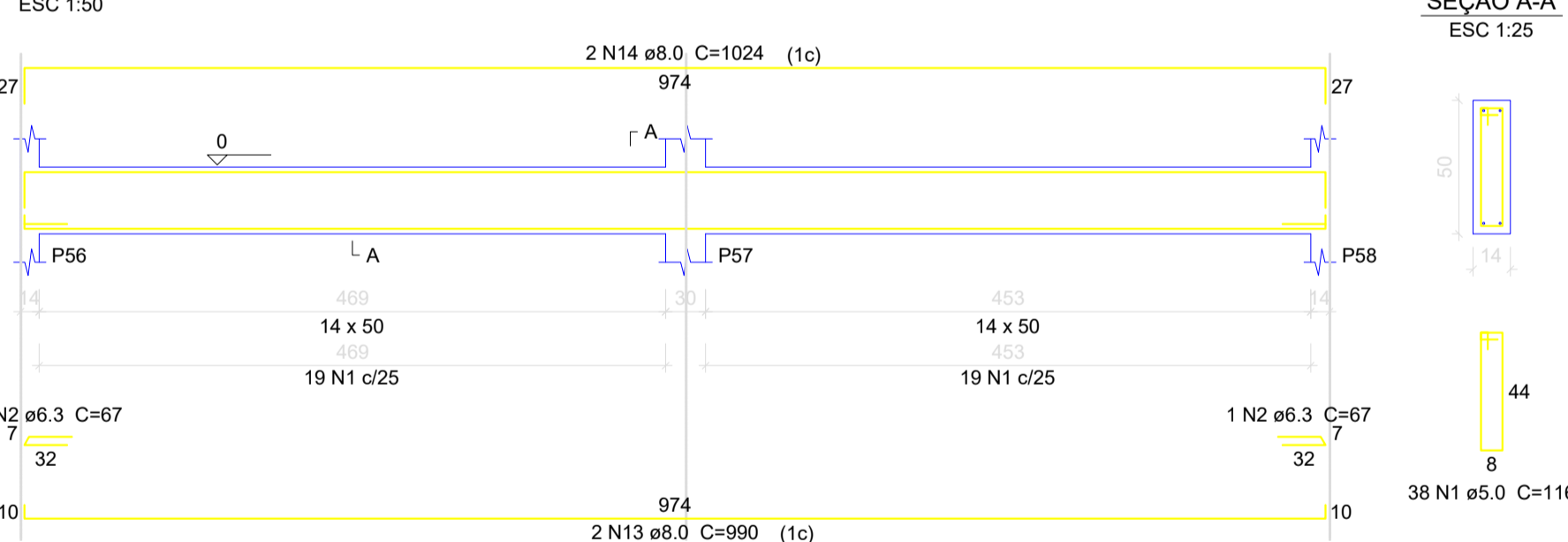
ÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	1.4	0.4
	8.0	262.6	114
	10.0	180.5	122.4
	12.5	38.7	40.9
CA60	5.0	500	84.8
PESO TOTAL			
CA50		277.6	
CA60		84.8	

Vol. de concreto total (C-30) = 8.05 m³
Área de forma total = 131.03 m²

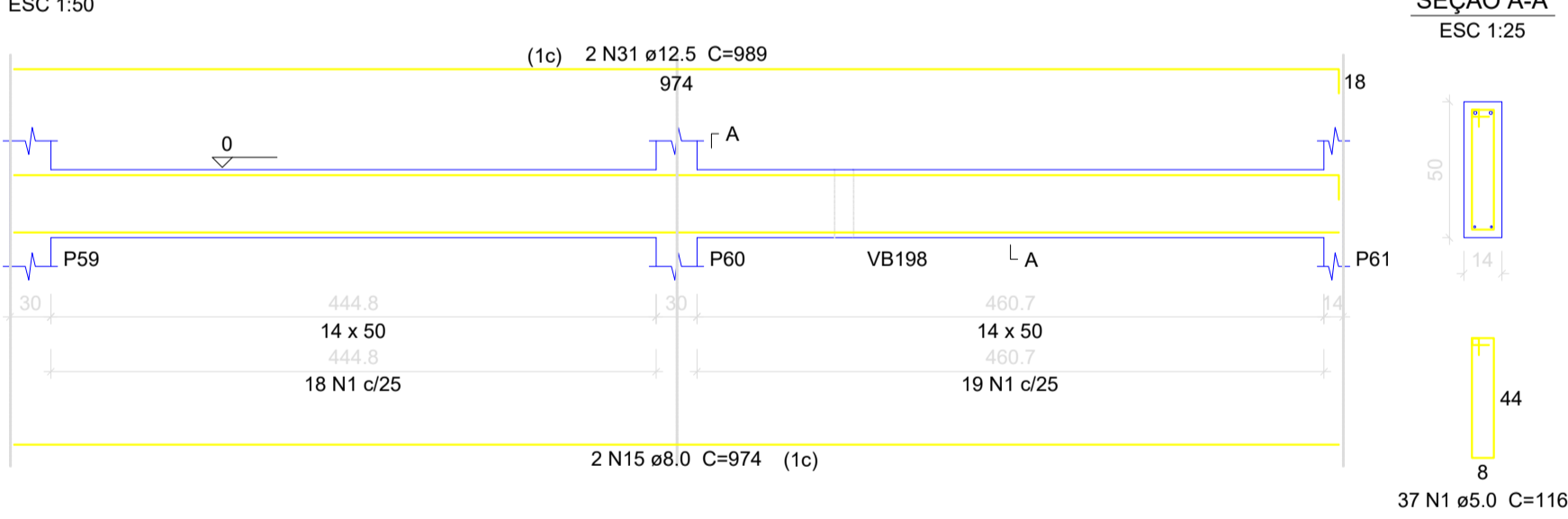
VB111



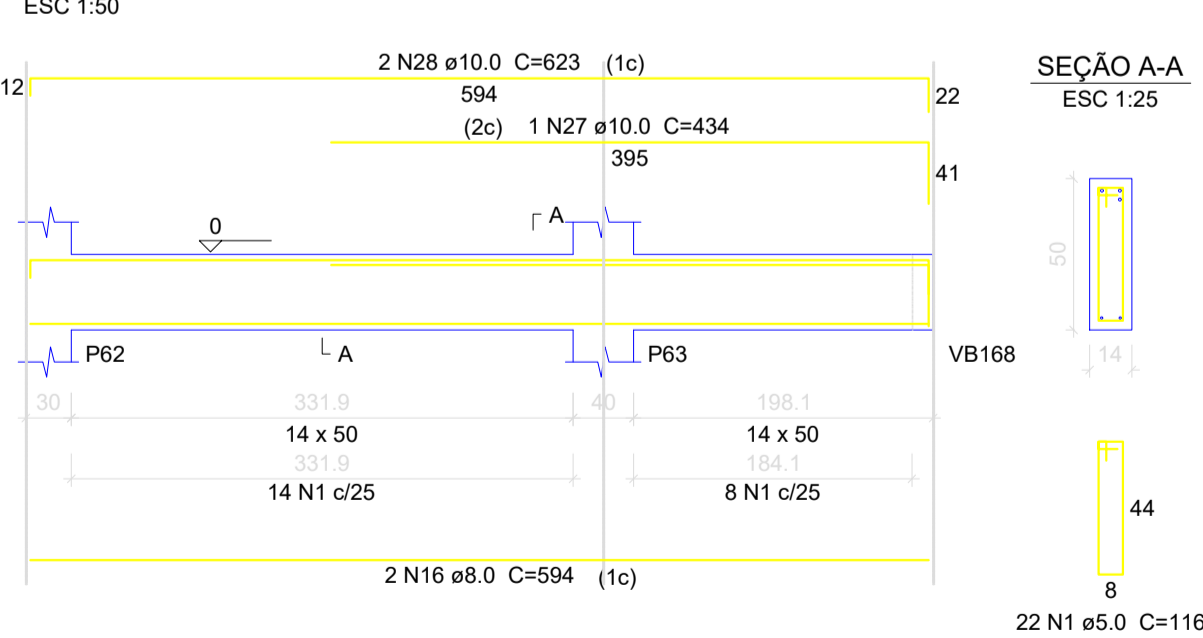
VB112



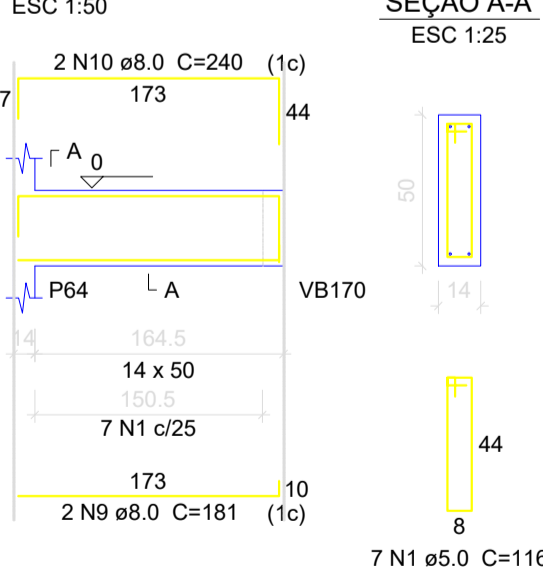
VB113



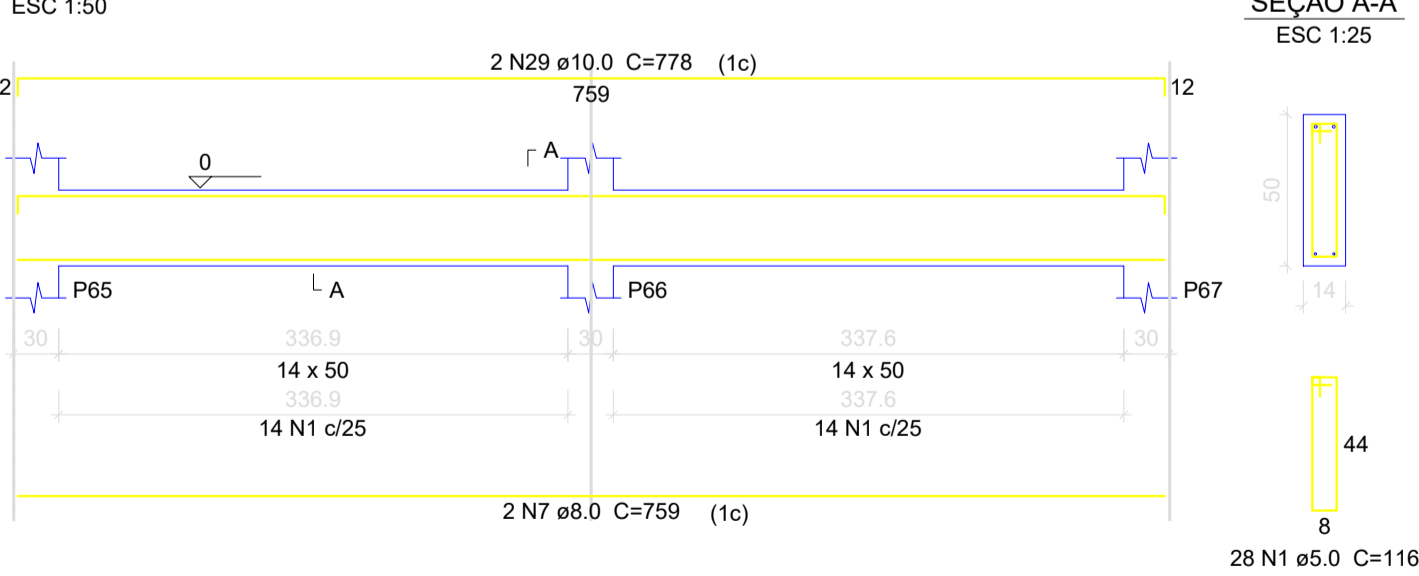
VB114



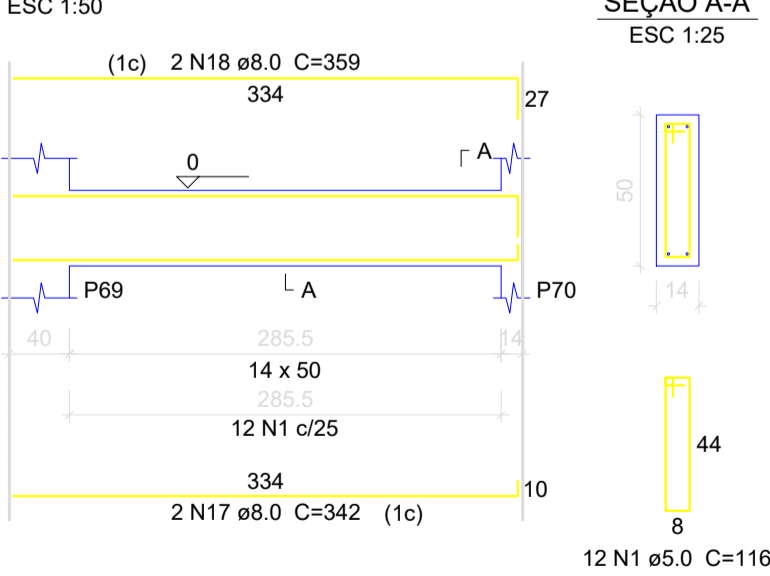
VB115



VB116



VB117



ARQUITETURA E ENGENHARIA

> PROJETOS INDUSTRIAIS / COMERCIAIS / RESIDENCIAIS E PÚBLICAS
> ASSESSORIA / CONSULTORIA
> GESTÃO DE OBRAS
> PERÍCIAS
> EXECUÇÃO DE OBRAS

AV. BRASIL, 1225 - SALA 03
UNIVERSITÁRIO
CSP 04609-017 - LACERDOTE
TEL: (49) 99263 2944
CNPJ 23.270.410/0001-49

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RESP. TÉCN.:

James André Claiberg
Eng. Civil - CREA 45.160-6

RESP. TÉCN.:

Indiamara de Oliveira Ribeiro
Eng. Civil - CREA 13.4548-3

CLIENTE:

Prefeitura Municipal de Rio Rufino

OBRA:

PROJETO ESTRUTURAL
ESCOLA MUNICIPAL DE RIO RUFINO

PLANTA DAS VIGAS DE BALDRAMES - TÉRREO

DESENHO:

ESCALA:

DATA:

OUT/2022