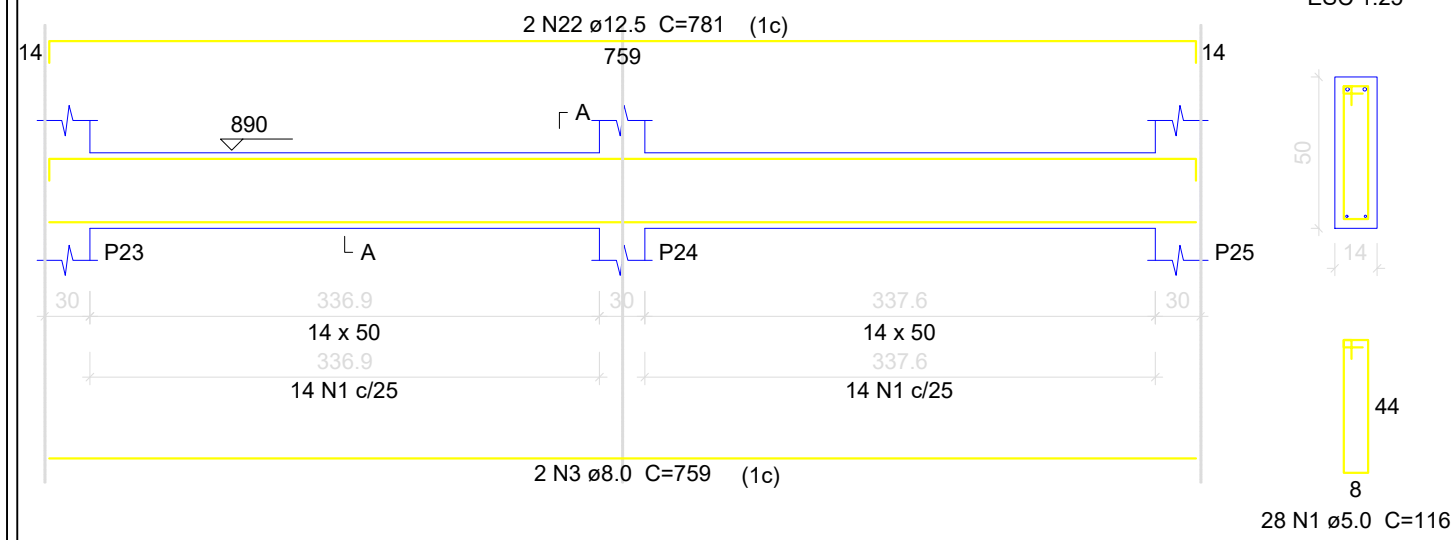


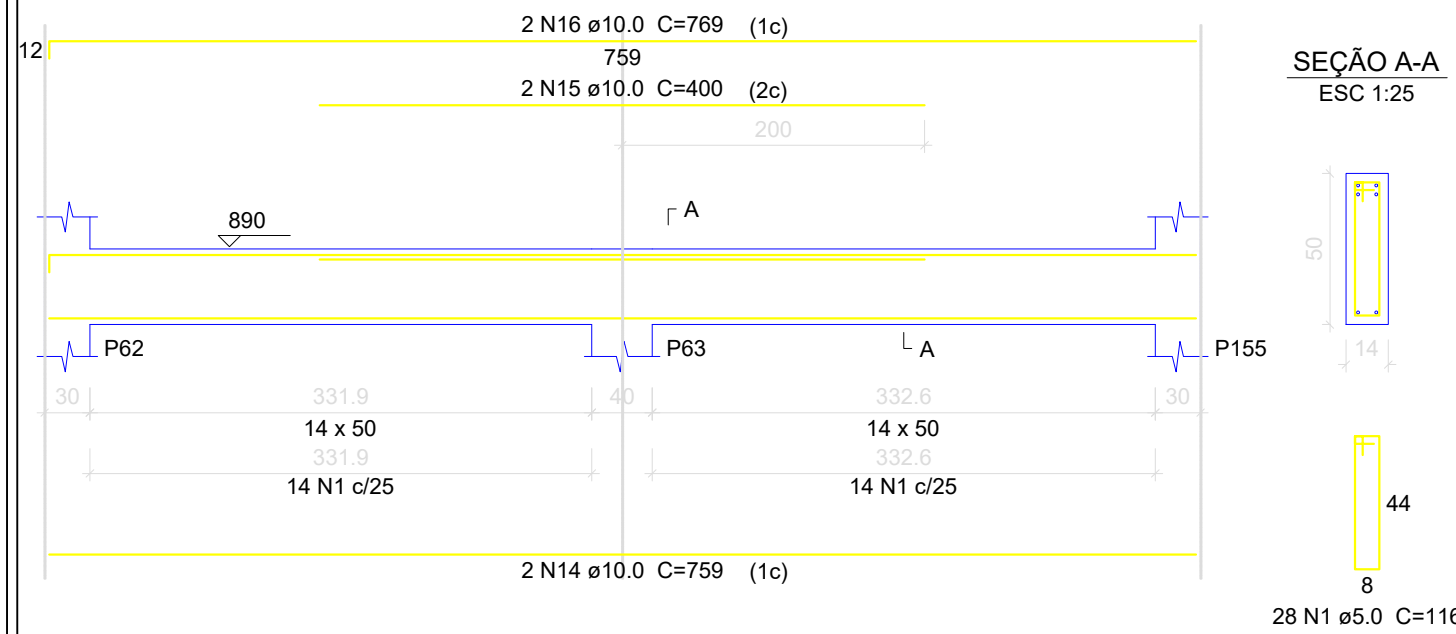
VRR400

ESC 1:50



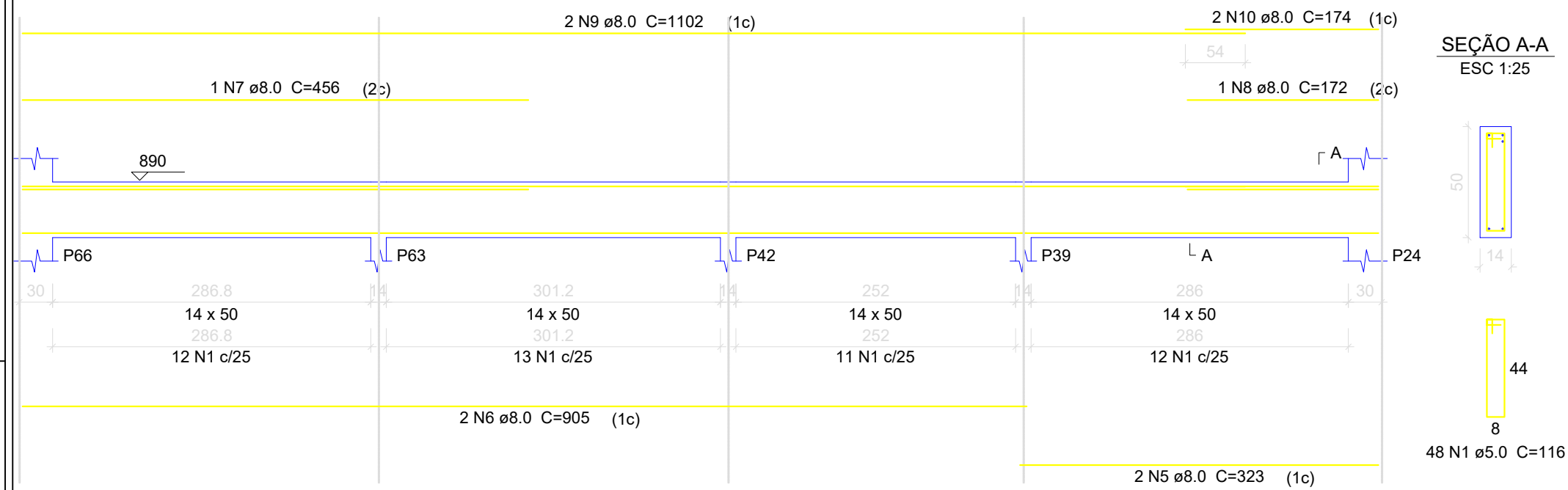
VRR403

ESC 1:50



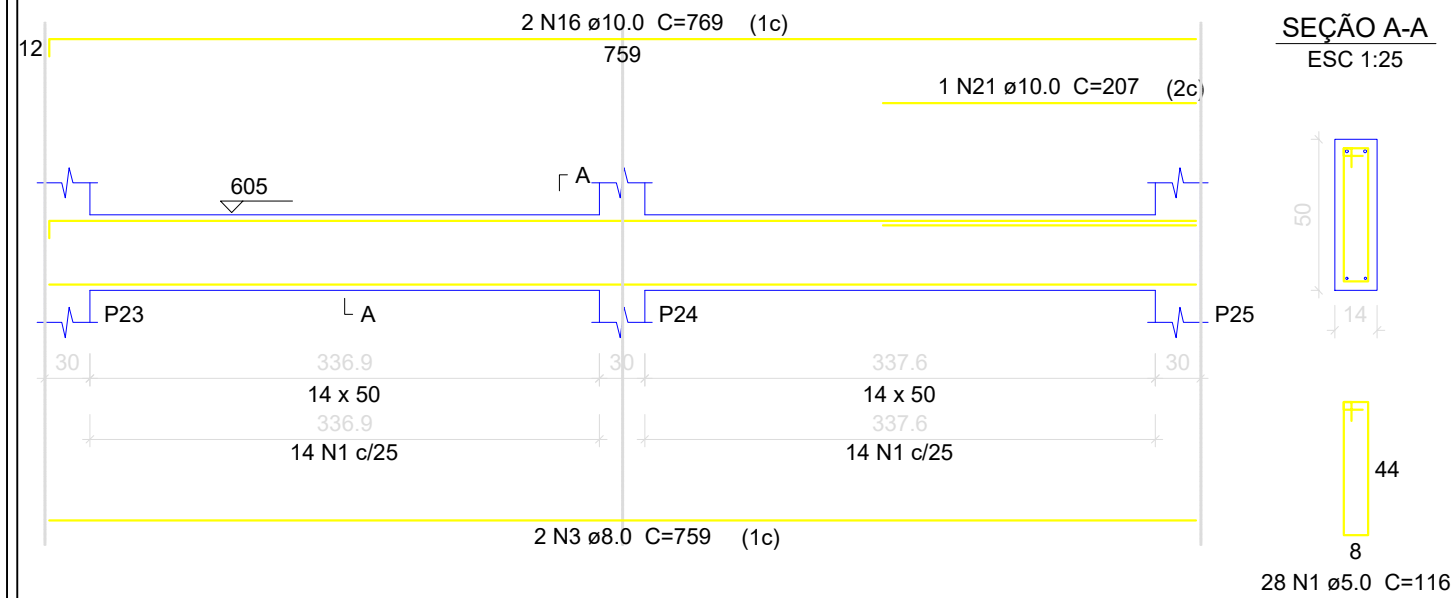
VRR406

ESC 1:50



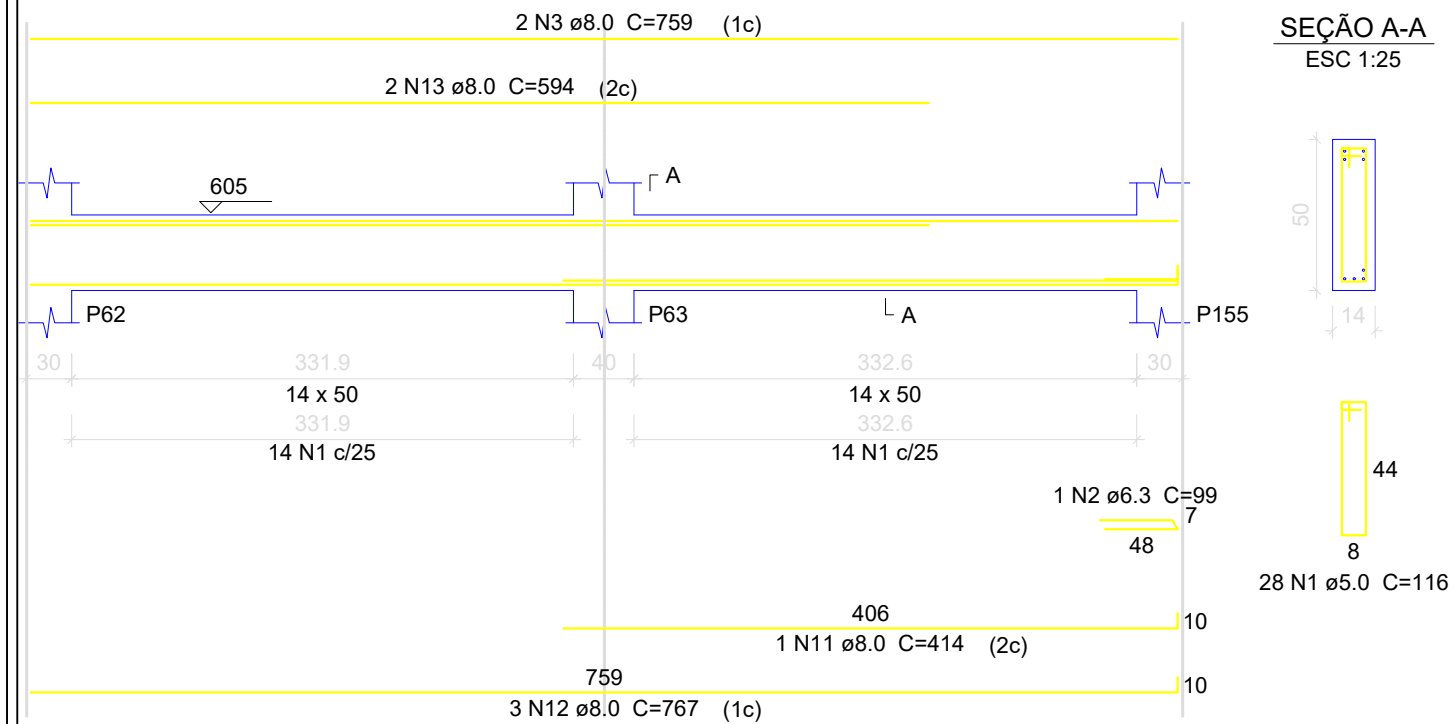
VRR408

ESC 1:50



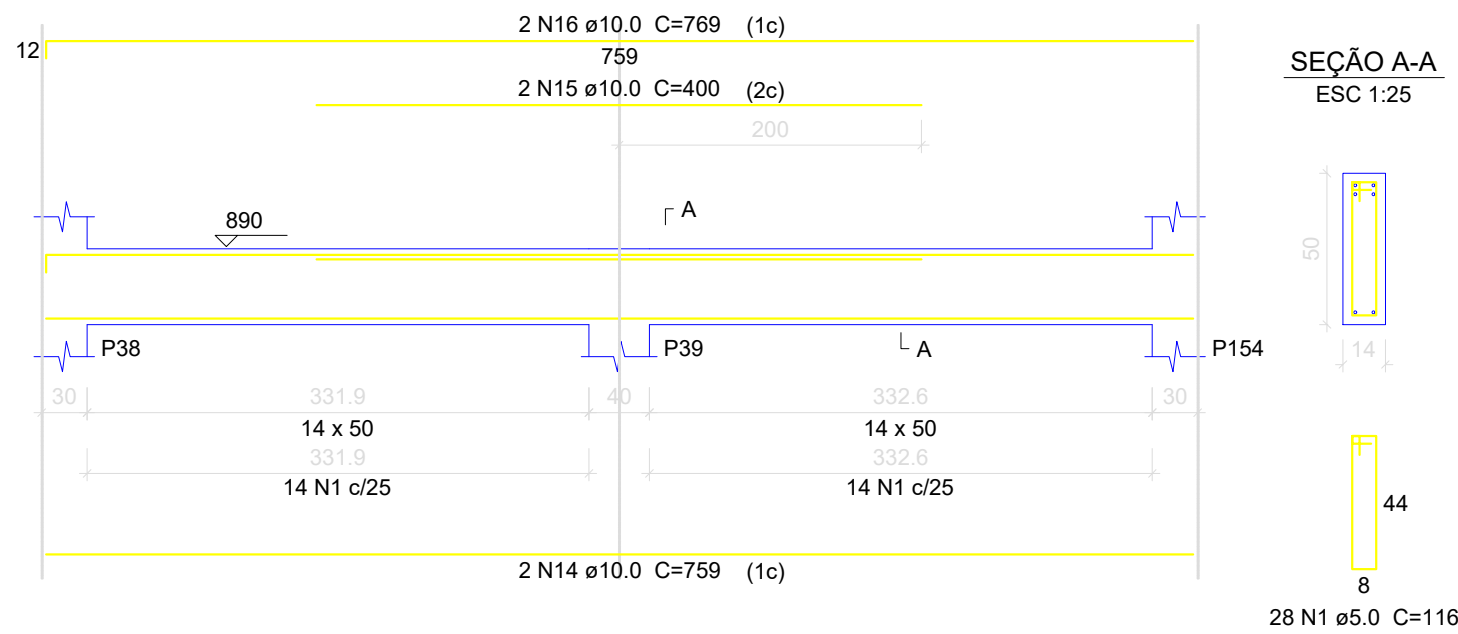
VRR411

ESC 1:50



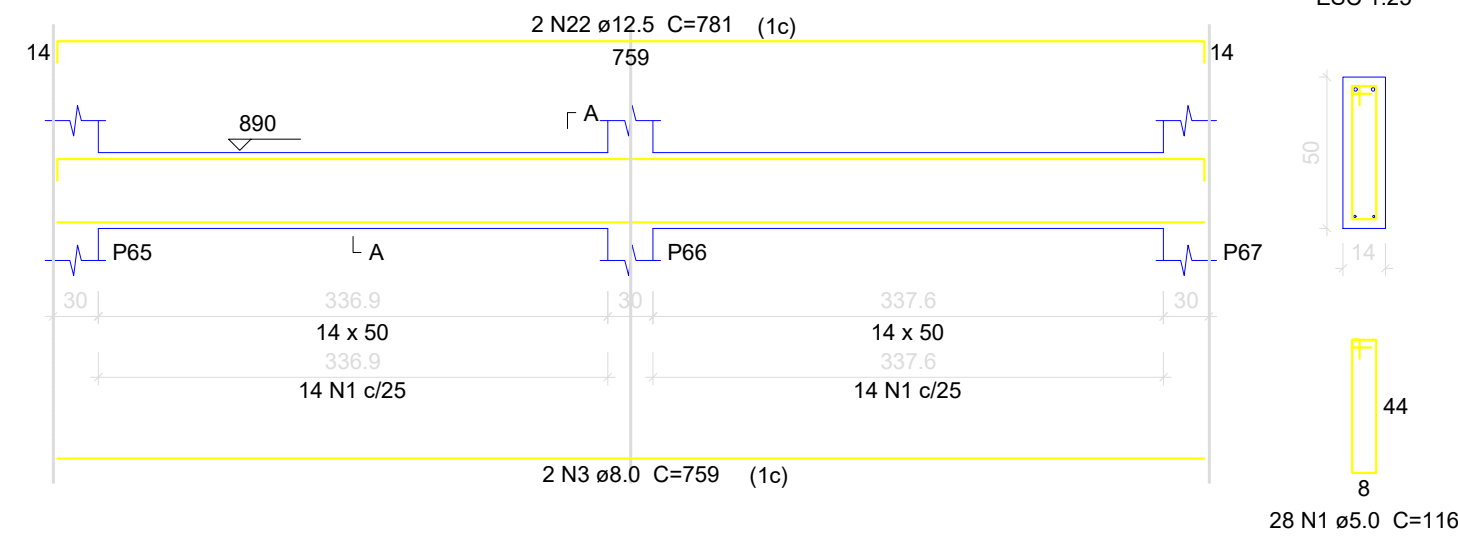
VRR401

ESC 1:50



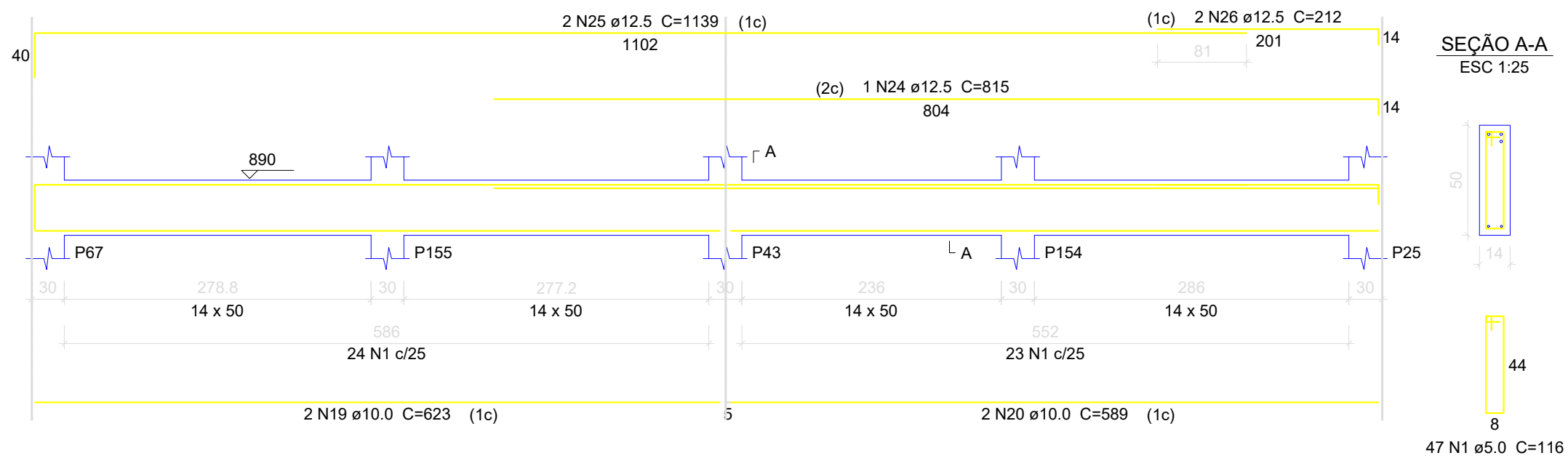
VRR404

ESC 1:50



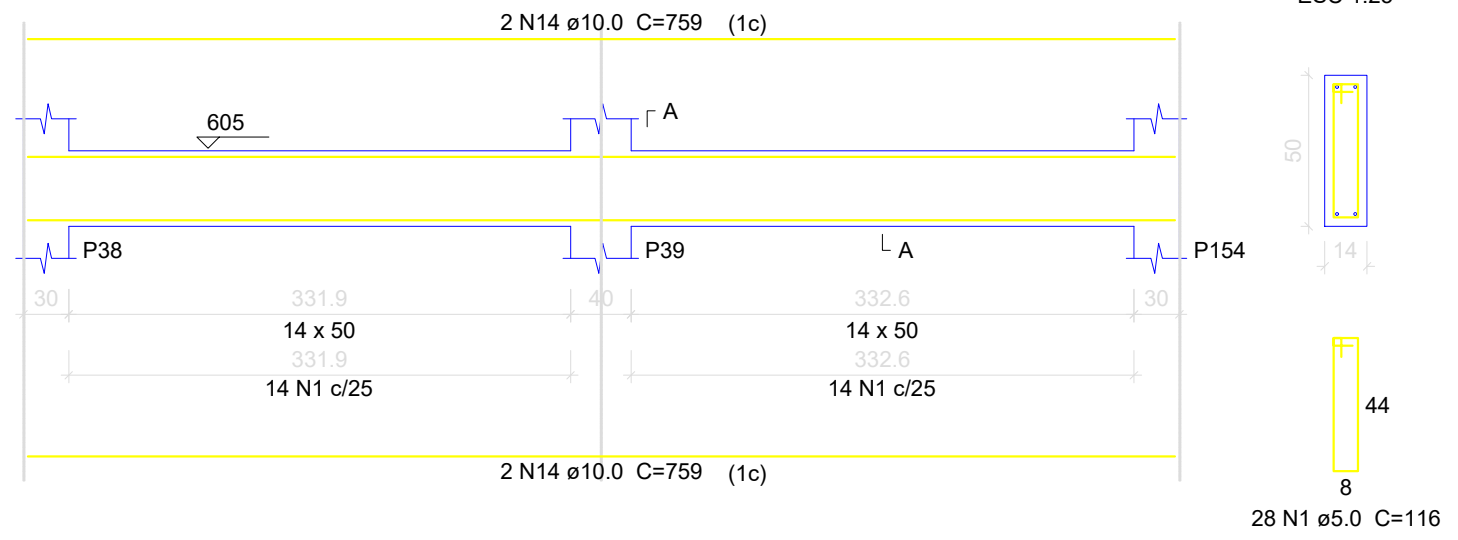
VRR407

ESC 1:50



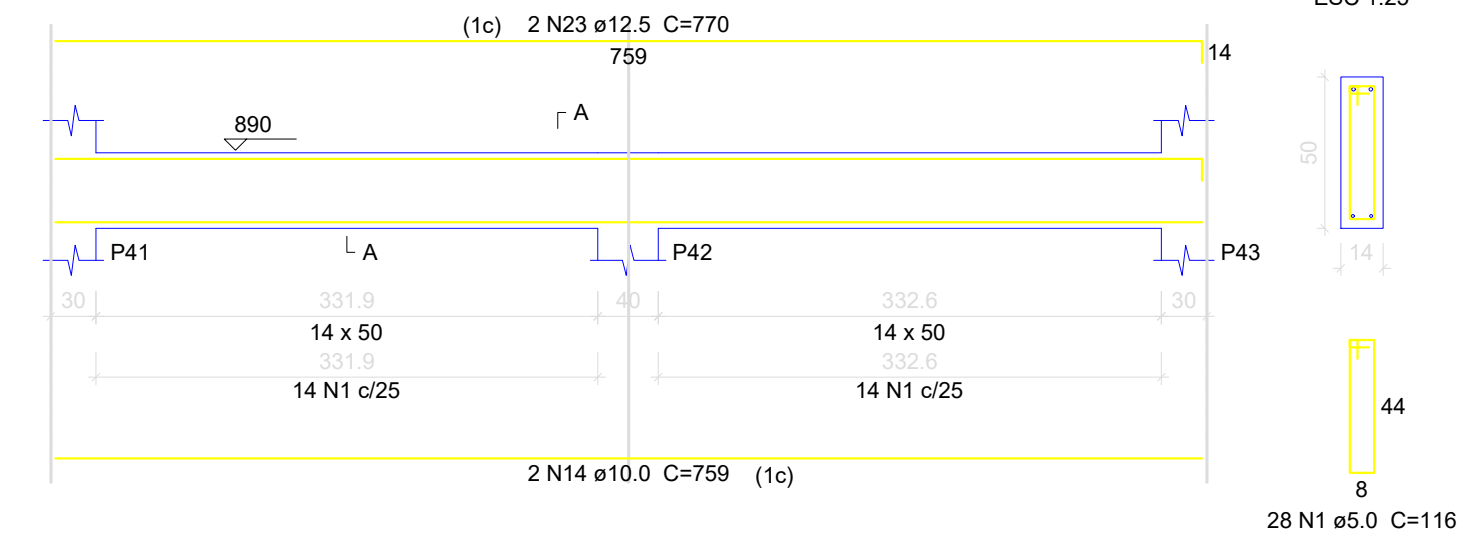
VRR409

ESC 1:50



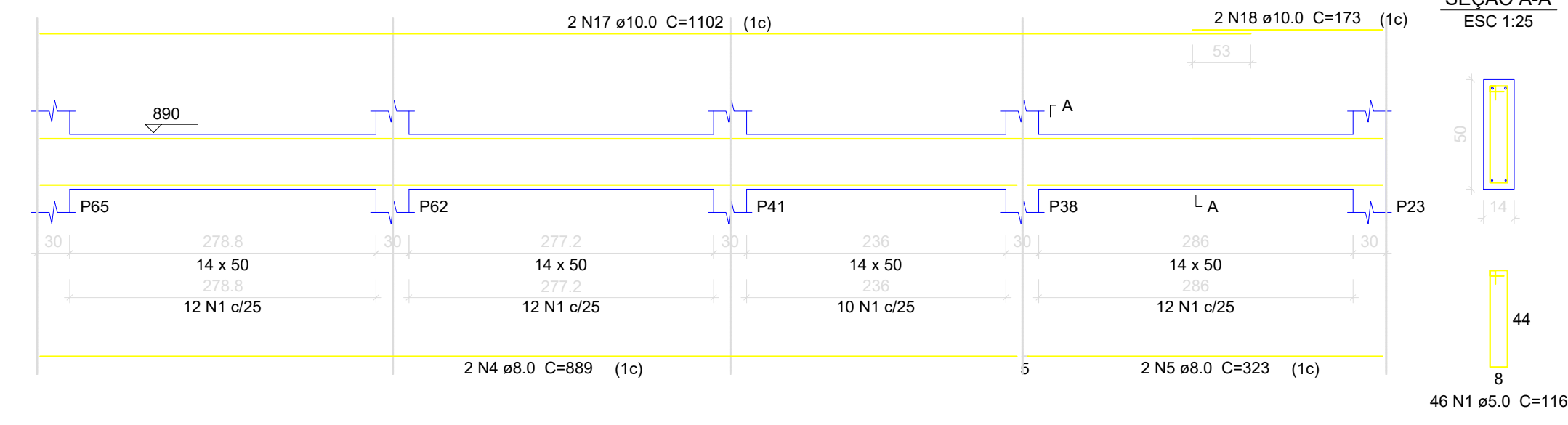
VRR402

ESC 1:50



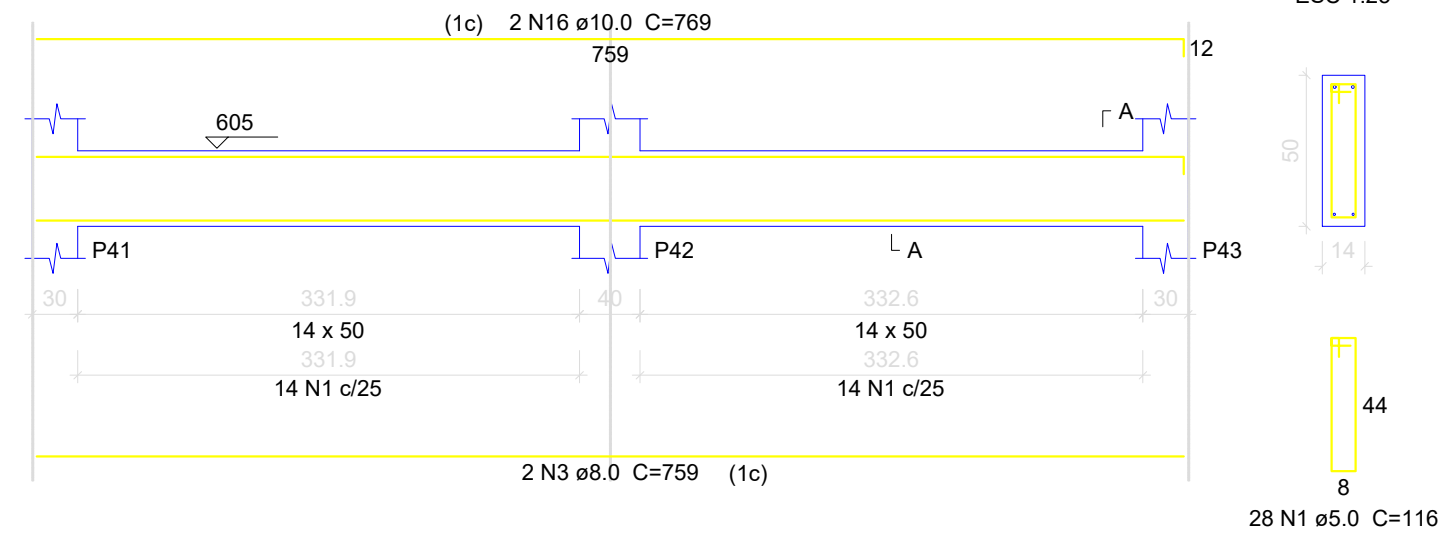
VRR405

ESC 1:50



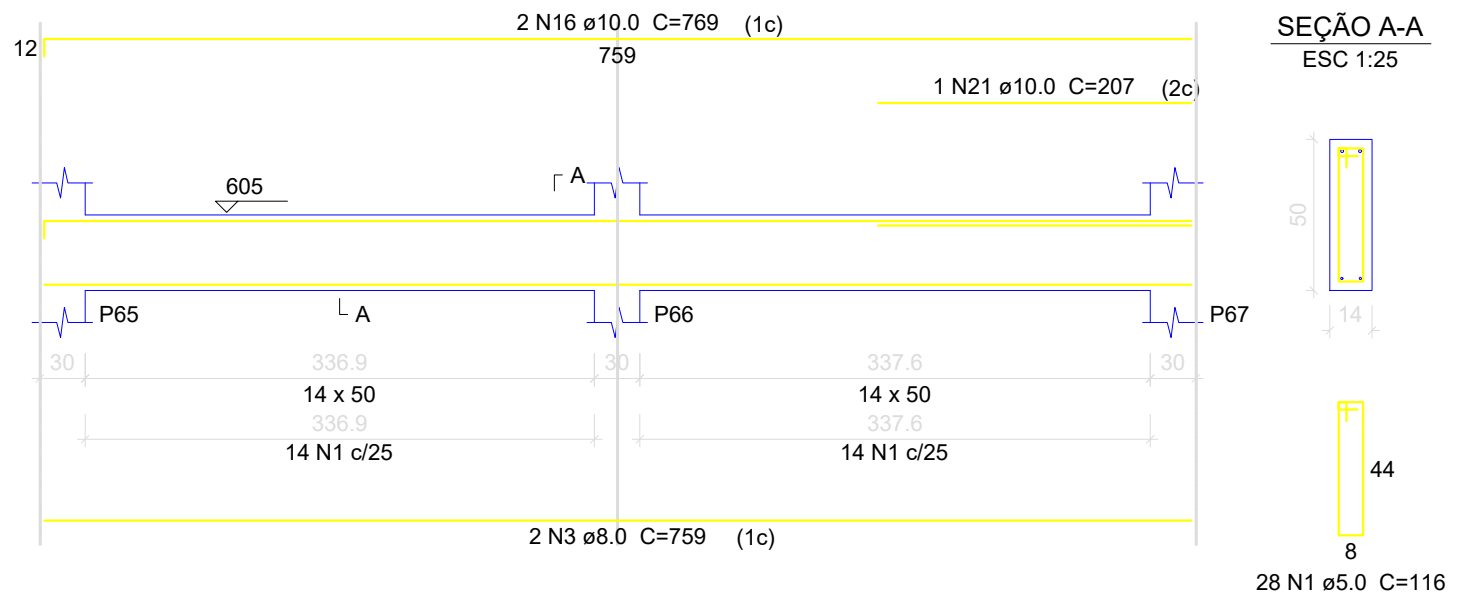
VRR410

ESC 1:50



VRR412

ESC 1:50




Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
VRR400	1	5.0	421	116	48836
VRR403	2	6.3	1	99	99
VRR406	3	8.0	12	759	9108
VRR409	4	8.0	2	889	1778
VRR412	5	8.0	4	323	1292
	6	8.0	2	905	1810
	7	8.0	1	456	456
	8	8.0	1	172	172
	9	8.0	2	1102	2204
	10	8.0	2	174	348
	11	8.0	1	414	414
	12	8.0	3	767	2301
	13	8.0	2	594	1188
	14	10.0	10	759	7590
	15	10.0	4	400	1600
	16	10.0	10	769	7690
	17	10.0	2	1102	2204
	18	10.0	2	173	346
	19	10.0	2	623	1246
	20	10.0	2	589	1178
	21	10.0	2	207	414
	22	12.5	4	781	3124
	23	12.5	2	770	1540
	24	12.5	1	815	815
	25	12.5	2	1139	2278
	26	12.5	2	212	424

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	1	0.3
	8.0	210.8	91.5
	10.0	222.7	151
	12.5	81.9	86.7
CA60	5.0	488.4	82.8
PESO TOTAL			
CA50		329.4	
CA60		82.8	

Vol. de concreto total (C-30) = 7.93 m³
Área de forma total = 129.15 m²



ARQUITETURA E ENGENHARIA

> PROJETOS INDUSTRIAIS / COMERCIAIS / RESIDENCIAIS E PÚBLICAS

> ASSESSORIA / CONSULTORIA

> GESTÃO DE OBRAS

> PERÍCIAS

> EXECUÇÃO DE OBRAS

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CNPJ 23.270.410/0001-49

22

OBRA:

PROJETO ESTRUTURAL
ESCOLA MUNICIPAL DE RIO RUFINO

PLANTA DAS VIGAS DE RESPALDO
DO RESERVATÓRIO

RESP. TÉCN.: James André Clauberg
Eng. Civil - CREA 45.160-6

RESP. TÉCN.: Indiamara de Oliveira Ribeiro
Eng. Civil - CREA 13.4548-3

CLIENTE: Prefeitura Municipal de Rio Rufino

DESENHO:

ESCALA:

DATA: OUT/2022