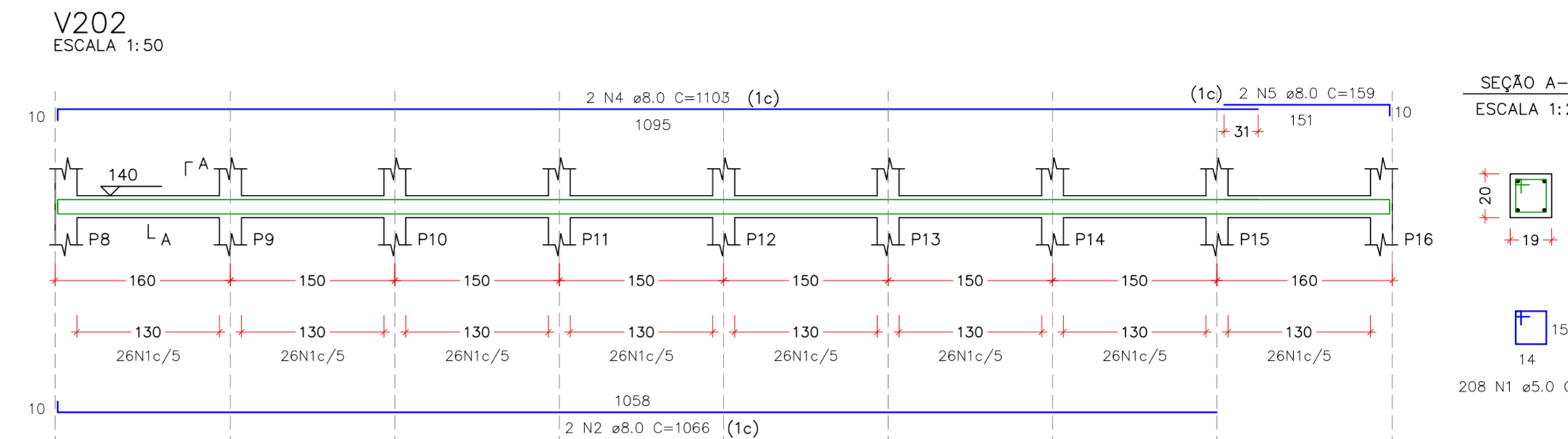
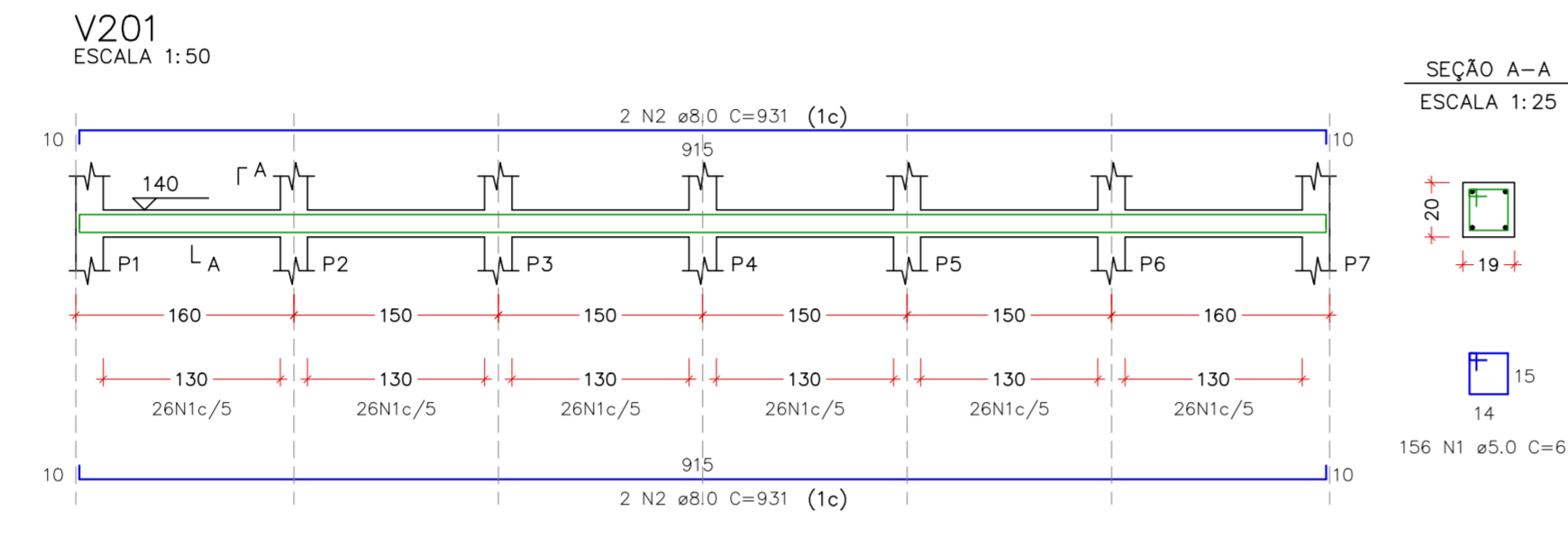
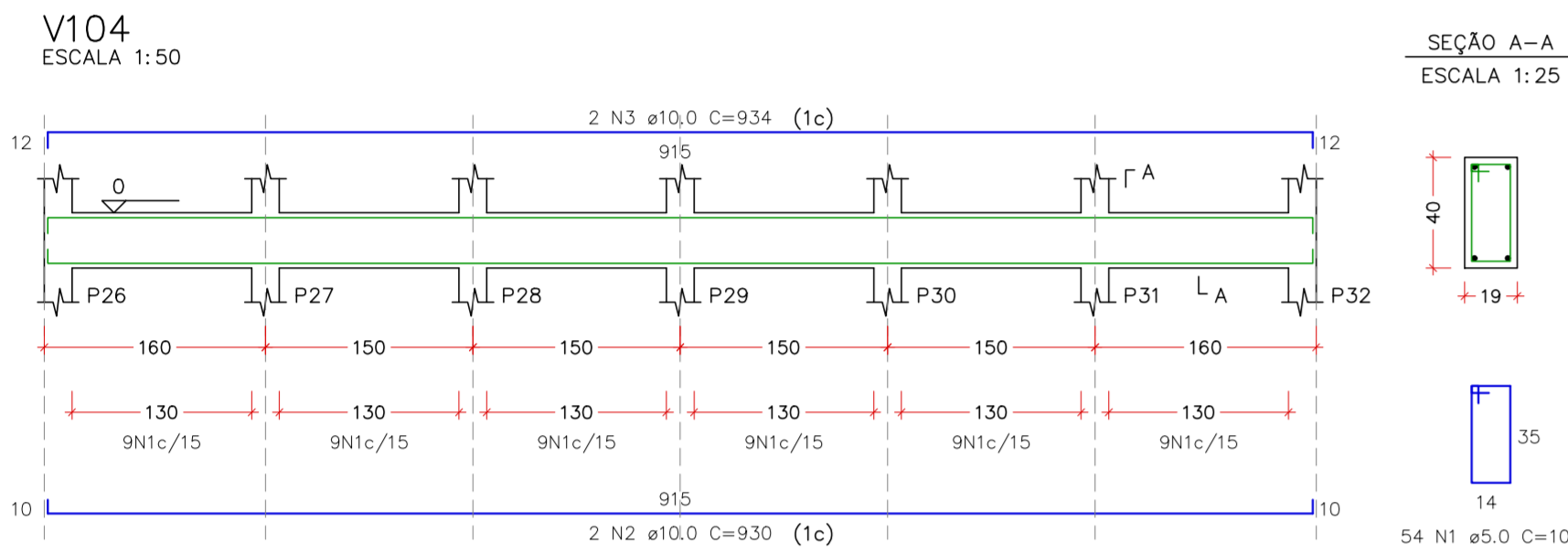


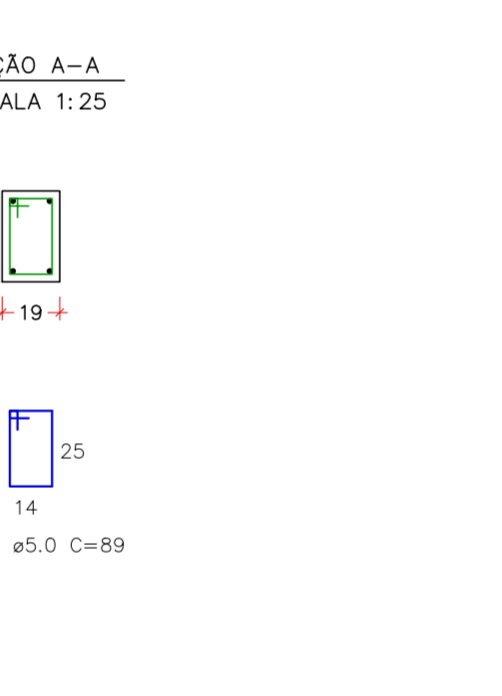
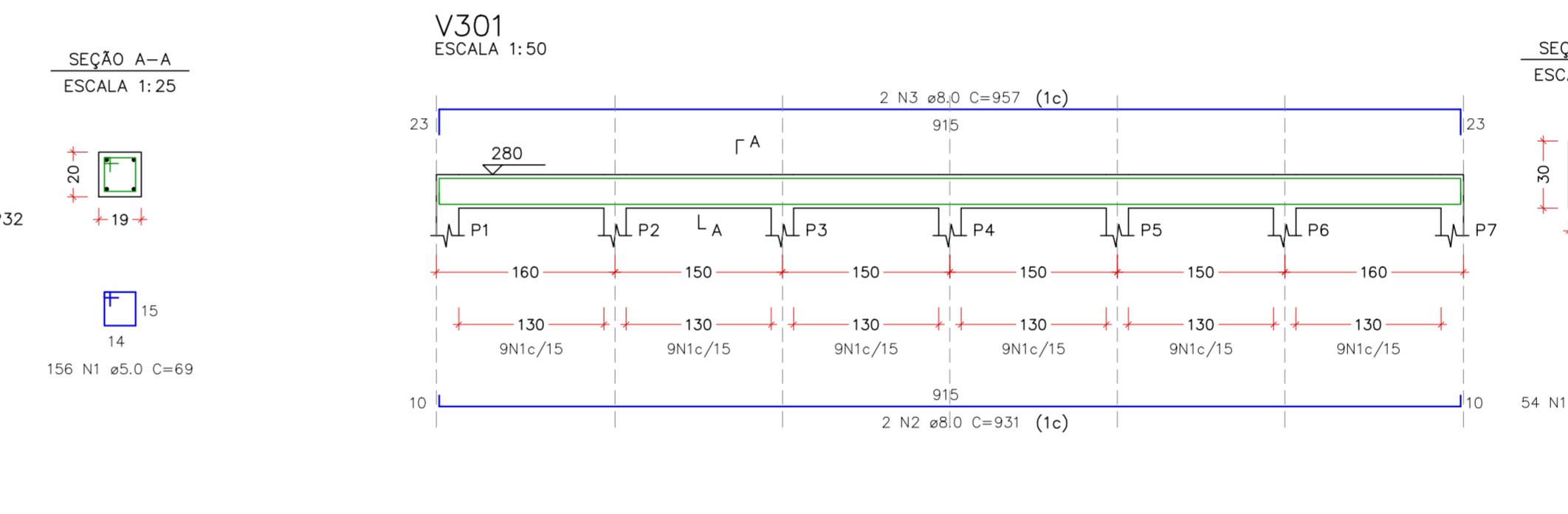
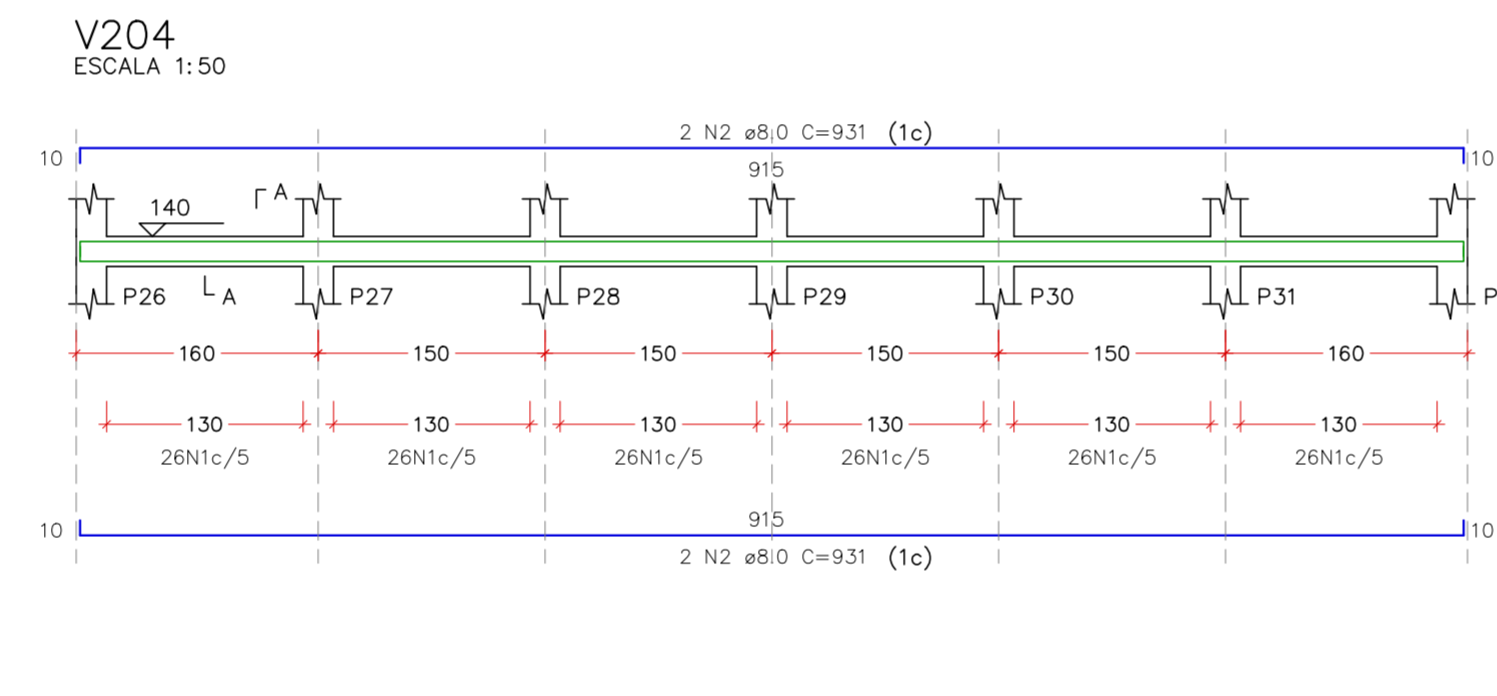
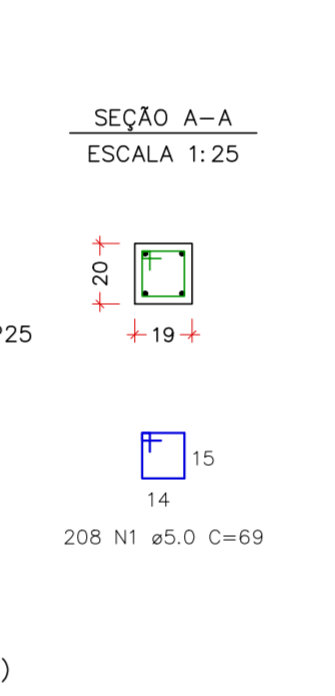
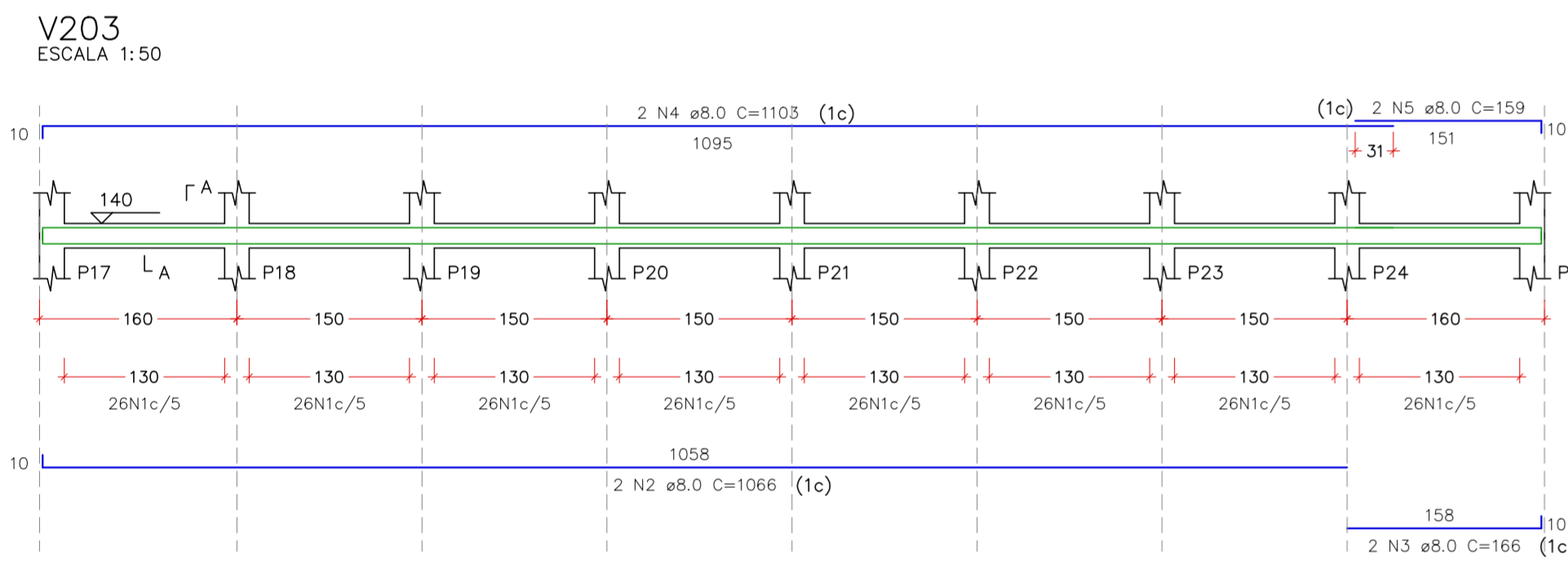
RELAÇÃO DO AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
V101	CA60	1	5.0	54	109	5886
	CA50	2	10.0	2	930	1860
	CA80	3	10.0	2	934	1868
V102	CA80	1	5.0	72	109	7848
	CA50	2	10.0	2	1066	2132
	CA30	3	10.0	2	166	332
V103	CA50	4	10.0	2	1105	2210
	CA50	5	10.0	2	179	358
	CA80	2	10.0	2	1066	2132
V104	CA50	3	10.0	2	166	332
	CA50	4	10.0	2	1105	2210
	CA50	5	10.0	2	179	358
V104	CA60	1	5.0	54	109	5886
	CA50	2	10.0	2	930	1860
	CA50	3	10.0	2	934	1868

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	175.2	118.8
CA60	5.0	274.7	46.6
PESO TOTAL (kg)		VOLUME DE CONCRETO (C=30) = 2.77 m ³	
CA50	118.8	ÁREA DE FORMA = 36.04 m ²	
CA60	46.6		



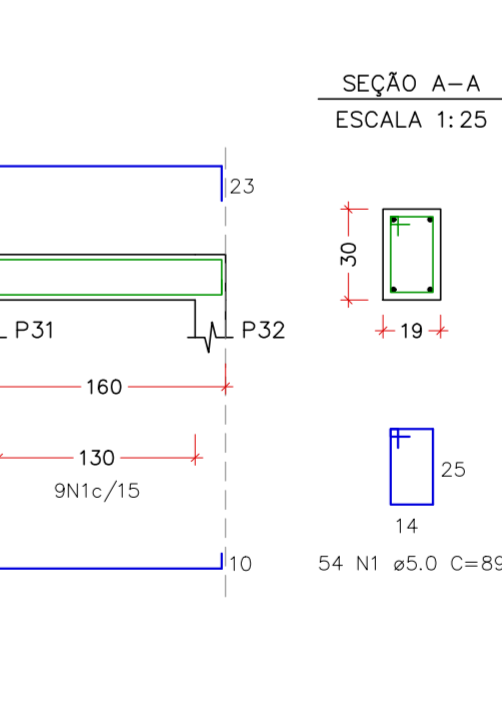
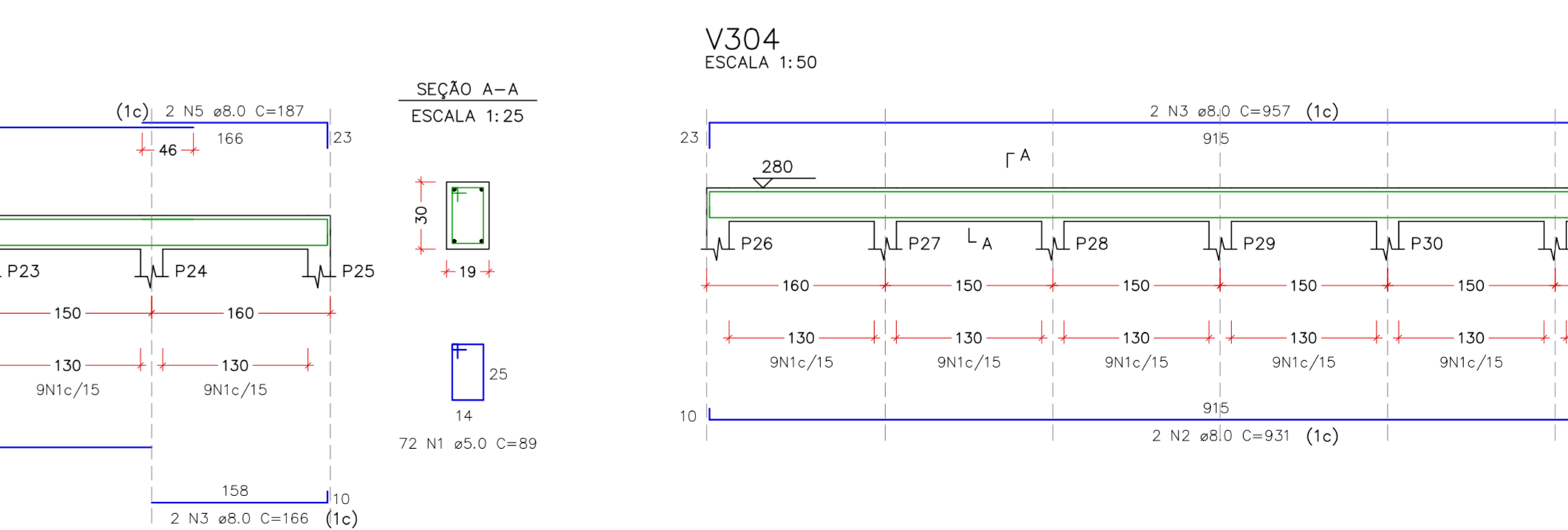
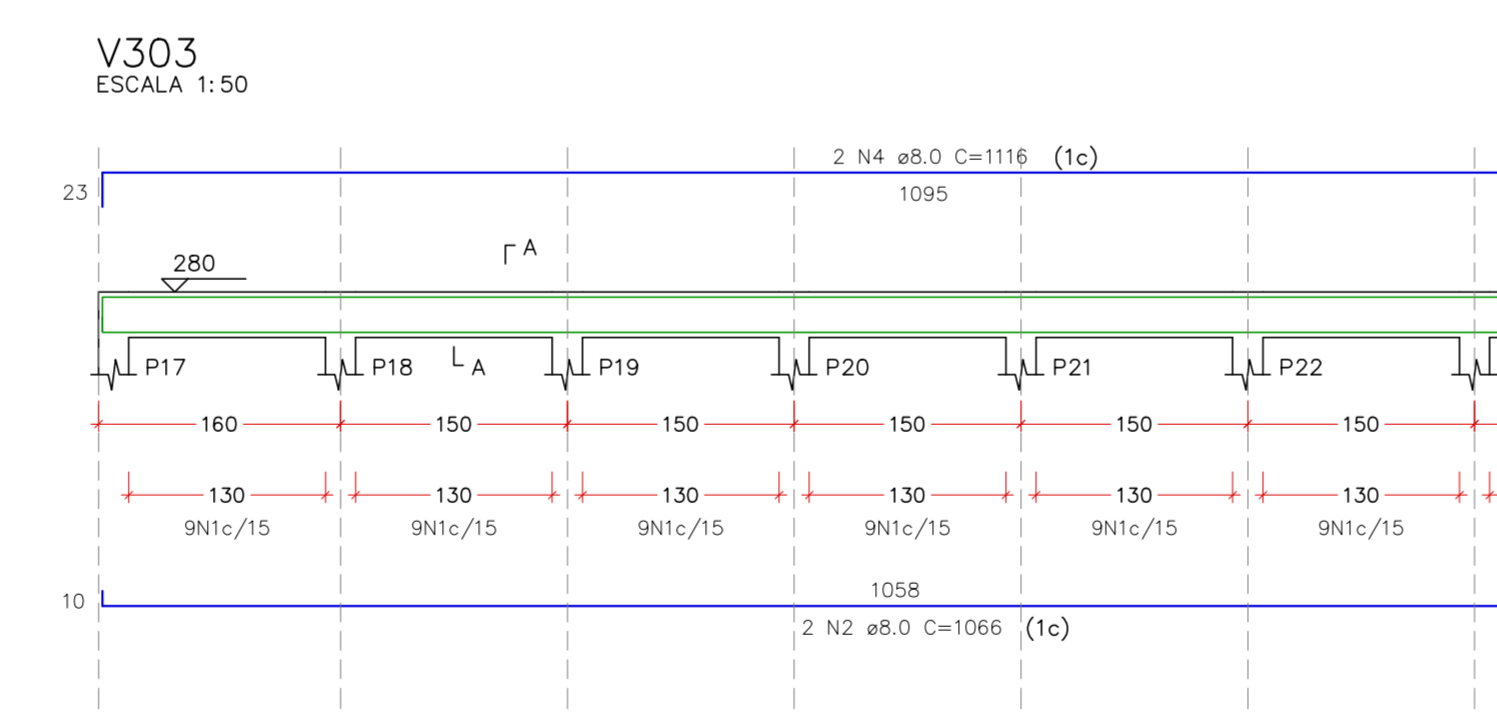
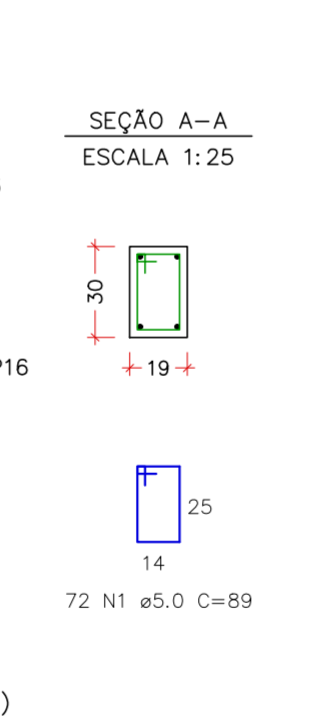
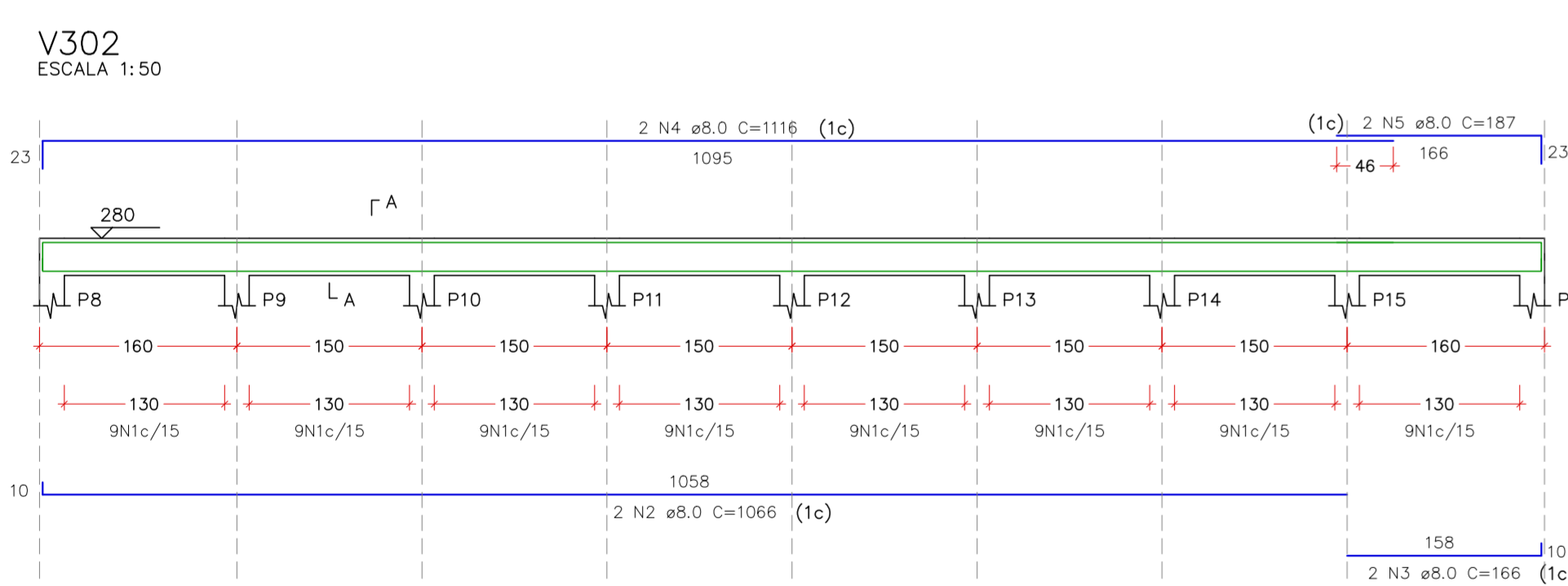
RELAÇÃO DO AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
V201	CA60	1	5.0	156	69	10764
	CA50	2	8.0	4	931	3724
	CA60	1	5.0	208	69	14352
V202	CA50	2	8.0	2	1066	2132
	CA50	3	8.0	2	166	332
	CA50	4	8.0	2	1103	2206
V203	CA50	5	8.0	2	159	318
	CA60	1	5.0	208	69	14352
	CA50	2	8.0	2	1066	2132
V204	CA50	3	8.0	2	166	332
	CA50	4	8.0	2	1103	2206
	CA50	5	8.0	2	159	318
V204	CA60	1	5.0	156	69	10764
	CA50	2	8.0	4	931	3724

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	174.2	75.6
CA60	5.0	502.3	85.2
PESO TOTAL (kg)		VOLUME DE CONCRETO (C=30) = 1.38 m ³	
CA50	75.6	ÁREA DE FORMA = 21.48 m ²	
CA60	85.2		



RELAÇÃO DO AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
V301	CA60	1	5.0	54	89	4806
	CA50	2	8.0	2	931	1862
	CA30	3	8.0	2	957	1914
V302	CA60	1	5.0	72	89	6408
	CA50	2	10.0	2	1066	2132
	CA50	3	8.0	2	166	332
V303	CA50	4	8.0	2	1116	2232
	CA50	5	8.0	2	187	374
	CA60	1	5.0	72	89	6408
V304	CA50	2	8.0	2	1066	2132
	CA50	3	8.0	2	166	332
	CA50	4	8.0	2	1116	2232
V304	CA50	5	8.0	2	187	374
	CA60	1	5.0	54	89	4806
	CA50	2	8.0	2	931	1862
V304	CA50	3	8.0	2	957	1914

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	176.9	76.8
CA60	5.0	224.3	38
PESO TOTAL (kg)		VOLUME DE CONCRETO (C=30) = 2.07 m ³	
CA50	76.8	ÁREA DE FORMA = 28.76 m ²	
CA60	38		



REV. 00 | 18/06/24 | EMISSÃO INICIAL | DAC

REVISÃO DATA : | DESCRIÇÃO: | RESP.:

CLIENTE:

Prefeitura Municipal de Pouso Alegre

PROJETO: **DAC** engenharia

Rua Cel. Joaquim Francisco, 341, Bairro Varginha
CEP: 37501-052 - Itajubá / MG
Tel: (35) 3623-8846
www.dacengenharia.com.br

COORDENAÇÃO: ALOISIO CAETANO FERREIRA

RESPONSÁVEL TÉCNICO E AUTOR:

ENG.º FLÁVIA C. BARBOSA MG-187.842/D

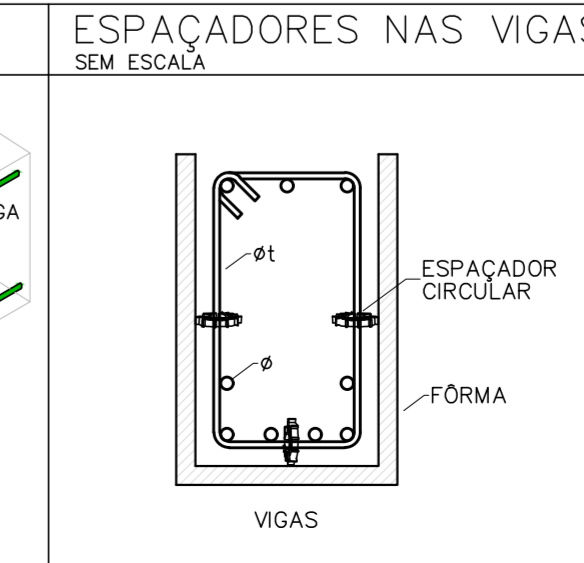
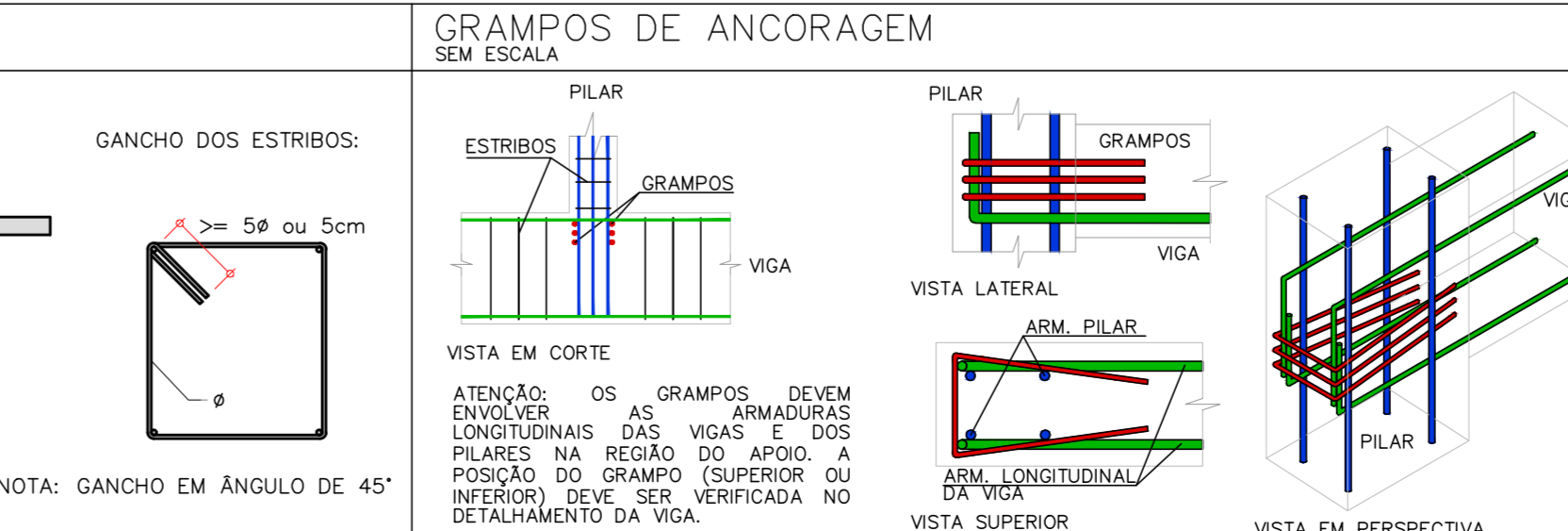
DETALHE DE DOBRAS SEM ESCALA

DIÂMETRO MÍNIMO DOS PINOS DE DOBRAMENTO DAS BARRAS:

ESTRIBOS		BARRAS DE TRAÇÃO	
ø (mm)	D (mm)	ø (mm)	D (mm)
5,0	15,0	5,0	30,0
6,3	18,9	6,3	31,5
8,0	24,0	8,0	40,0
10,0	30,0	10,0	50,0
12,5	62,5	12,5	62,5
16,0	80,0	16,0	80,0
≥= 20,0	8xø	≥= 20,0	8xø

GANCHO DOS ESTRIBOS:

NOTA: GANCHO EM ÂNGULO DE 45°



EMPENHAMENTO: **CONSTRUÇÃO DO REFEITÓRIO DA E.M. VASCONCELOS COSTA**

ENDEREÇO: RUA VENERANDO SCODELER, BELLA ITÁLIA
POUSO ALEGRE – MINAS GERAIS

DISCIPLINA: **ESTRUTURAL**

ASSUNTO: PROJETO ESTRUTURAL EM CONCRETO ARMADO
MURO DE ARRIMO
DETALHAMENTO DAS VIGAS

FASE DO PROJETO: **EXECUTIVO**

FOLHA Nº: **13/13**

DATA INICIAL: 18/06/2024 | ESCALA: INDICADA | REVISÃO: ROO | ARQUIVO: DAC-PMPA-RVAS-PE-EST-ROO.DWG