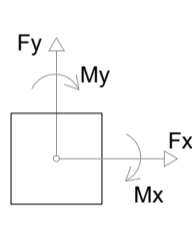
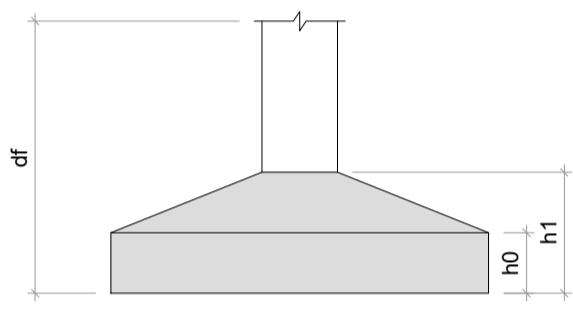


Nome	Seção (cm)	X (cm)	Y (cm)	Carga Máx. (tf)	Carga Mín. (tf)	Pilar				Fundação								
						Mx Máximo (kgf.m)	Mx Negativo (kgf.m)	My Máximo (kgf.m)	My Negativo (kgf.m)	Fx Máximo (tf)	Fx Negativo (tf)	Fy Máximo (tf)	Fy Negativo (tf)	Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)	df (cm)
P1	14x26	87.08	2000.08	2.6	4.8	100	-100	0	-100	0.1	-0.5	0.3	0.0	75	85	25	40	100
P2	14x26	510.17	2006.08	5.4	5.2	0	-100	200	0	0.4	0.0	0.4	0.0	75	85	25	40	100
P3	14x26	809.95	2006.08	3.4	3.3	200	0	100	-200	0.2	-0.1	0.0	-0.1	65	70	30	40	100
P4	14x26	1109.72	2006.08	3.6	3.1	0	-100	200	-200	0.3	0.0	0.4	0.0	65	70	30	40	100
P5	14x26	1274.97	2006.08	5.2	4.6	0	-100	0	-200	0.0	-0.5	0.4	0.0	75	85	25	40	100
P6	14x26	1745.51	2006.08	4.8	3.9	200	0	300	0	0.5	0.0	0.2	0.0	75	85	25	40	100
P7	14x26	1889.92	2006.08	3.6	2.6	100	0	100	-100	0.2	-0.2	0.1	0.0	65	70	30	40	100
P8	14x26	86.08	1736.04	2.6	2.5	200	-200	100	0	0.1	0.0	0.1	-0.3	65	70	30	40	100
P9	14x26	502.75	1630.04	2.9	2.6	300	0	0	-300	0.0	-1.0	0.0	-0.6	80	100	25	40	100
P10	14x26	1104.34	1630.67	3.7	3.1	200	0	300	0	0.8	0.0	0.0	-0.3	75	85	25	40	100
P11	14x26	1266.93	1630.67	4.0	3.4	100	0	0	-700	0.0	-1.3	0.0	-0.1	100	115	20	40	100
P12	14x26	1889.92	1630.67	5.9	5.7	100	-200	500	0	1.4	0.0	0.2	0.0	80	100	25	40	100
P13	14x26	87.08	1472.00	4.6	4.4	100	-100	0	-100	0.0	-0.5	0.2	0.0	75	85	25	40	100
P14	14x26	497.58	1465.00	2.5	2.1	100	-200	300	0	0.5	0.0	0.2	0.0	65	70	30	40	100
P15	14x26	652.75	1459.42	1.9	1.5	100	-100	100	0	0.1	-0.2	0.2	0.0	65	70	30	40	100
P16	14x26	881.33	1465.42	1.1	0.9	0	0	200	-200	0.2	-0.1	0.1	0.0	65	70	30	40	100
P17	14x26	1110.34	1459.42	1.6	1.3	200	-100	100	0	0.1	0.0	0.2	-0.2	65	70	30	40	100
P18	15x30	660.75	1279.76	6.6	5.3	100	-200	100	-300	0.0	-0.1	0.2	0.0	80	100	25	40	100
P19	14x26	881.55	1274.26	1.8	1.7	0	0	100	-200	0.2	-0.3	0.1	0.0	65	70	30	40	100
P20	15x30	1102.34	1279.76	6.1	5.0	100	-200	200	-100	0.2	0.0	0.2	0.0	75	85	25	40	100
P21	14x26	1265.51	1243.61	3.4	3.2	100	0	0	-500	0.0	-1.3	0.0	-0.3	95	105	20	40	100
P22	14x26	1889.92	1243.61	5.4	5.2	100	0	300	0	1.0	0.0	0.0	-0.2	75	85	25	40	100
P23	14x26	93.08	1143.61	4.9	4.6	100	0	100	-300	0.0	-0.6	0.1	-0.2	75	85	25	40	100
P24	14x26	497.58	1143.61	2.8	2.5	100	0	400	0	0.7	0.0	0.1	-0.2	65	70	30	40	100
P25	14x26	652.75	969.33	5.9	5.3	100	-100	0	0	0.0	-0.2	0.2	0.0	75	85	25	40	100
P26	14x26	881.55	969.33	1.5	1.4	0	0	100	-200	0.1	-0.1	0.2	0.0	65	70	30	40	100
P27	14x26	1110.34	969.33	5.3	4.8	200	-200	100	0	0.1	-0.2	0.1	-0.1	75	85	25	40	100
P28	14x26	1259.93	969.33	3.1	2.7	100	-100	0	-200	0.0	-0.2	0.3	0.0	65	70	30	40	100
P29	14x26	1895.92	969.33	4.1	3.9	200	-200	100	0	0.3	0.0	0.1	-0.2	65	70	30	40	100
P30	14x26	93.08	823.28	4.5	4.3	100	0	100	-300	0.0	-0.6	0.1	-0.2	75	85	25	40	100
P31	14x26	497.58	823.28	2.7	2.5	100	0	400	0	0.7	0.0	0.1	0.0	65	70	30	40	100
P32	14x26	652.75	668.49	2.0	1.7	100	-200	0	-200	0.0	-0.1	0.1	-0.3	65	70	30	40	100
P33	14x26	881.55	662.49	1.3	1.1	100	0	100	-200	0.1	-0.3	0.0	-0.2	55	70	40	40	100
P34	14x26	1110.34	668.49	2.0	1.5	200	0	100	0	0.1	-0.2	0.0	-0.2	65	70	30	40	100
P35	14x26	1265.51	663.33	3.3	2.8	100	0	0	-400	0.0	-1.1	0.1	-0.1	80	100	25	40	100
P36	14x26	1889.92	663.33	5.1	4.9	100	0	300	0	1.0	0.0	0.1	-0.1	75	85	25	40	100
P37	14x26	93.08	502.95	5.8	5.5	0	-100	0	-400	0.0	-0.7	0.4	0.0	75	85	25	40	100
P38	14x26	497.58	502.95	2.0	1.6	100	0	300	0	0.6	0.0	0.0	-0.1	65	70	30	40	100
P39	14x26	652.75	497.58	3.2	2.7	0	-200	0	-200	0.0	-0.7	0.5	0.0	75	85	25	40	100
P40	15x30	1259.93	497.95	2.7	2.5	0	-500	300	0	0.9	0.0	0.8	0.0	100	115	20	40	100
P41	14x26	503.17	337.92	1.6	1.4	100	0	0	-100	0.2	0.0	0.1	-0.2	65	70	30	40	100
P42	14x26	1895.92	375.21	3.5	3.3	200	-200	0	-300	0.0	-0.1	0.1	-0.1	65	70	30	40	100
P43	14x26	93.08	87.08	4.3	4.1	200	0	0	-700	0.0	-1.3	0.0	-0.4	80	100	25	40	100
P44	20x40	650.58	100.08	7.4	6.9	300	-400	300	-200	0.9	0.0	0.0	-0.5	80	100	25	40	100
P45	20x40	1262.51	100.08	7.8	7.3	400	-600	0	-500	0.0	-1.2	0.0	-0.8	85	105	25	40	100
P46	14x26	1889.92	87.08	4.0	3.6	100	0	600	0	1.4	0.0	0.0	-0.3	95	105	20	40	100

Os esforços indicados nesta tabela são os valores máximos obtidos pela envoltória de todas as combinações definidas para as fundações. Para análises complementares, deve-se consultar o relatório de esforços na fundação, que apresenta os valores calculados para cada combinação.



Localização no eixo X		Localização no eixo Y	
Coordenadas (cm)	Nome	Coordenadas (cm)	Nome
86.08	P8	2006.08	P2, P3, P4, P5, P6, P7
87.08	P1, P13	2000.08	P1
93.08	P23, P30, P37, P43	1736.04	P8
497.58	P14, P24, P31, P38	1630.67	P10, P11, P12
502.75	P9	1630.04	P9
503.17	P41	1472.00	P13
510.17	P2	1465.42	P16
650.58	P44	1465.00	P14
652.75	P15, P25, P32, P39	1459.42	P15, P17
660.75	P18	1279.76	P18, P20
809.95	P3	1274.26	P19
881.33	P16	1243.61	P21, P22
881.55	P19, P26, P33	1143.61	P23, P24
1102.34	P20	969.33	P25, P26, P27, P28, P29
1104.34	P10	823.28	P30, P31
1109.72	P4	668.49	P32, P34
1110.34	P17, P27, P34	663.33	P35, P36
1259.93	P26, P40	662.49	P33
1262.51	P45	502.95	P37, P38
1265.51	P21, P35	497.95	P40
1266.93	P11	497.58	P39
1274.97	P5	375.21	P42
1745.51	P6	337.92	P41
1889.92	P7, P12, P22, P36, P46	100.08	P44, P45
1895.92	P29, P42	87.08	P43, P46

Planta de locação  
escala 1:50

PROJETO

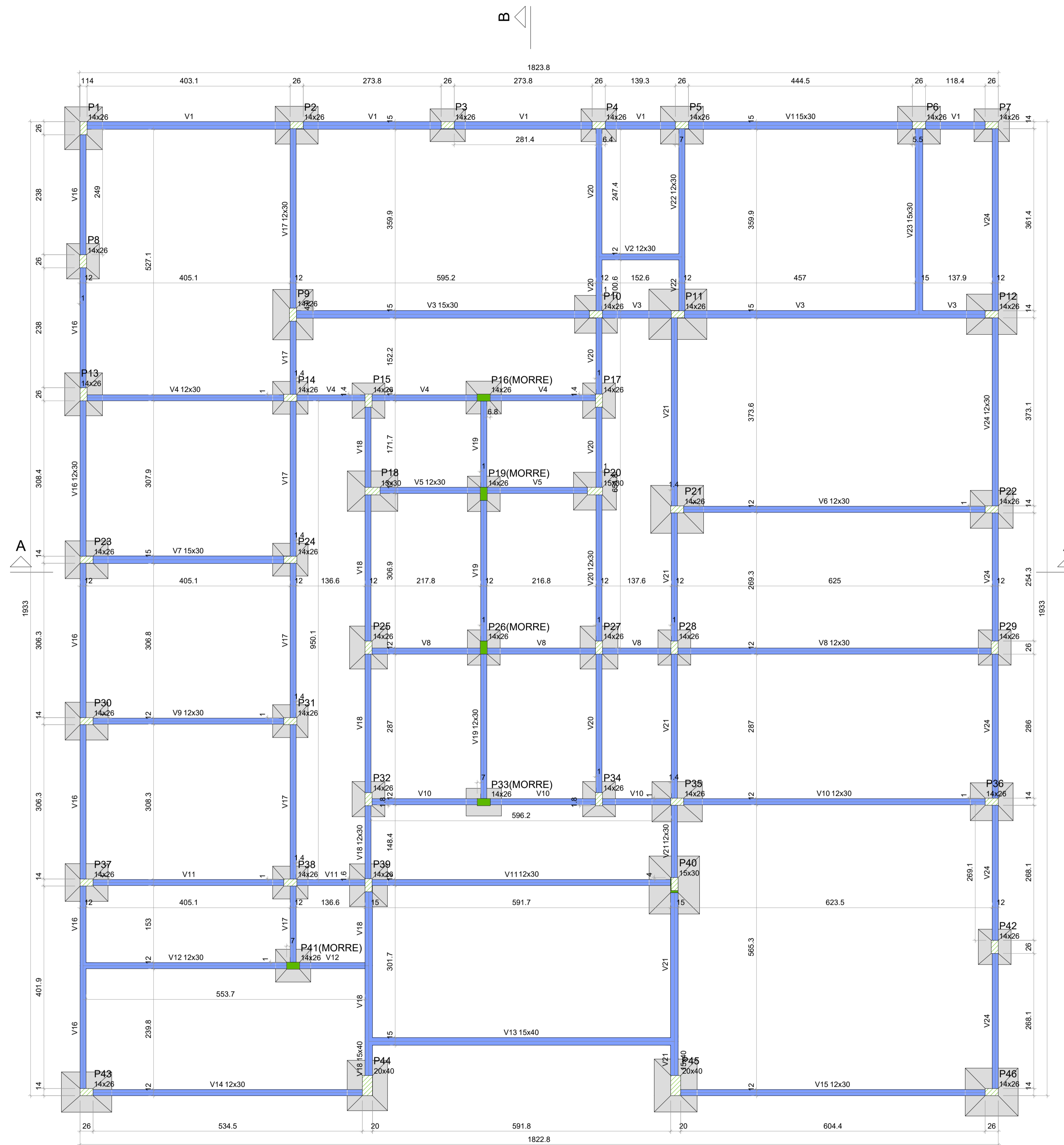
PLANTA DE LOCAÇÃO SAPATAS - ESC. INDICADA  
ÁREA CONSTRUÍDA: 360,95M<sup>2</sup>

RESPONSÁVEL TÉCNICO

*Lucas Rodrigues Ramos*  
ENG. LUCAS RODRIGUES RAMOS  
CREA-ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁQUA





Vigas		
Nome	Seção (cm)	Nível (cm)
V1	15x30	0
V2	12x30	0
V3	15x30	0
V4	12x30	0
V5	12x30	0
V6	12x30	0
V7	15x30	0
V8	12x30	0
V9	12x30	0
V10	12x30	0
V11	12x30	0
V12	12x30	0
V13	15x40	0
V14	12x30	0
V15	12x30	0
V16	12x30	0
V17	12x30	0
V18	15x40	0
V19	12x30	0
V20	12x30	0
V21	15x40	0
V22	12x30	0
V23	15x30	0
V24	12x30	0

Características dos materiais		
fck (kgf/cm²)	Ecs (kgf/cm²)	
250	241500	

Dimensão máxima do agregado = 19 mm

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	14x26	0	0
P2	14x26	0	0
P3	14x26	0	0
P4	14x26	0	0
P5	14x26	0	0
P6	14x26	0	0
P7	14x26	0	0
P8	14x26	0	0
P9	14x26	0	0
P10	14x26	0	0
P11	14x26	0	0
P12	14x26	0	0
P13	14x26	0	0
P14	14x26	0	0
P15	14x26	0	0
P16	14x26	0	0
P17	14x26	0	0
P18	15x30	0	0
P19	14x26	0	0
P20	15x30	0	0
P21	14x26	0	0
P22	14x26	0	0
P23	14x26	0	0
P24	14x26	0	0
P25	14x26	0	0
P26	14x26	0	0
P27	14x26	0	0
P28	14x26	0	0
P29	14x26	0	0
P30	14x26	0	0
P31	14x26	0	0
P32	14x26	0	0
P33	14x26	0	0
P34	14x26	0	0
P35	14x26	0	0
P36	14x26	0	0
P37	14x26	0	0
P38	14x26	0	0
P39	14x26	0	0
P40	15x30	0	0
P41	14x26	0	0
P42	14x26	0	0
P43	14x26	0	0
P44	20x40	0	0
P45	20x40	0	0
P46	14x26	0	0

Legenda dos pilares		
	Pilar que morre	
	Pilar que passa	
	Pilar com mudança de seção	

Legenda das vigas e paredes	
	Viga

### Forma de Fundação (Nível 0)

escala 1:50

PROJETO

FORMA DO PAVIMENTO FUNDAÇÃO (NÍVEL 0) - ESC. INDICADA  
ÁREA CONSTRUIDA: 360,95M<sup>2</sup>

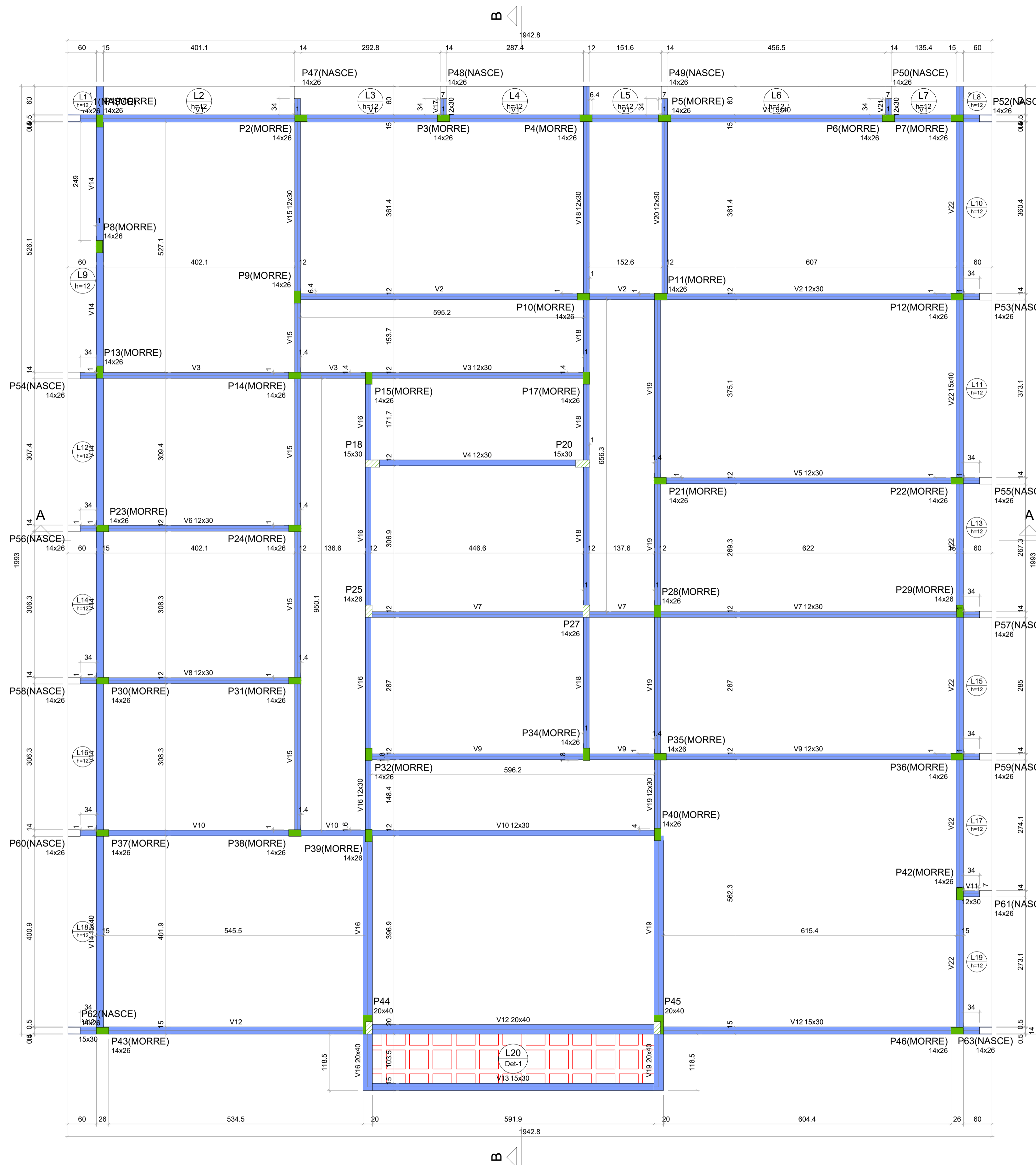
RESPONSÁVEL TÉCNICO

*Lucas Rodrigues Ramos*

ENG. LUCAS RODRIGUES RAMOS  
CREA/ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁQUA





Forma do Térreo (Nível 272)

escala 1:50

Nome	Seção (cm)	Vigas	
		Elevação (cm)	Nível (cm)
V1	15x40	0	272
V2	12x30	0	272
V3	12x30	0	272
V4	12x30	0	272
V5	12x30	0	272
V6	12x30	0	272
V7	12x30	0	272
V8	12x30	0	272
V9	12x30	0	272
V10	12x30	0	272
V11	12x30	0	272
V12	15x30	0	272
V13	20x40	0	272
V14	15x30	0	272
V15	12x30	0	272
V16	20x40	0	272
V17	12x30	0	272
V18	12x30	0	272
V19	20x40	0	272
V20	12x30	0	272
V21	12x30	0	272
V22	15x40	0	272

Detalhe	Tipo	Nome	Blocos de enchimento			Quantidade
			Dimensões (cm)	hb	bx	
1	EPS Painel	BB/40/40	8	40	40	39

Nome	Tipo	Altura (cm)	Dados			Sobrecarga (kgf/m²)		
			Elevação (cm)	Nível (cm)	Peso próprio (kgf/m²)	Adicional	Acidental	Localizada
L1	Maciça	12	0	272	300	154	10	-
L2	Maciça	12	0	272	300	154	10	-
L3	Maciça	12	0	272	300	154	10	-
L4	Maciça	12	0	272	300	154	10	-
L5	Maciça	12	0	272	300	154	10	-
L6	Maciça	12	0	272	300	154	10	-
L7	Maciça	12	0	272	300	154	10	-
L8	Maciça	12	0	272	300	154	10	-
L9	Maciça	12	0	272	300	154	10	-
L10	Maciça	12	0	272	300	154	10	-
L11	Maciça	12	0	272	300	154	10	-
L12	Maciça	12	0	272	300	154	10	-
L13	Maciça	12	0	272	300	154	10	-
L14	Maciça	12	0	272	300	154	10	-
L15	Maciça	12	0	272	300	154	10	-
L16	Maciça	12	0	272	300	154	10	-
L17	Maciça	12	0	272	300	154	10	-
L18	Maciça	12	0	272	300	154	10	-
L19	Maciça	12	0	272	300	154	10	-
L20	Nervurada	12	0	272	170	154	10	-

Nome	Características dos materiais	
	fck (kgf/cm²)	Ecs (kgf/cm²)
	250	241500

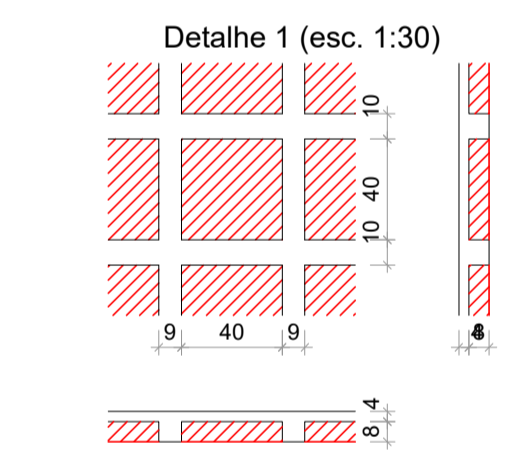
Dimensão máxima do agregado = 19 mm

**Legenda dos pilares**

- Pilar que morre
- Pilar que passa
- Pilar que nasce
- Pilar com mudança de seção

**Legenda das vigas e paredes**

- Viga



Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P2	14x26	0	272
P3	14x26	0	272
P4	14x26	0	272
P5	14x26	0	272
P6	14x26	0	272
P7	14x26	0	272
P8	14x26	0	272
P9	14x26	0	272
P10	14x26	0	272
P11	14x26	0	272
P12	14x26	0	272
P13	14x26	0	272
P14	14x26	0	272
P15	14x26	0	272
P17	14x26	0	272
P18	15x30	0	272
P20	15x30	0	272
P21	14x26	0	272
P22	14x26	0	272
P23	14x26	0	272
P24	14x26	0	272
P25	14x26	0	272
P27	14x26	0	272
P28	14x26	0	272
P29	14x26	0	272
P30	14x26	0	272
P31	14x26	0	272
P32	14x26	0	272
P34	14x26	0	272
P35	14x26	0	272
P36	14x26	0	272
P37	14x26	0	272
P38	14x26	0	272
P39	14x26	0	272
P40	14x26	0	272
P42	14x26	0	272
P43	14x26	0	272
P44	20x40	0	272
P45	20x40	0	272
P46	14x26	0	272
P47	14x26	0	272
P48	14x26	0	272
P49	14x26	0	272
P50	14x26	0	272
P51	14x26	0	272
P52	14x26	0	272
P53	14x26	0	272
P54	14x26	0	272
P55	14x26	0	272
P56	14x26	0	272
P57	14x26	0	272
P58	14x26	0	272
P59	14x26	0	272
P60	14x26	0	272
P61	14x26	0	272
P62	14x26	0	272
P63	14x26	0	272

PROJETO

FORMA DO PAVIMENTO TÉRREO (NÍVEL 272) - ESC. INDICADA  
ÁREA CONSTRUÍDA: 360,95M²

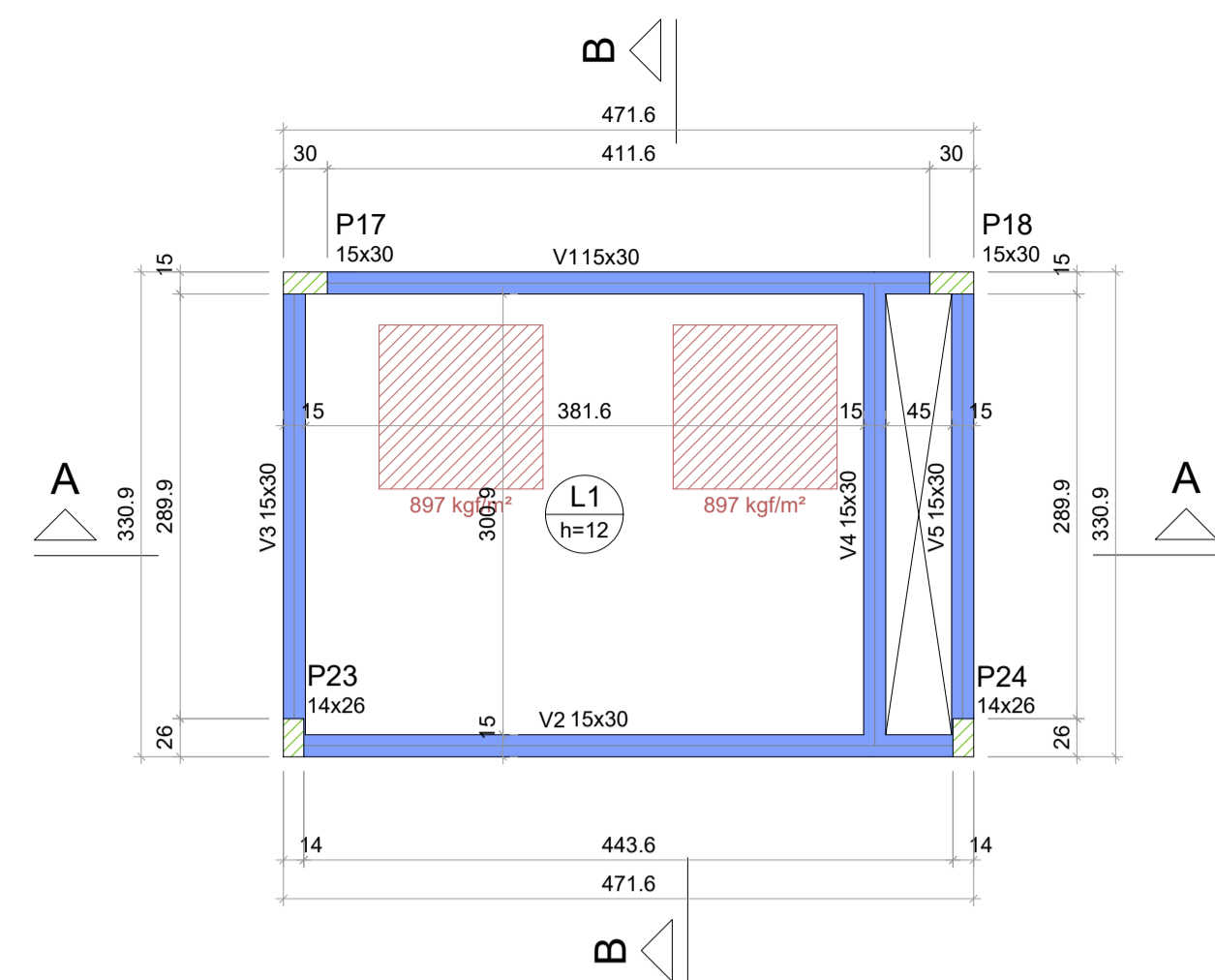
RESPONSÁVEL TÉCNICO

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CREA/ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA





Forma da Caixa D'água (Nível 382)

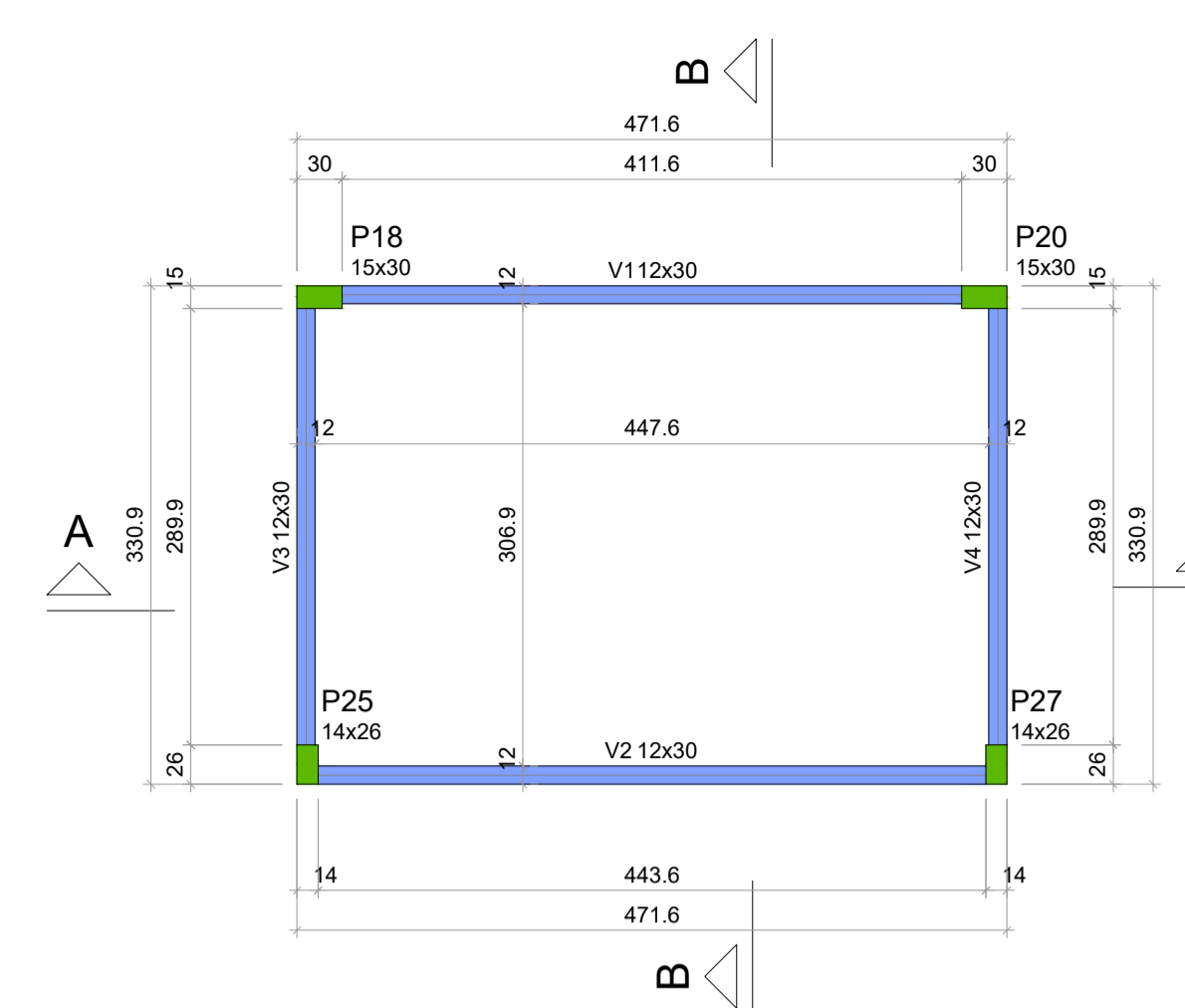
escala 1:50

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	382
V2	15x30	0	382
V3	15x30	0	382
V4	15x30	0	382
V5	15x30	0	382

Lajes							
Nome	Tipo	Altura (cm)	Elevação (cm)	Nível (cm)	Sobrecarga (kgf/m²)		
					Peso próprio (kgf/m²)	Adicional	Acidental
L1	Maciça	12	0	382	300	154	10
							sim

Características dos materiais		
fck (kgf/cm²)	Ecs (kgf/cm²)	
250	241500	

Dimensão máxima do agregado = 19 mm



Forma da Cobertura (Nível 539)

escala 1:50

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	12x30	0	539
V2	12x30	0	539
V3	12x30	0	539
V4	12x30	0	539

Características dos materiais		
fck (kgf/cm²)	Ecs (kgf/cm²)	
250	241500	

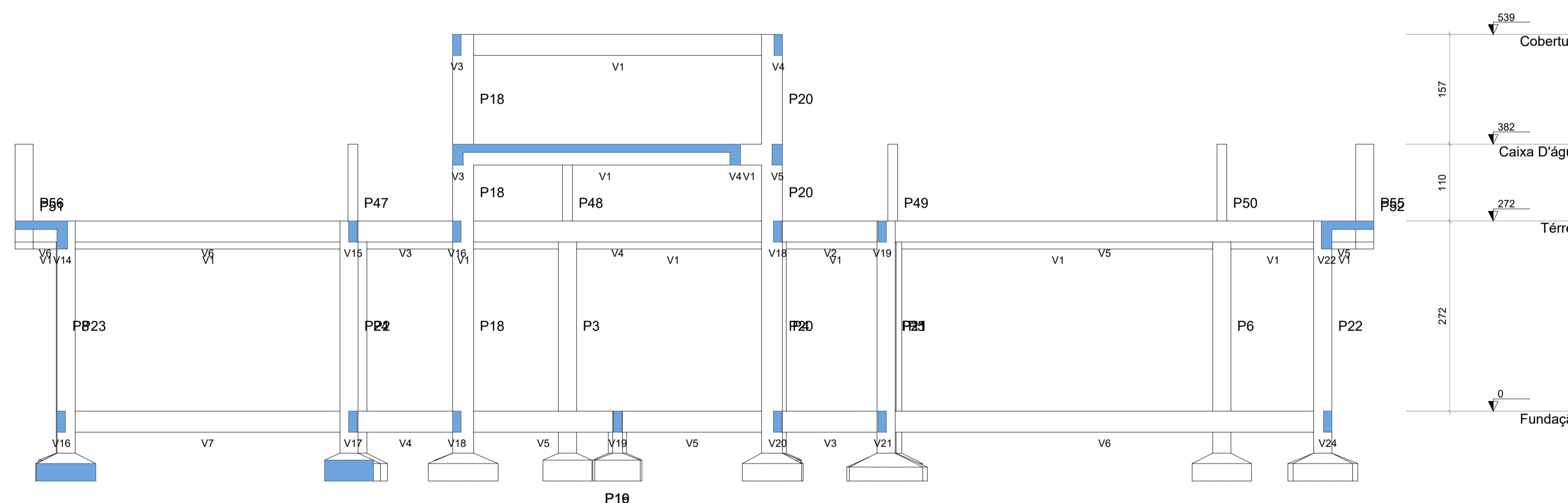
Dimensão máxima do agregado = 19 mm

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P18	15x30	0	539
P20	15x30	0	539
P25	14x26	0	539
P27	14x26	0	539

Legenda dos pilares	
<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Pilar que morre
Legenda das vigas e paredes	
<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Viga

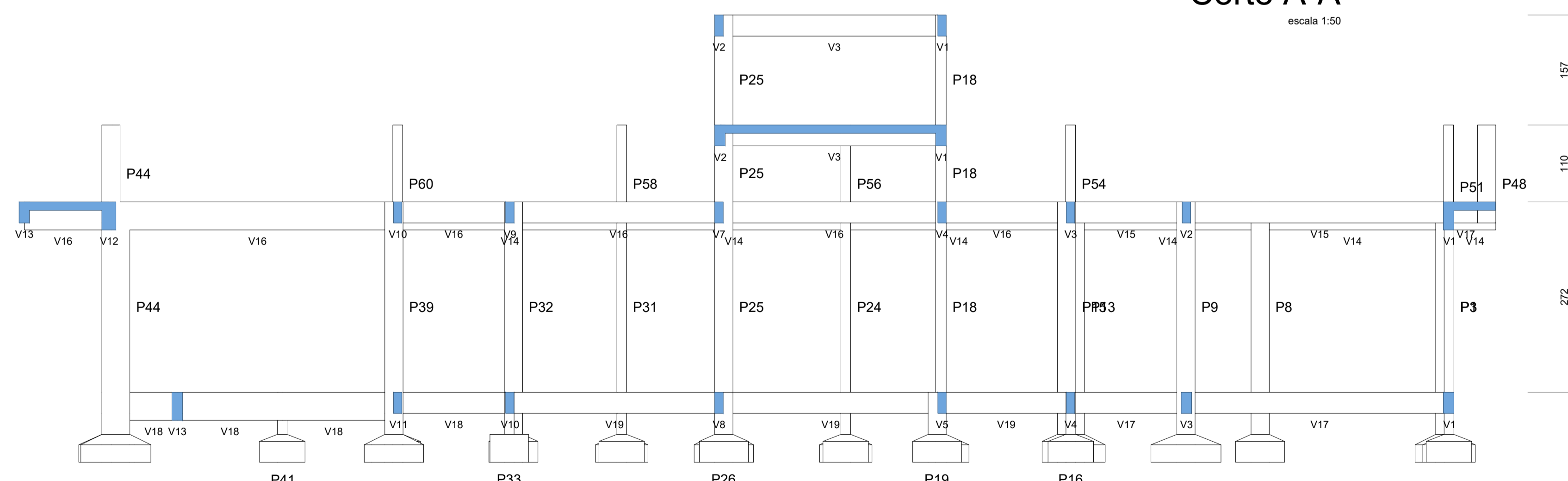
Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P18	15x30	0	382
P20	15x30	0	382
P25	14x26	0	382
P27	14x26	0	382
P44	14x26	0	382
P45	14x26	0	382
P47	14x26	0	382
P48	14x26	0	382
P49	14x26	0	382
P50	14x26	0	382
P51	14x26	0	382
P52	14x26	0	382
P53	14x26	0	382
P54	14x26	0	382
P55	14x26	0	382
P56	14x26	0	382
P57	14x26	0	382
P58	14x26	0	382
P59	14x26	0	382
P60	14x26	0	382
P61	14x26	0	382
P62	14x26	0	382
P63	14x26	0	382

Legenda dos pilares		Legenda das vigas e paredes	
<span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Pilar que morre	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Viga
<span style="background-color: #FFD700; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span>	Pilar que passa		



Corte A-A

escala 1:50



Corte B-B

escala 1:50

PROJETO

FORMA DA CAIXA D'ÁGUA, COBERTURA E CORTES (NÍVEL 382-539) - ESC. INDICADA  
ÁREA CONSTRUÍDA: 360,95M²

RESPONSÁVEL TÉCNICO

*Lucas Rodrigues Ramos*

ENG. LUCAS RODRIGUES RAMOS  
CREA/ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA

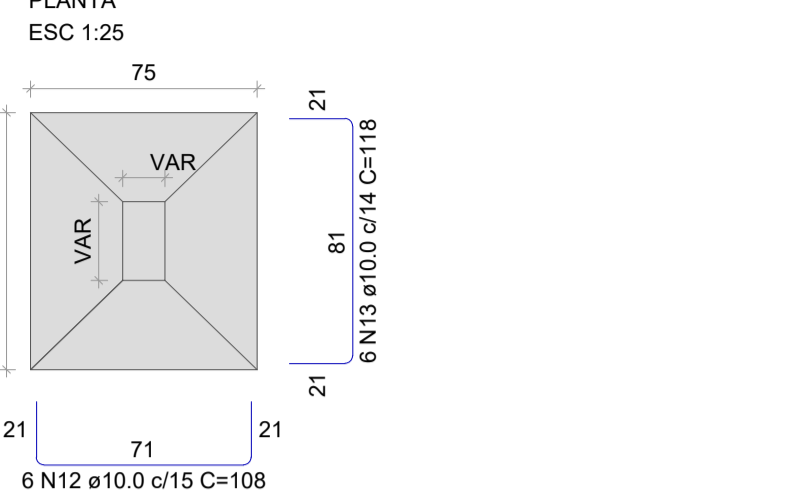


RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	798	492
CA60	5.0	293.1	45.2
PESO TOTAL (kg)			
CA50		492	
CA60		45.2	

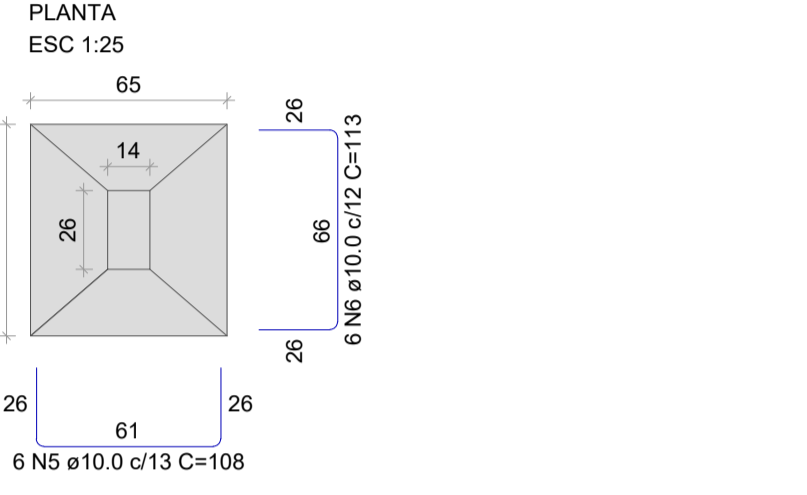
Volume de concreto (C-25) = 8.80 m³  
Área de forma = 63.11 m²

S1=S2=S5=S6=S10=S13=S20=S22=S23=S25=S27  
=S30=S36=S37=S39



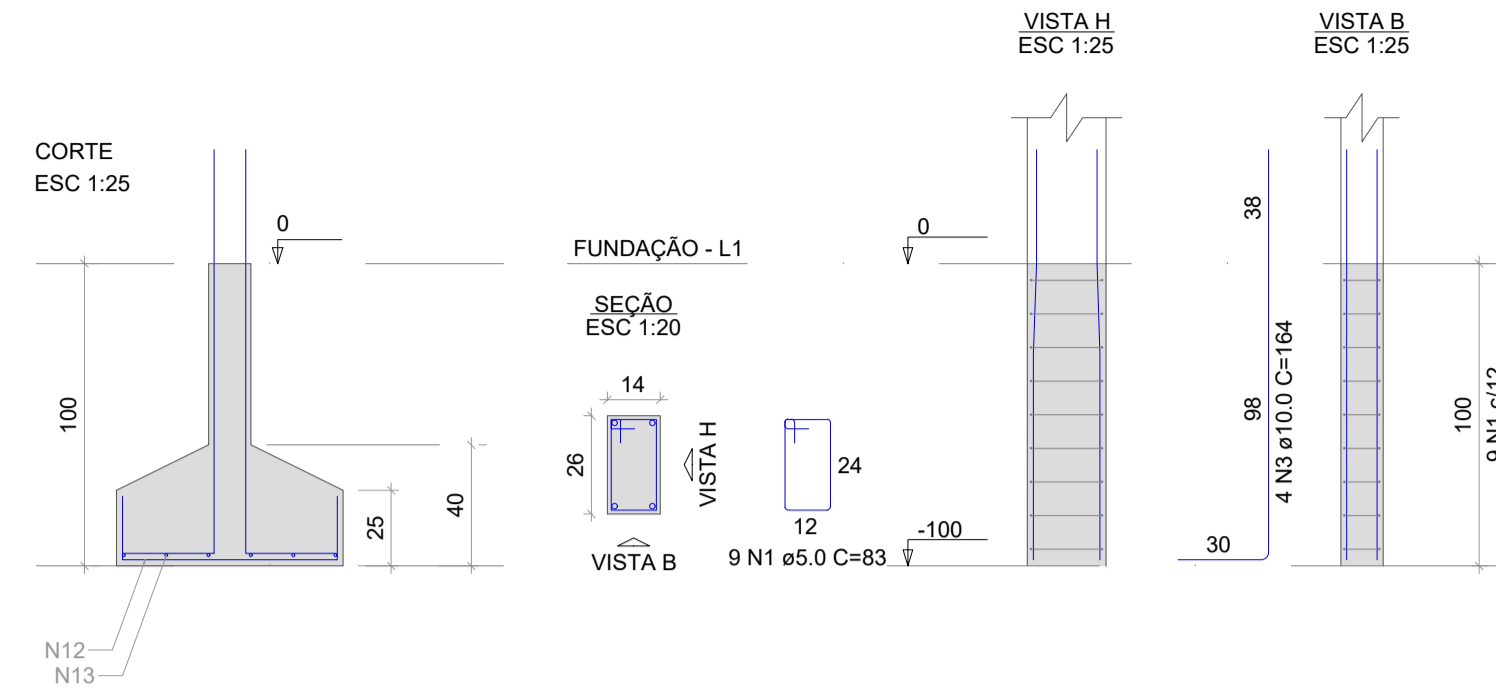
Solo com capacidade de suporte > 1.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kg/m³

S3=S4=S7=S8=S14=S15=S16=S17=S19=S24=S26  
=S28=S29=S31=S32=S34=S38=S41=S42

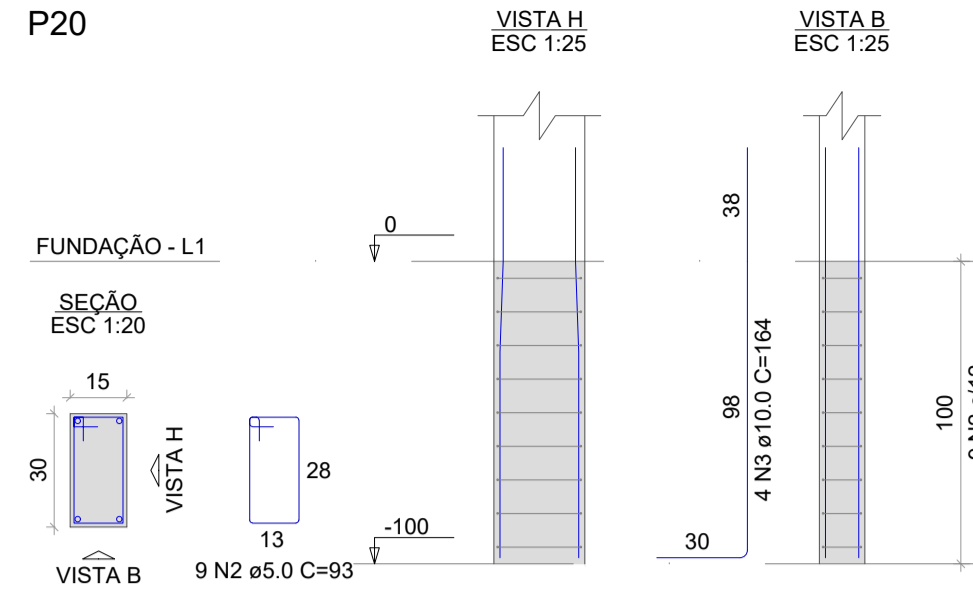


Solo com capacidade de suporte > 1.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kg/m³

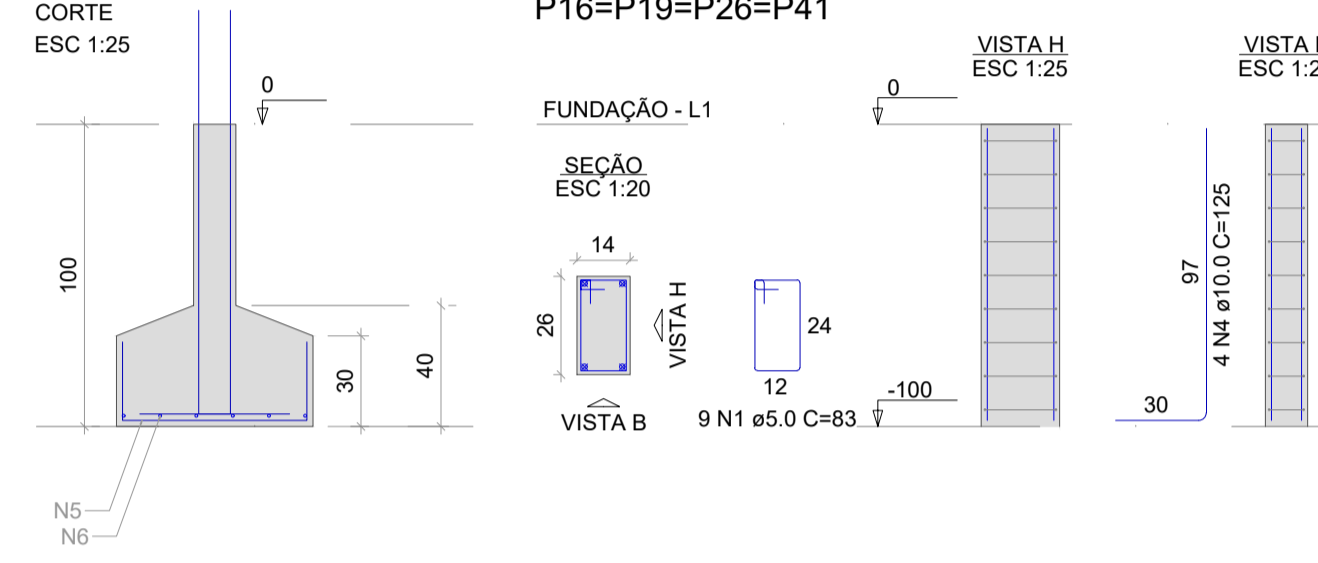
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=P23=P25=P27=P30=P36=P37=  
=P39



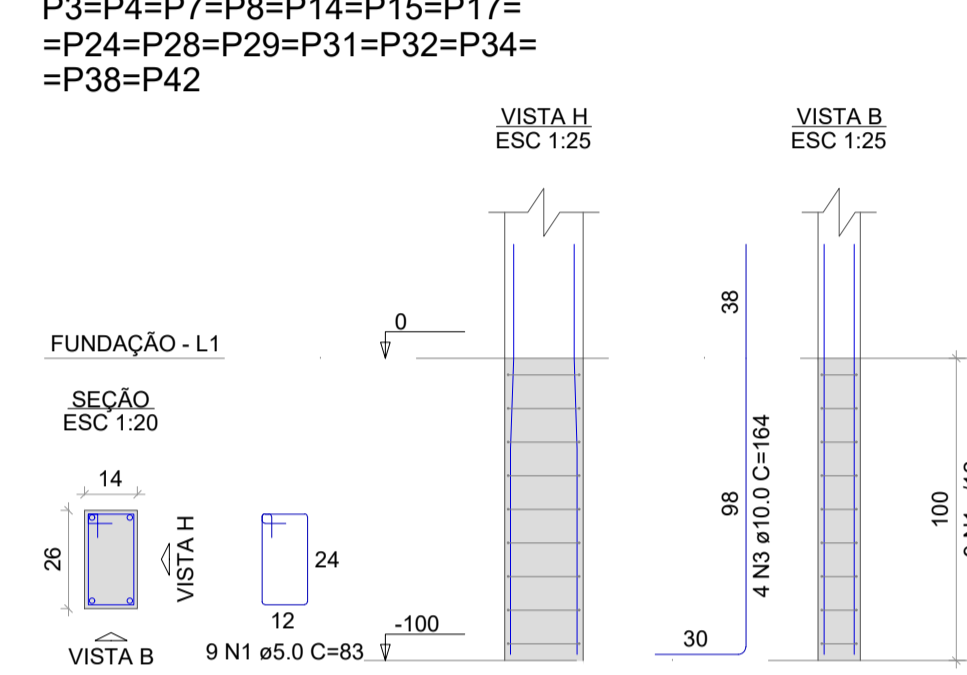
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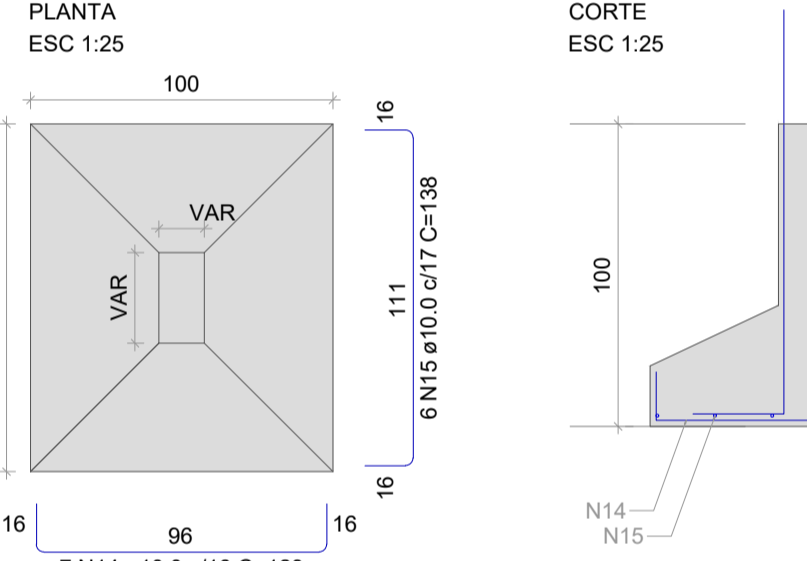
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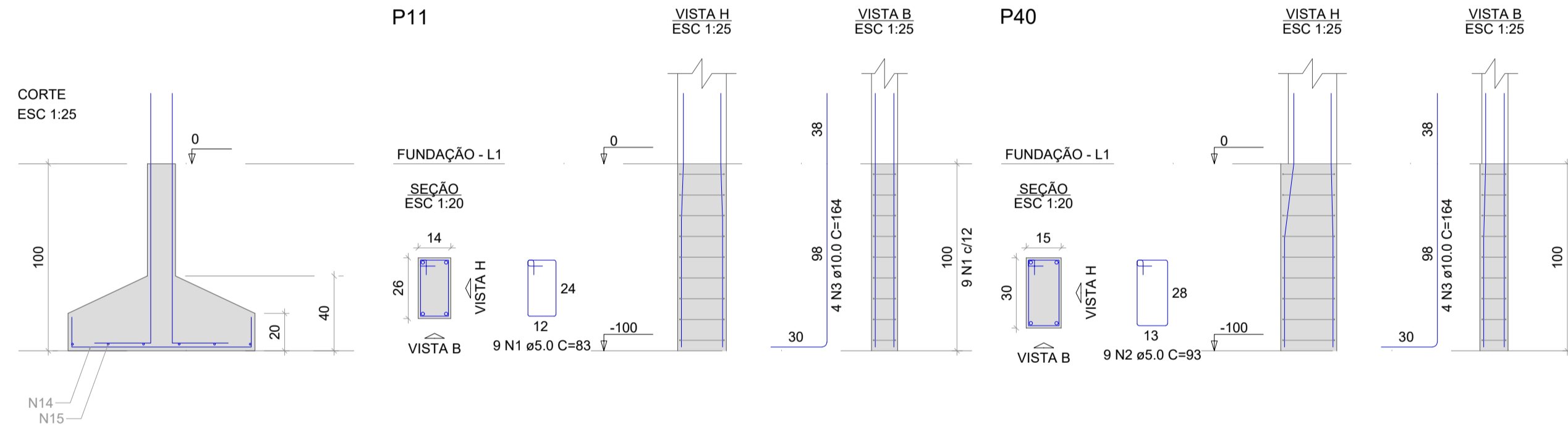
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=P38=P42



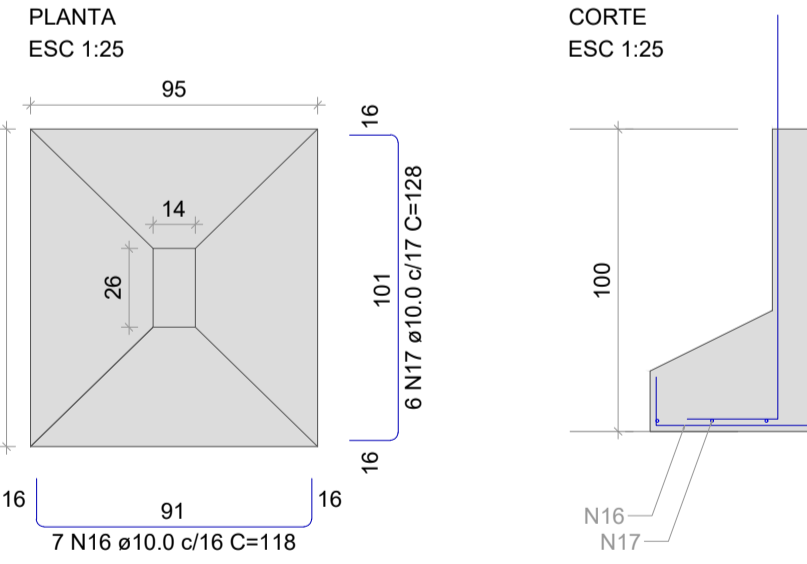
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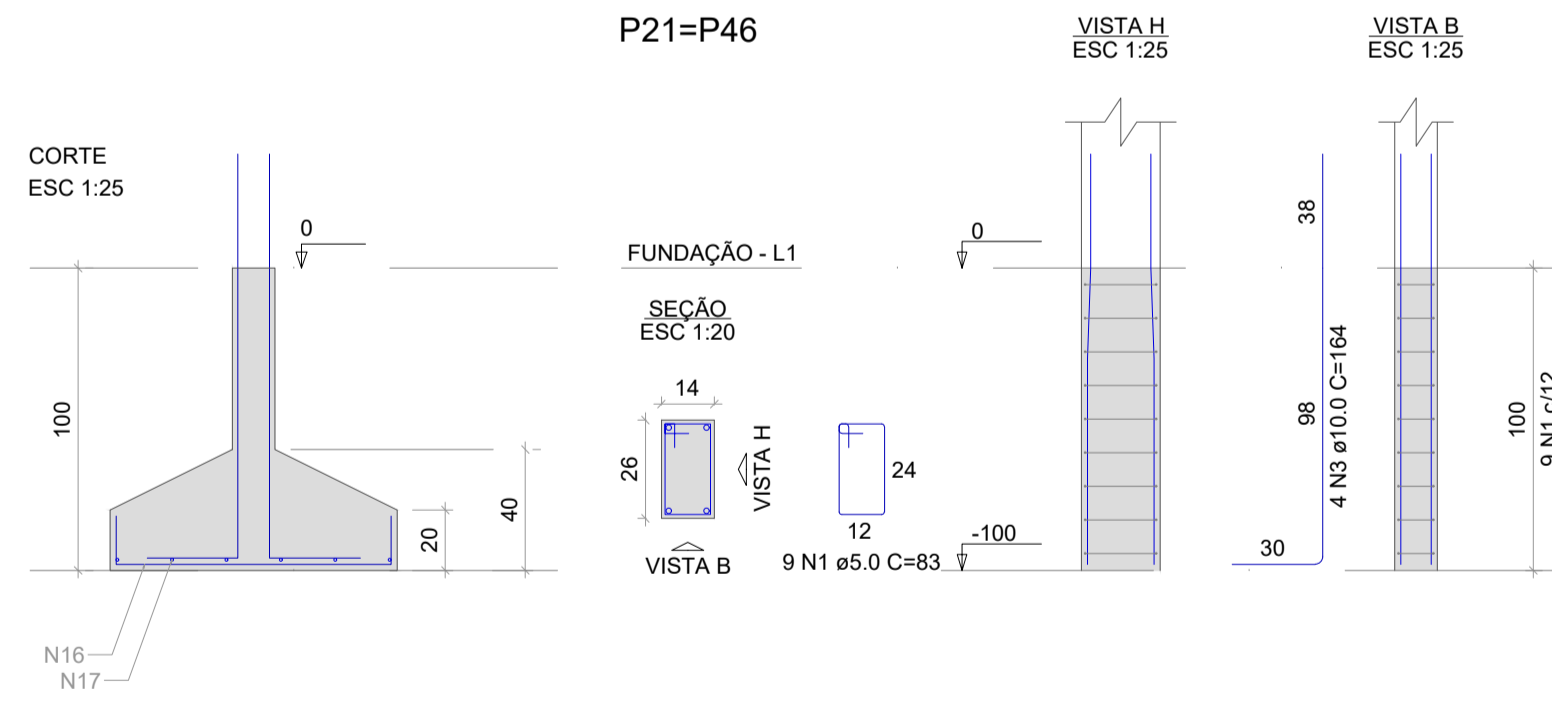
Solo com capacidade de suporte > 1.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kg/m³



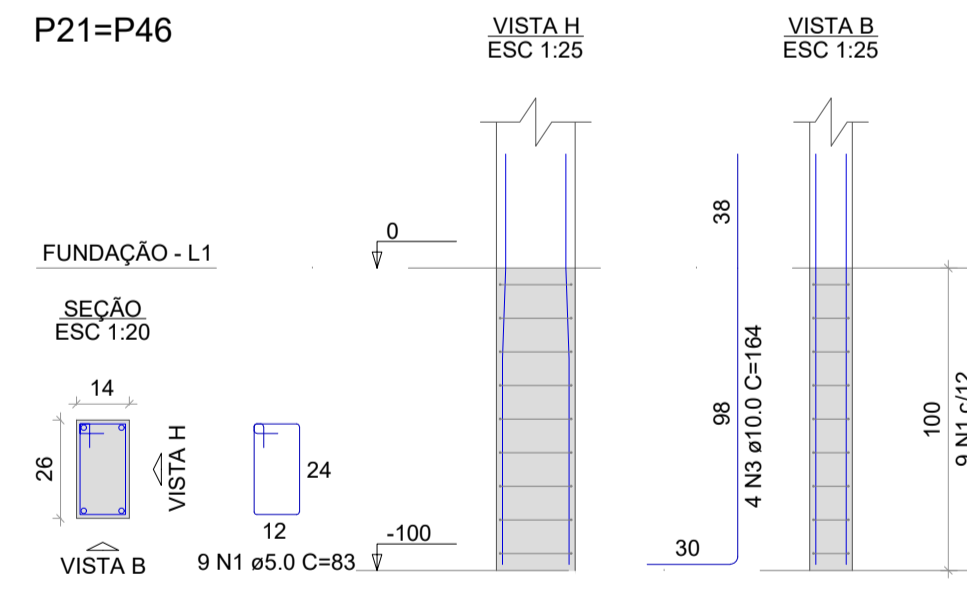
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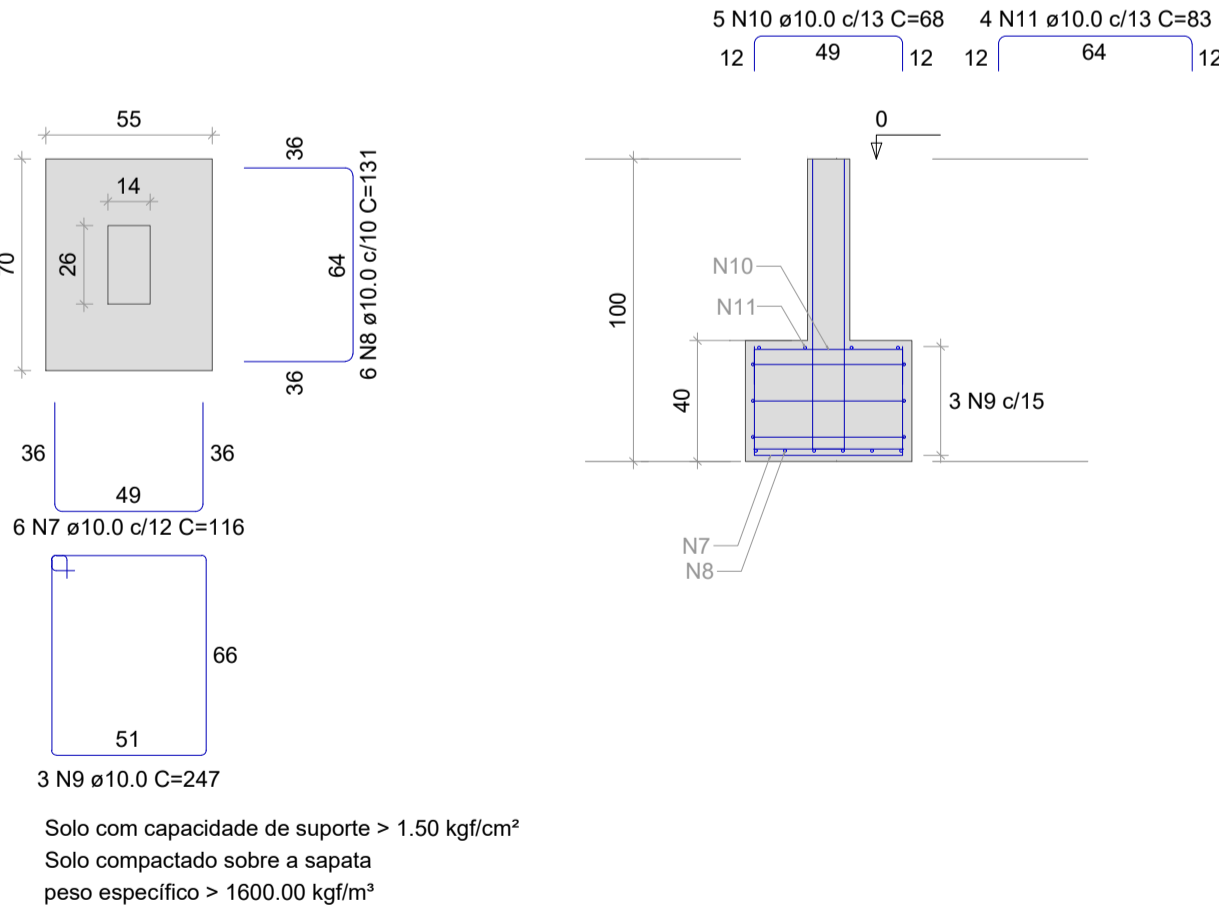
Solo com capacidade de suporte > 1.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kg/m³



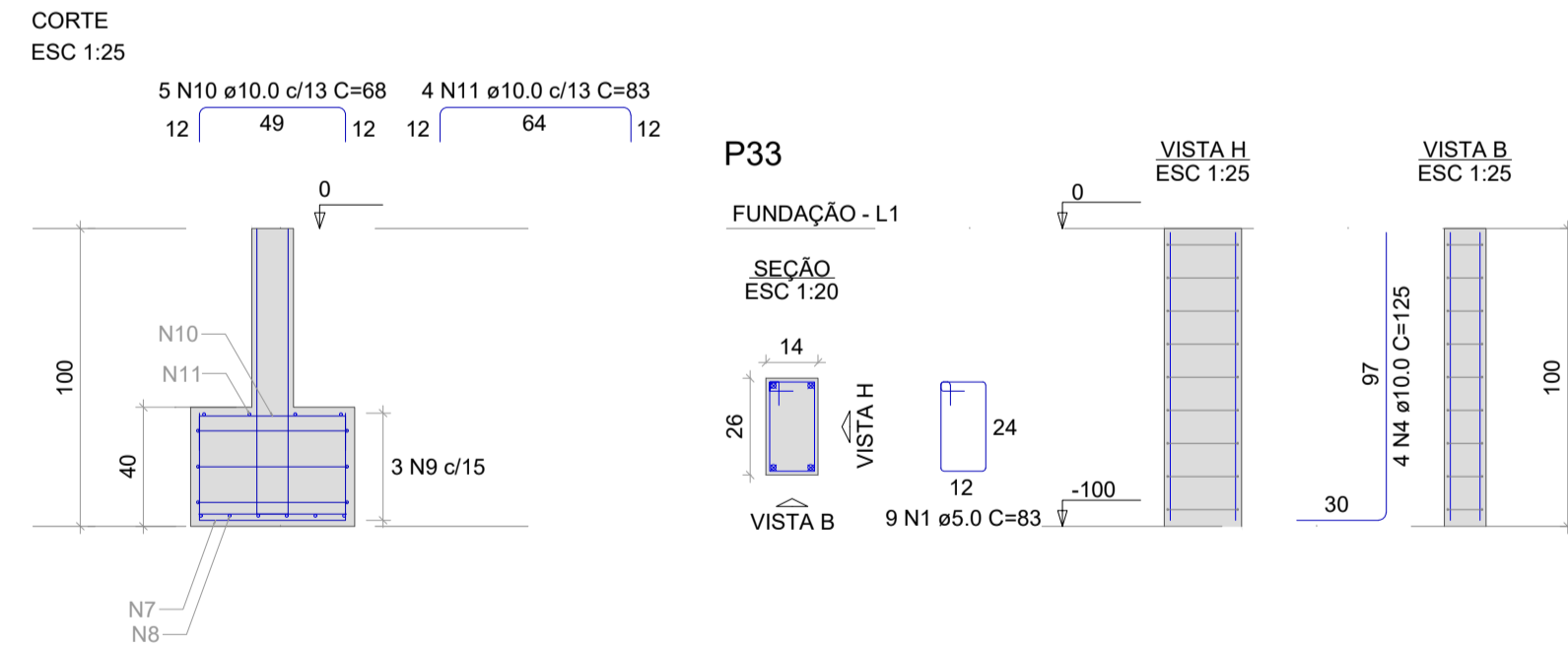
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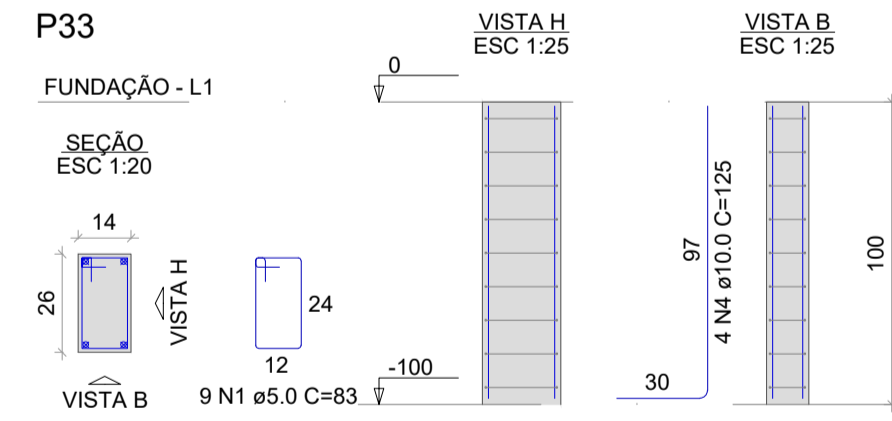
S33



Solo com capacidade de suporte > 1.50 kgf/cm²  
Solo compactado sobre a sapata  
peso específico > 1600.00 kg/m³



P33



PROJETO

PROJETO DE ARMAÇÃO DAS SAPATAS E ARRAQUE DE PILARES - ESC. INDICADA  
ÁREA CONSTRUÍDA: 360,95M²

RESPONSÁVEL TÉCNICO

*Lucas Rodrigues Ramos*

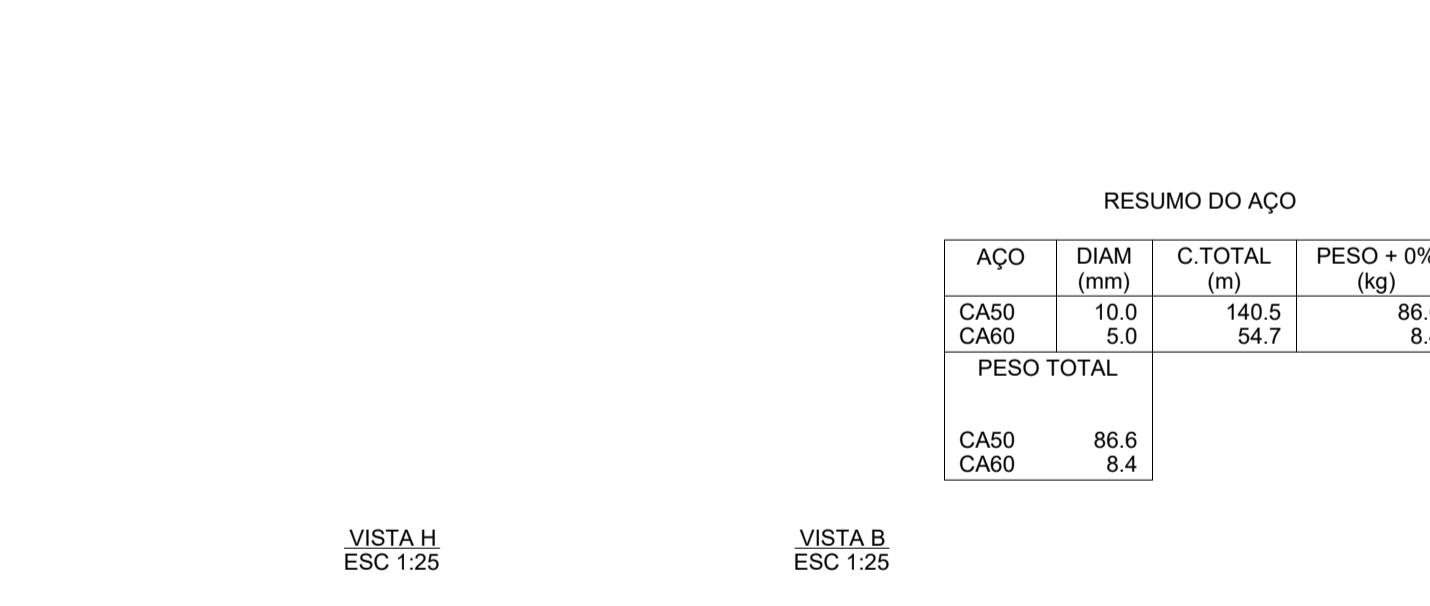
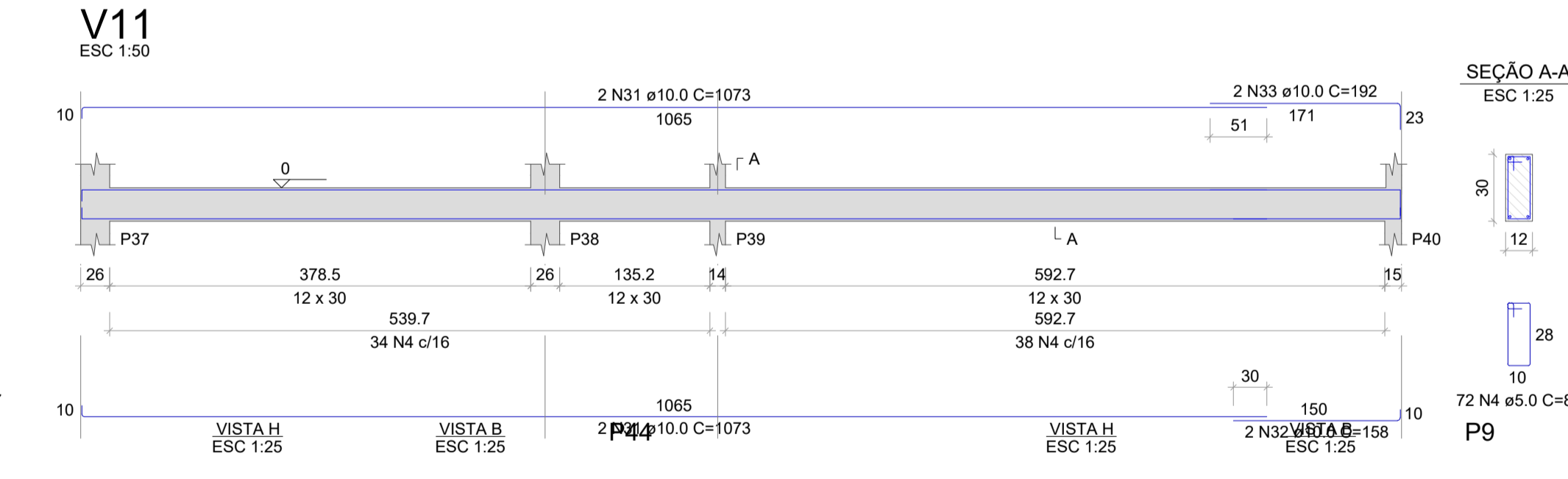
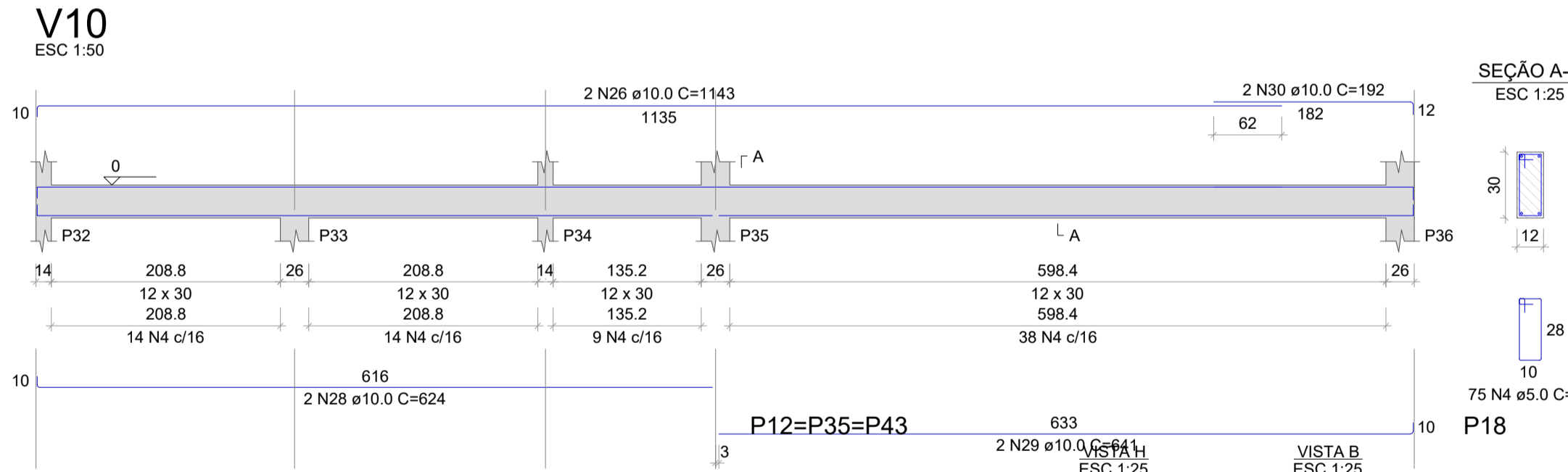
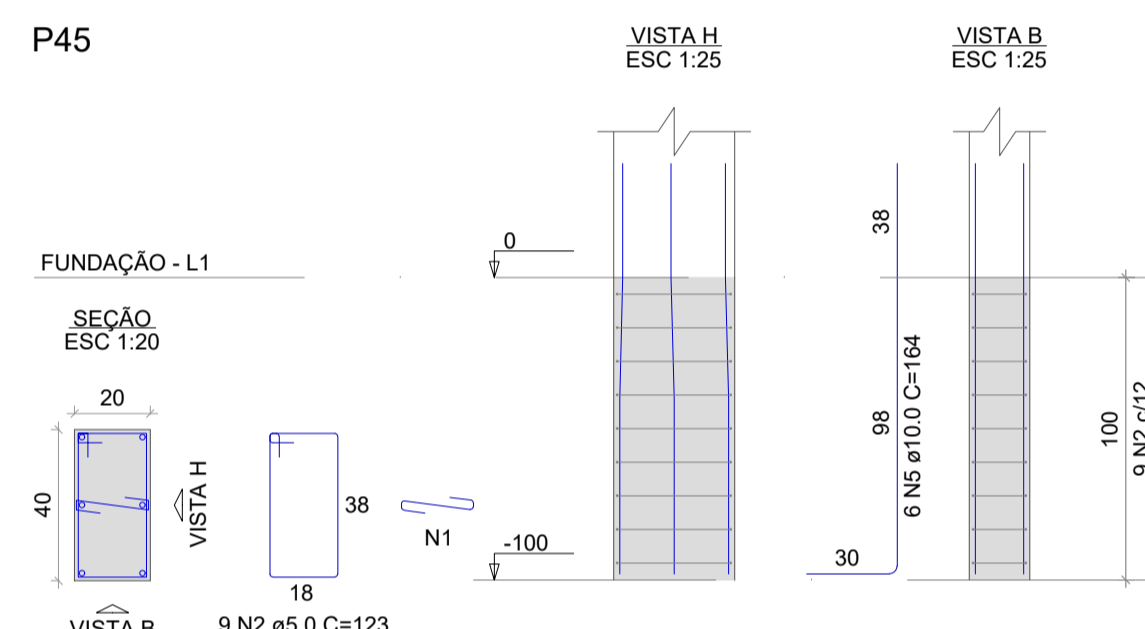
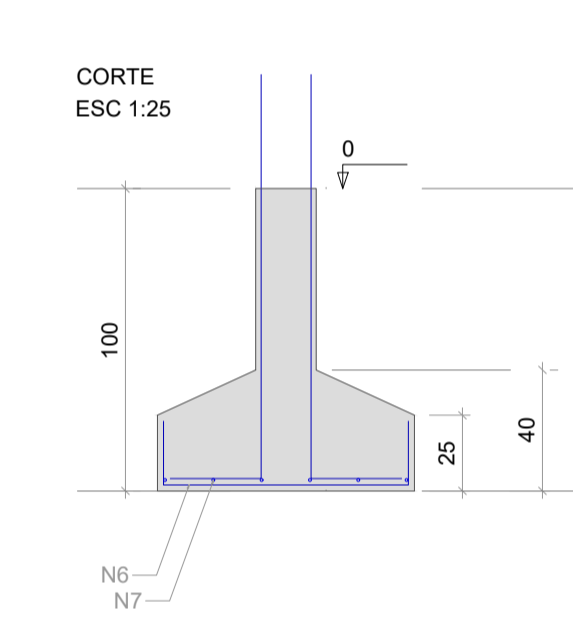
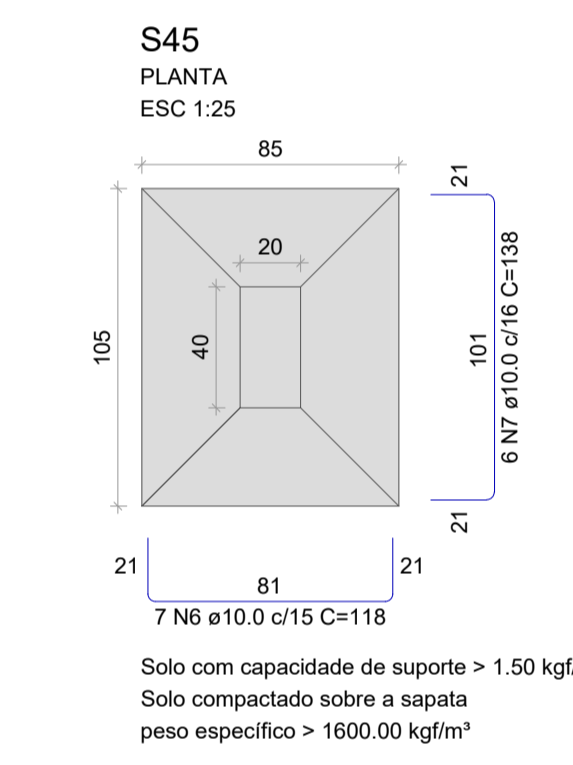
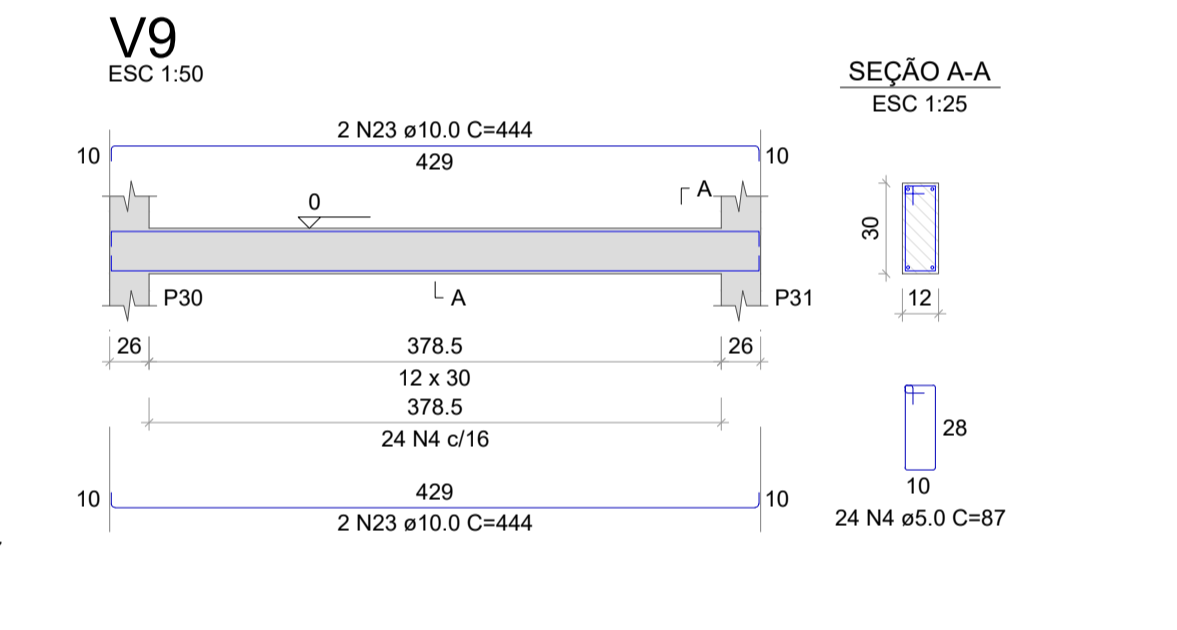
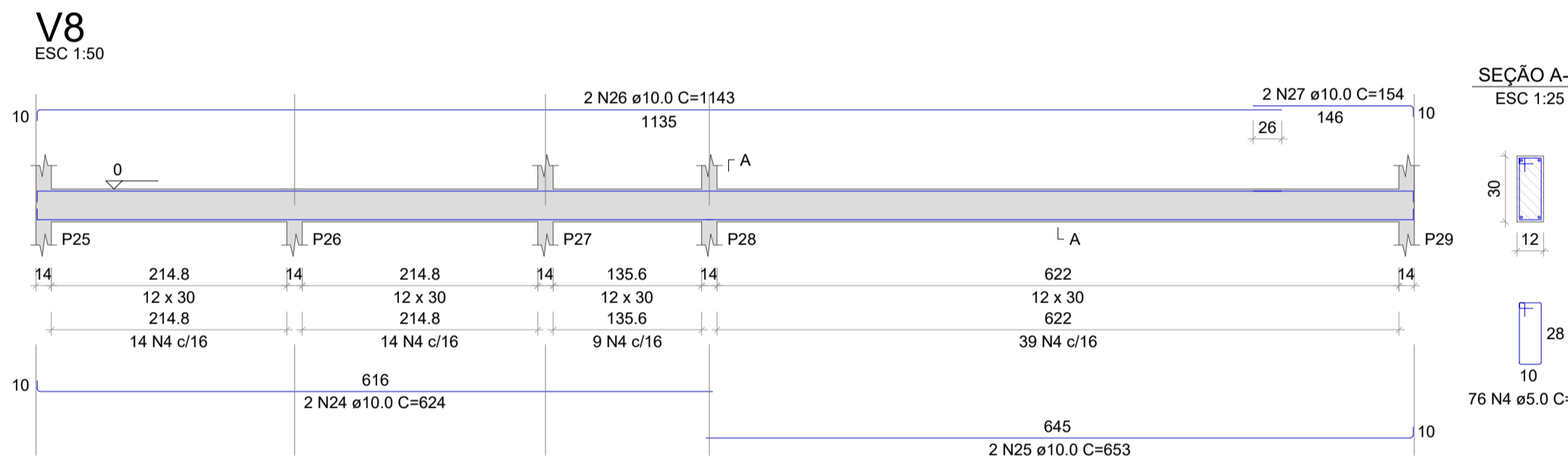
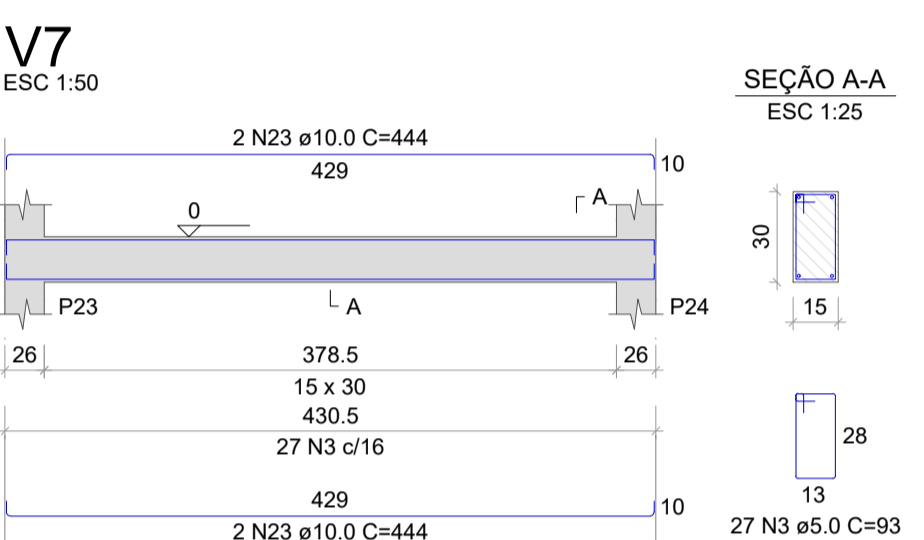
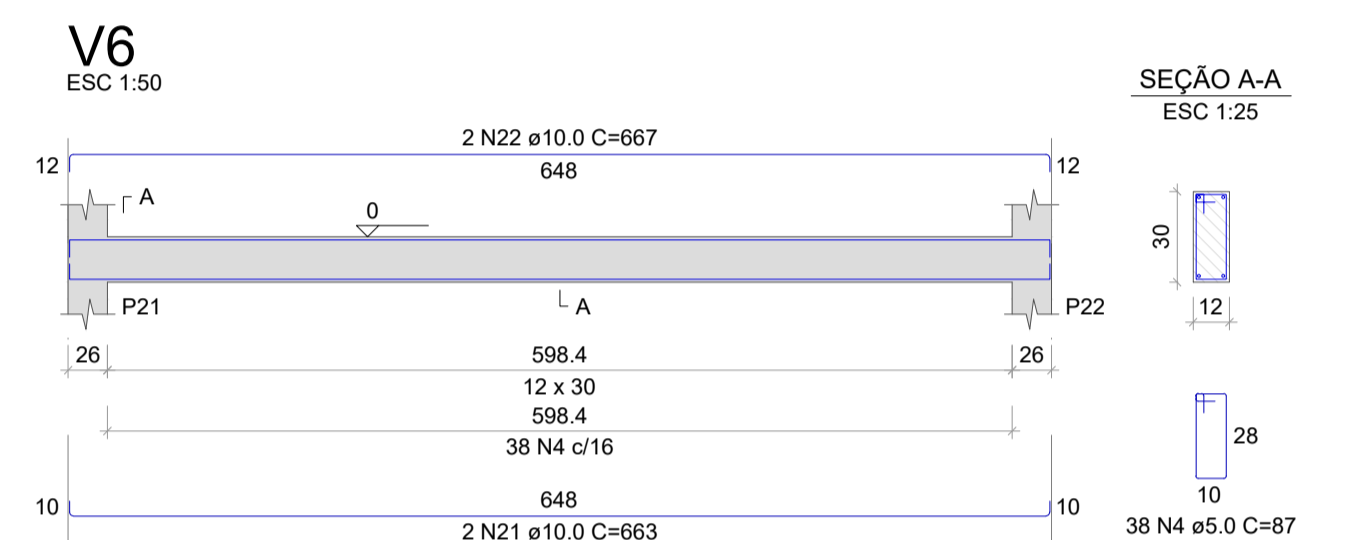
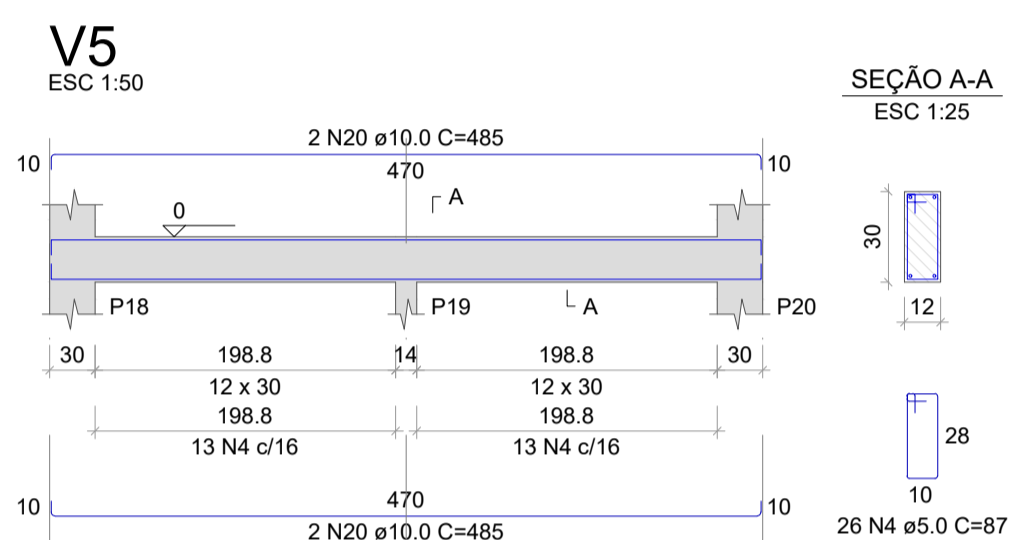
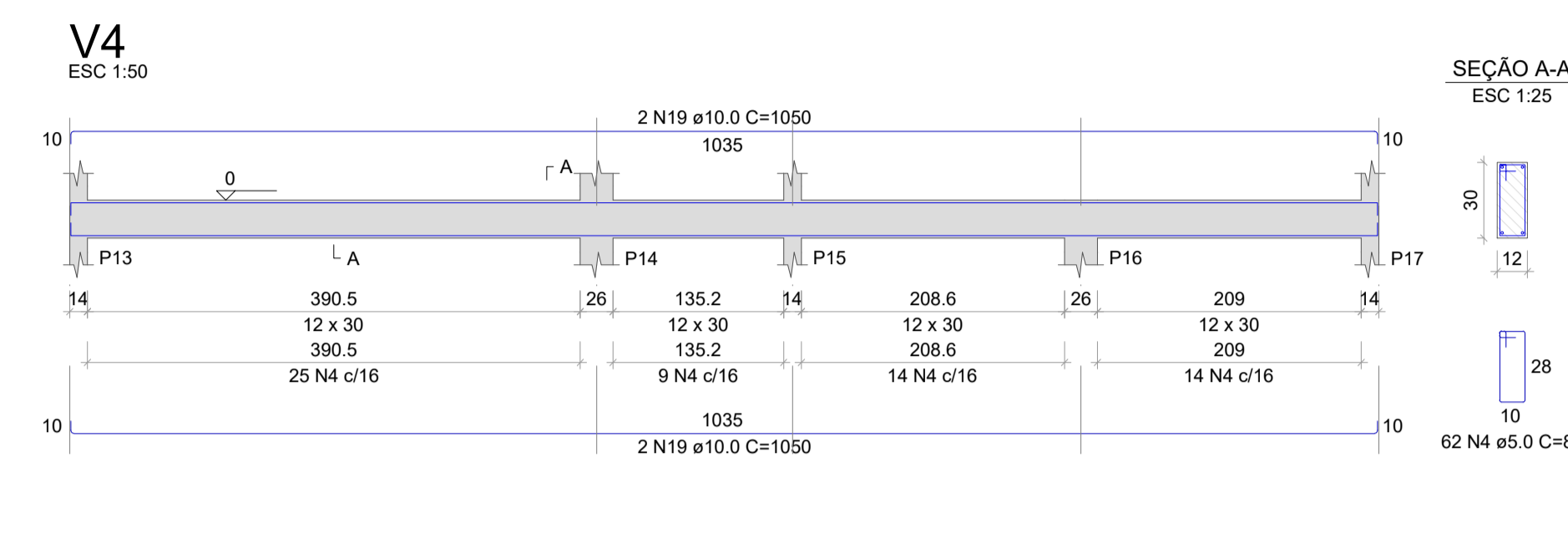
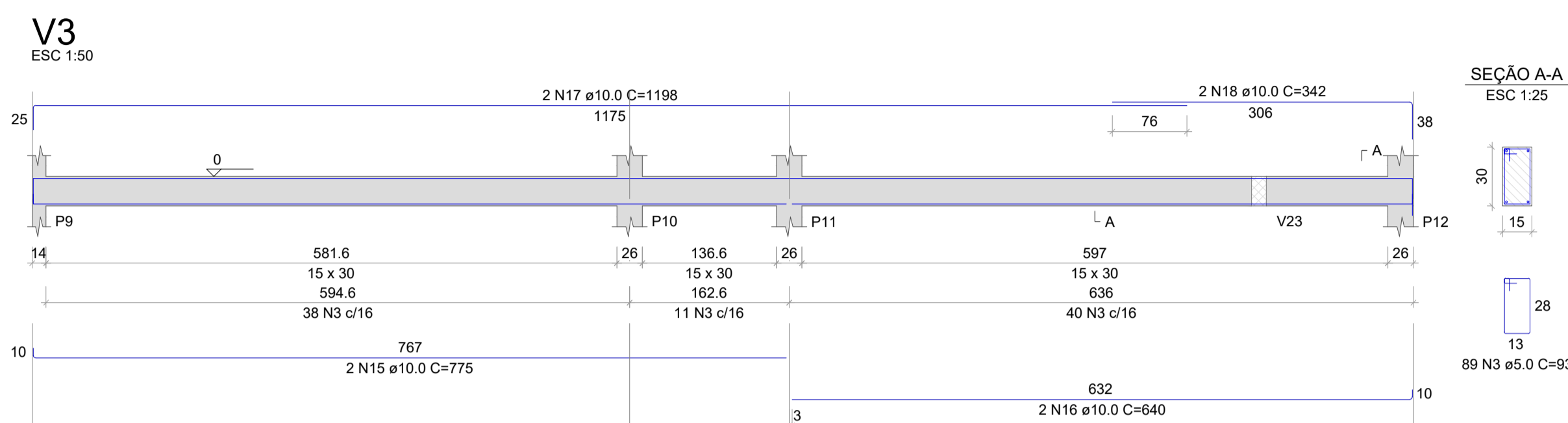
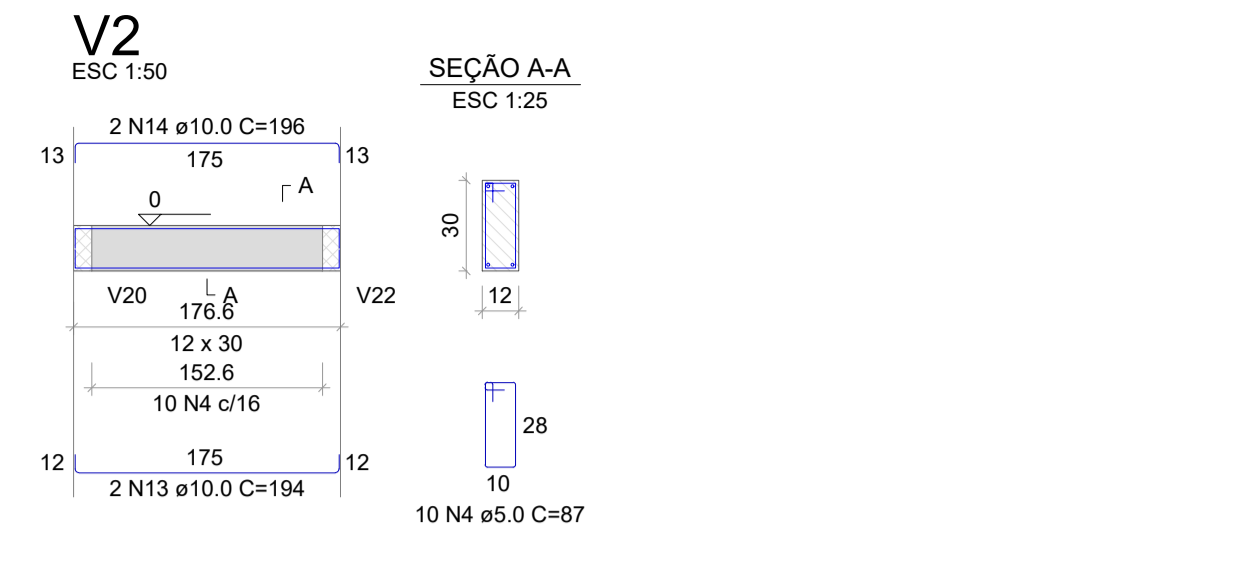
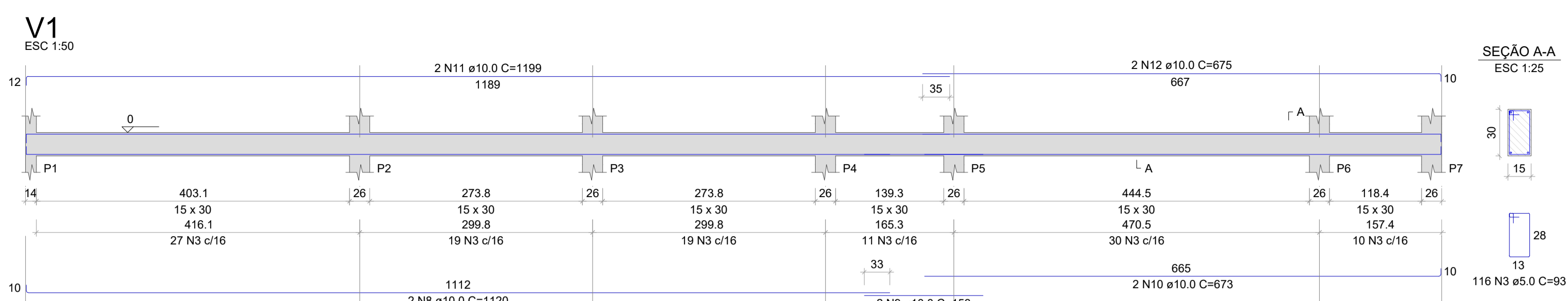
ENG. LUCAS RODRIGUES RAMOS  
CREA/ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA



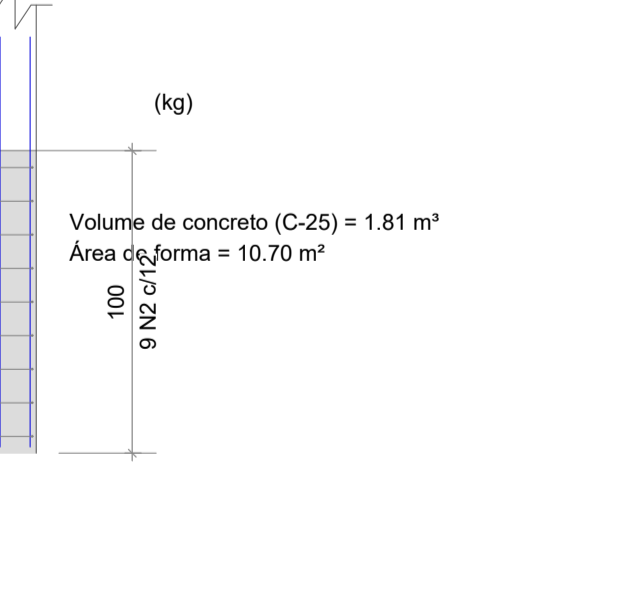
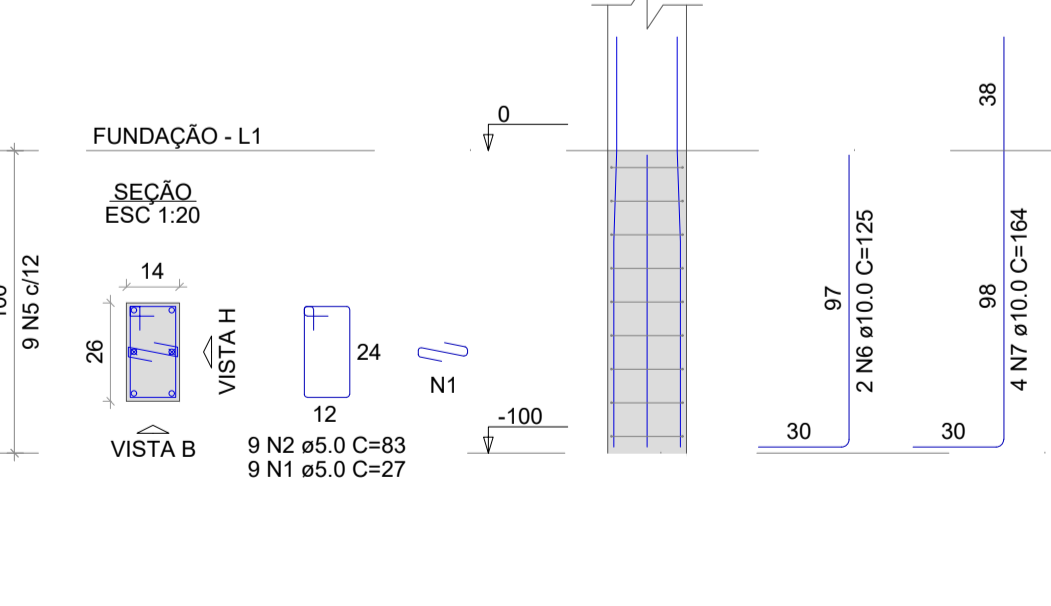
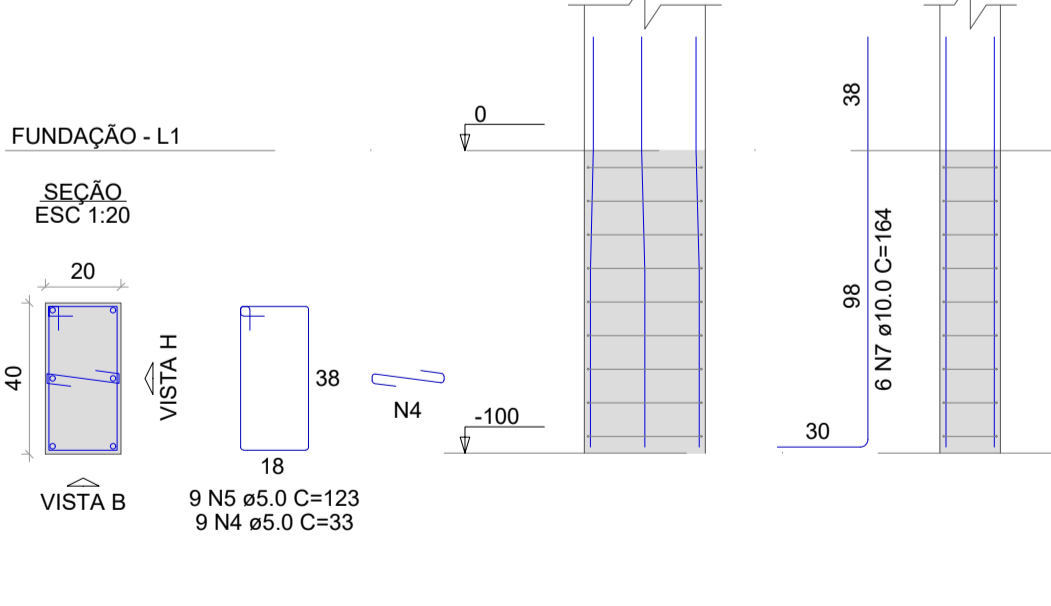
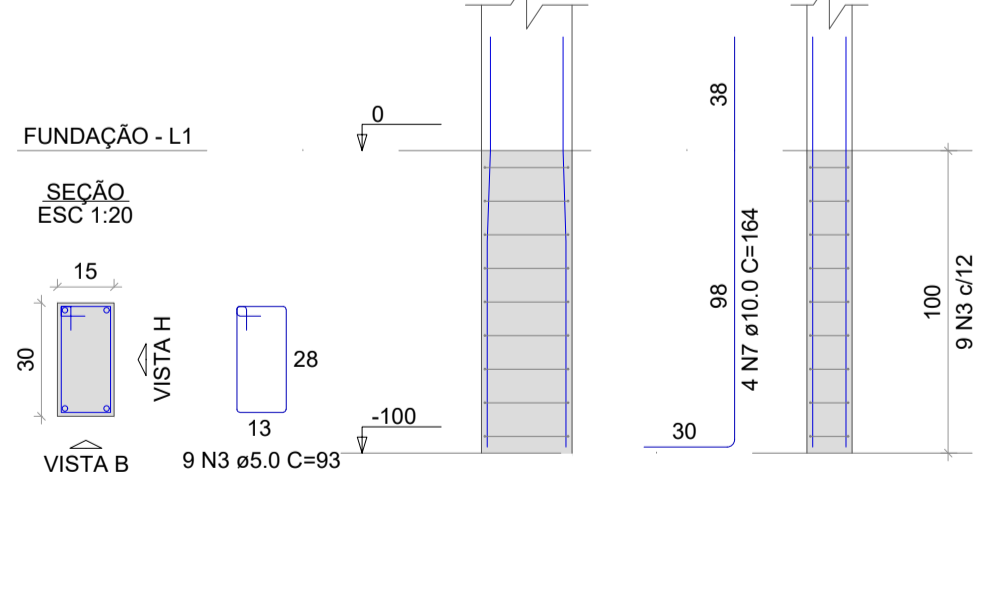
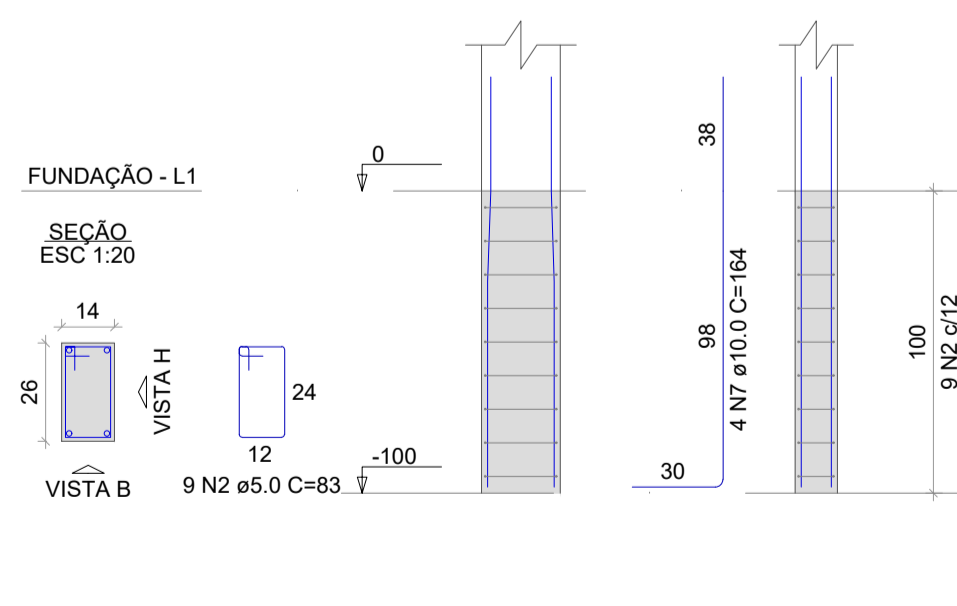
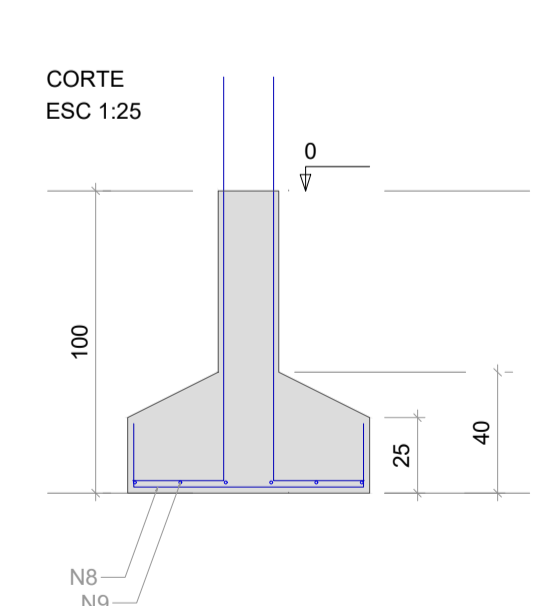
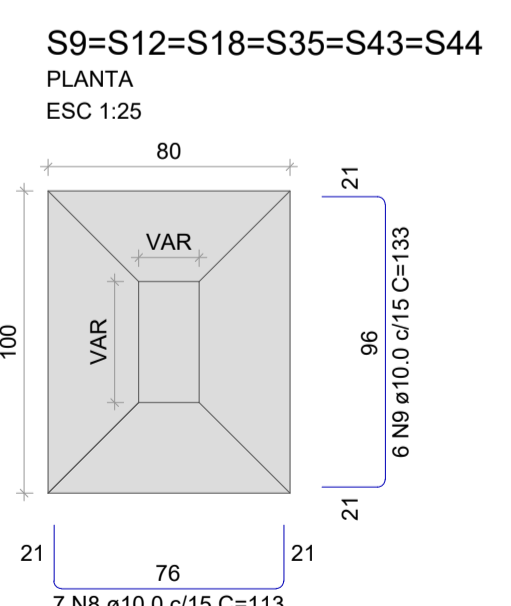
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	446.6	275.3
CA60	5.0	563	86.8
PESO TOTAL (kg)			
CA50		275.3	
CA60		86.8	

Volume de concreto (C-25) = 4.34 m³  
 Área de forma = 76.17 m²



RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	140.5	86.6
CA60	5.0	54.7	8.4
PESO TOTAL			
CA50		86.6	
CA60		8.4	



PROJETO

PROJ. ARMAÇÃO DAS SAPATAS, ARRANQUE E VIGAS BALDRAME - ESC. INDICADA  
 ÁREA CONSTRUÍDA: 360,95M²

RESPONSÁVEL TÉCNICO

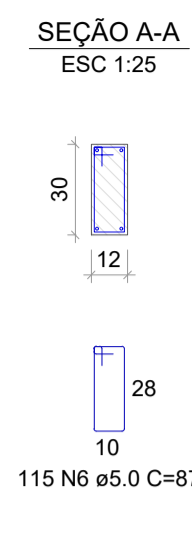
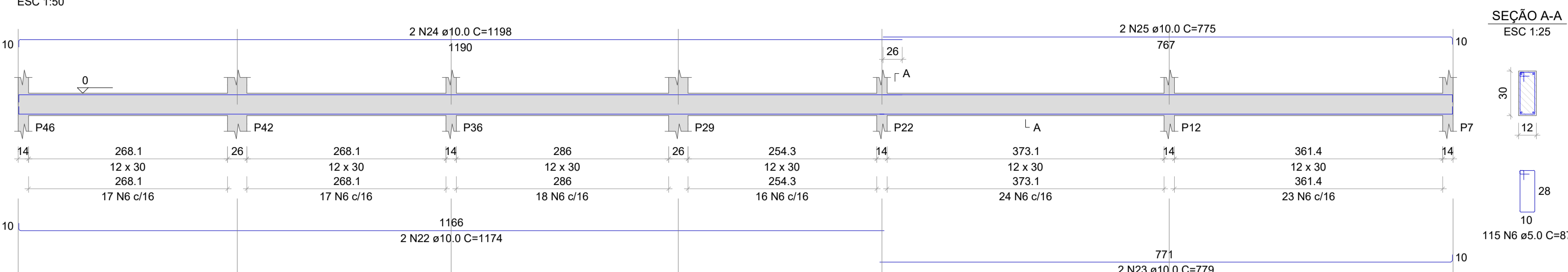
*Lucas Rodrigues Ramos*  
 ENG. LUCAS RODRIGUES RAMOS  
 CREA/ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁQUA



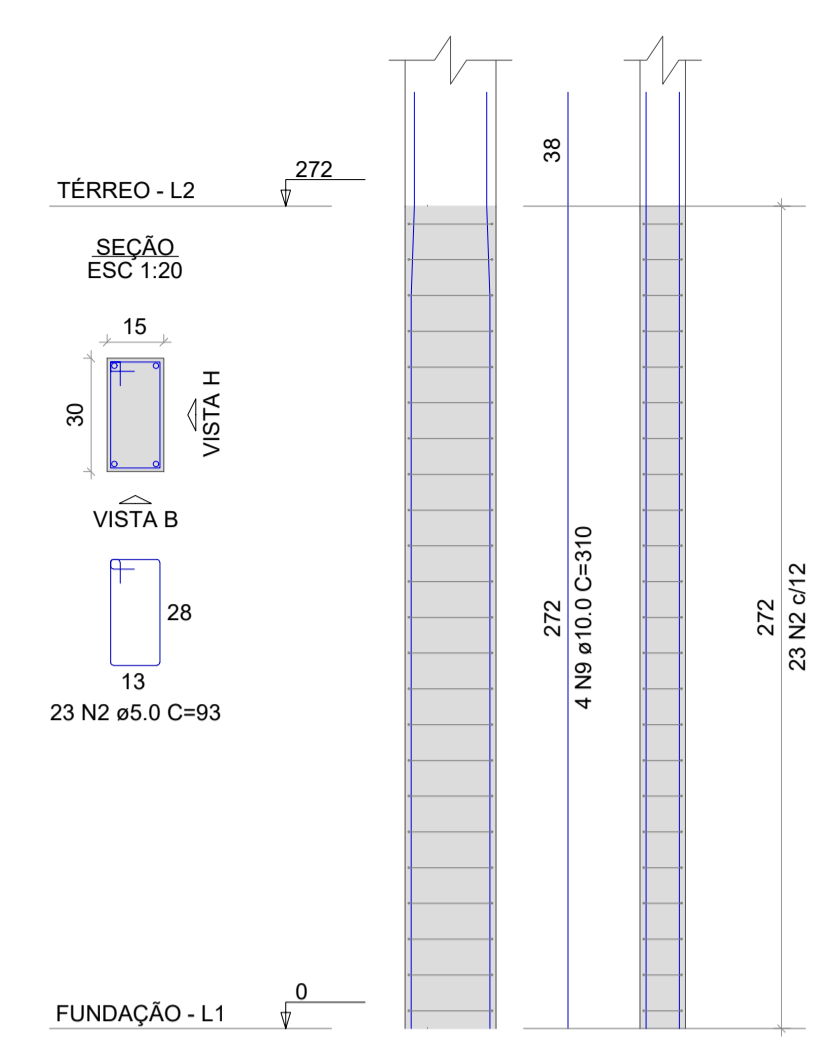


V24



P1=P2=P3=P4=P5=P6=  
 =P7=P8=P9=P10=P11=  
 =P12=P13=P14=P15=  
 =P17=P21=P22=P23=  
 =P24=P28=P29=P30=  
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 =P40=P42=P43=P46

P18=P20

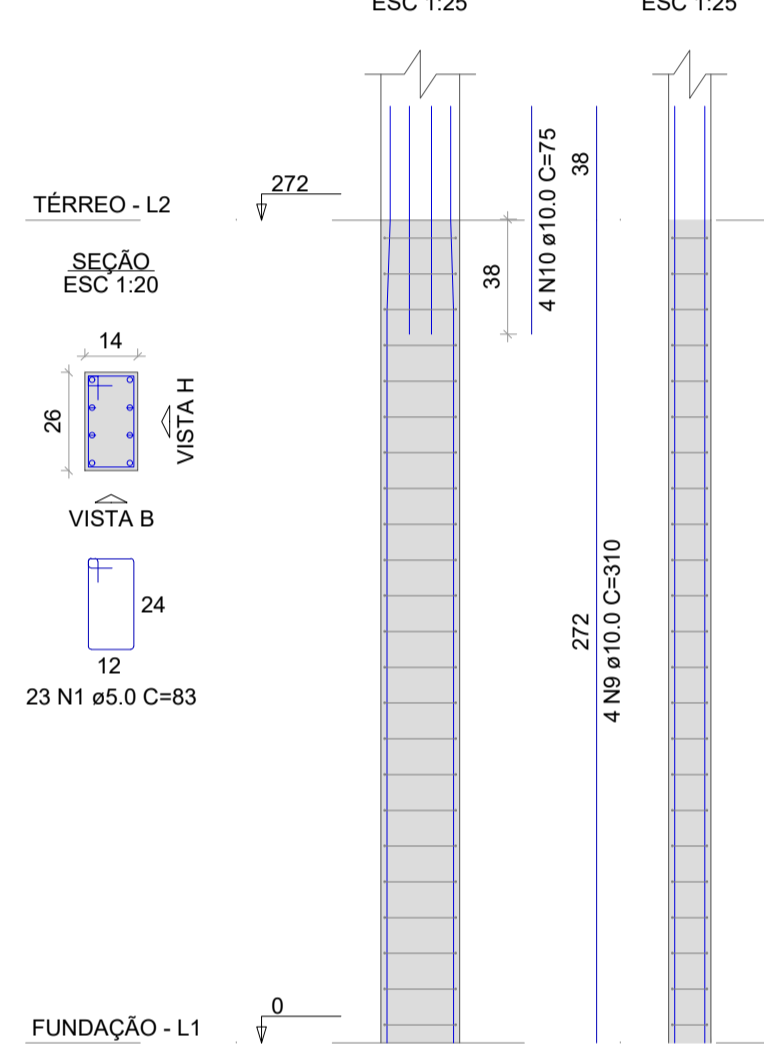


RESUMO DO AÇO

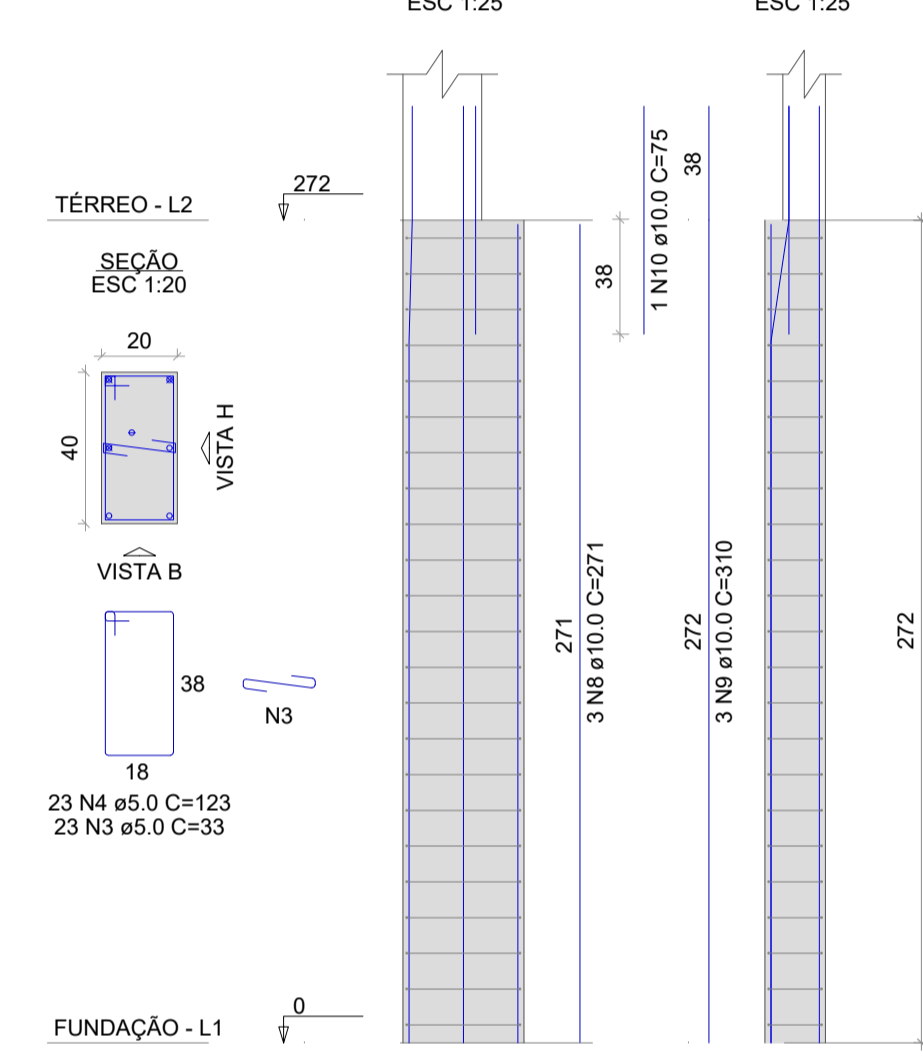
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	25.6	6.3
CA60	10.0	745.4	459.6
CA60	5.0	1165.3	179.6
PESO TOTAL (kg)			
CA50		465.8	
CA60		179.6	

Volume de concreto (C-25) = 7.13 m³  
 Área de forma = 142.77 m²

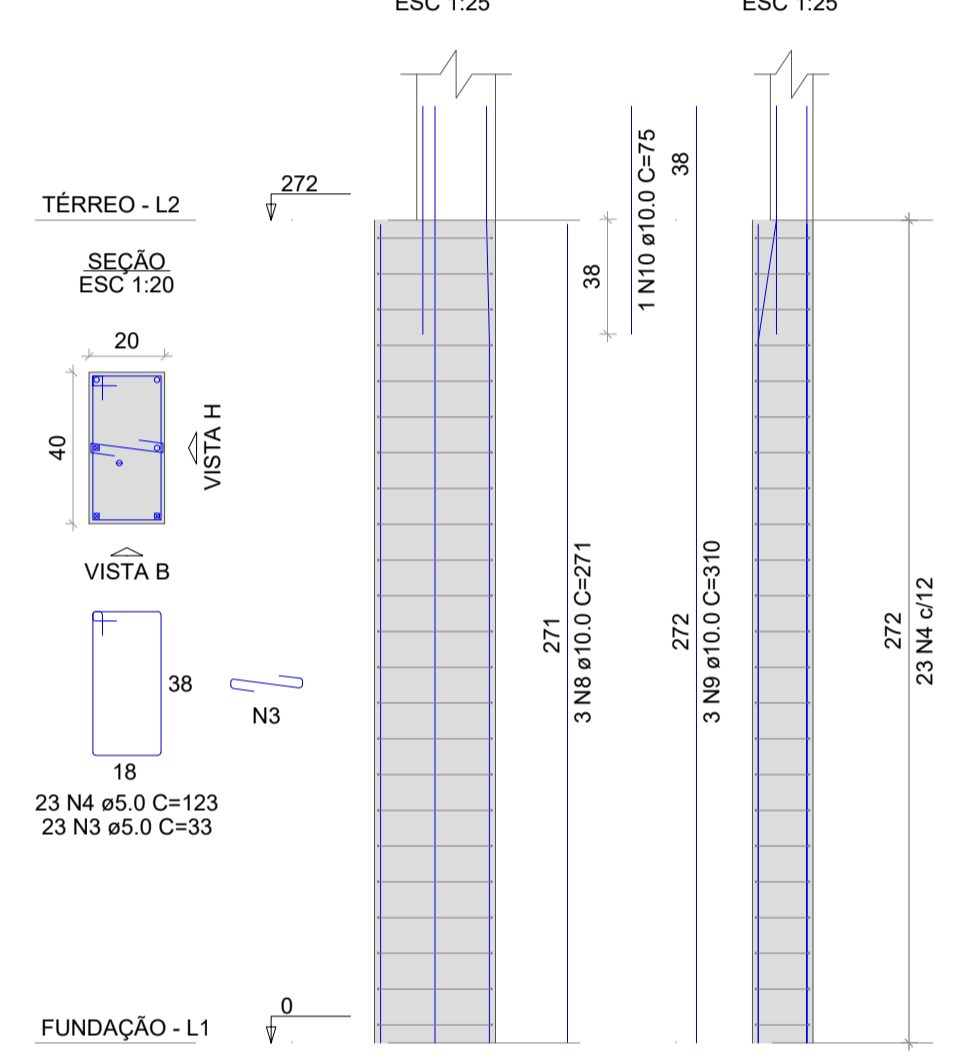
P25=P27



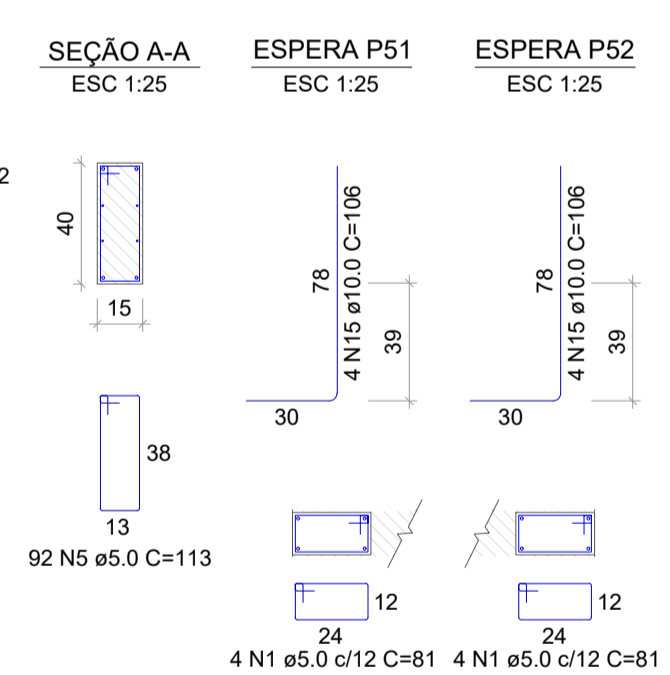
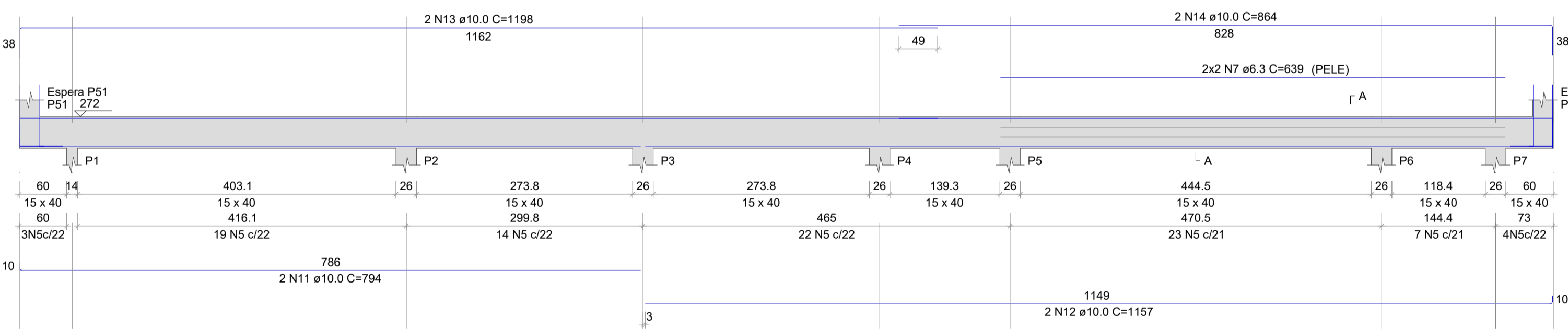
P44



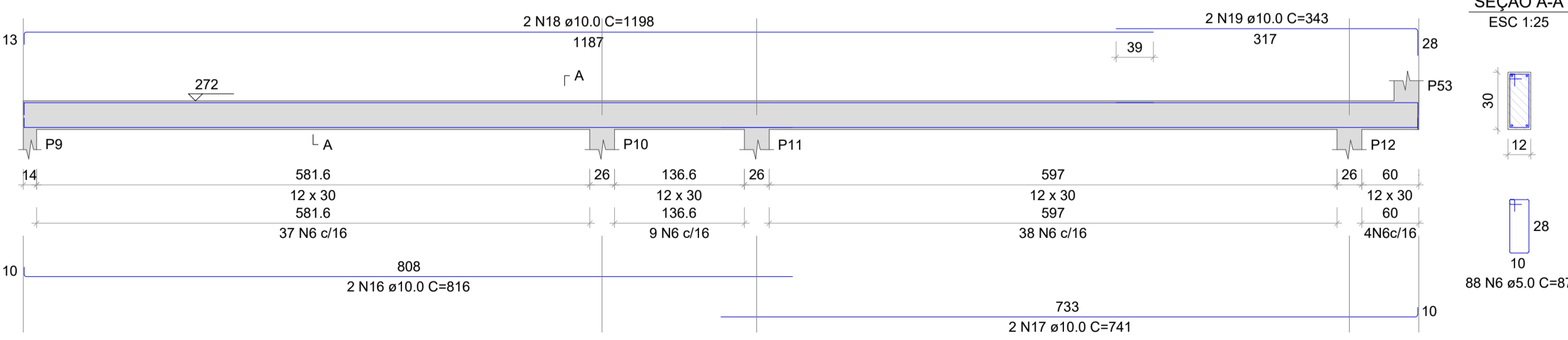
P45



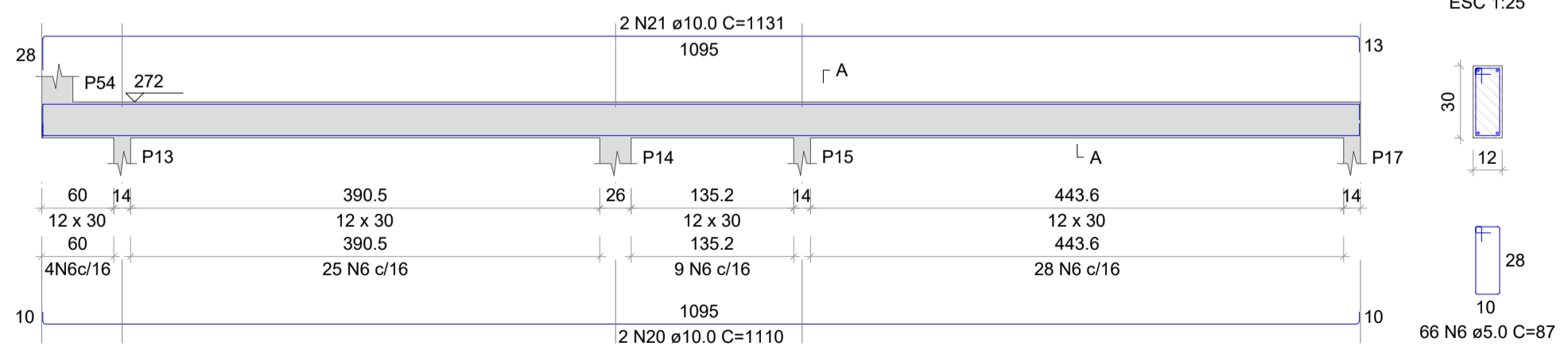
V1



V2



V3



PROJETO

PROJ. ARMAÇÃO DAS VIGAS BALDRAME, PILARES E VIGAS TÉRREO - ESC. INDICADA  
 ÁREA CONSTRUÍDA: 360,95M²

RESPONSÁVEL TÉCNICO  
*Lucas Rodrigues Ramos*  
 ENG. LUCAS RODRIGUES RAMOS  
 CREA/ES 025761/D

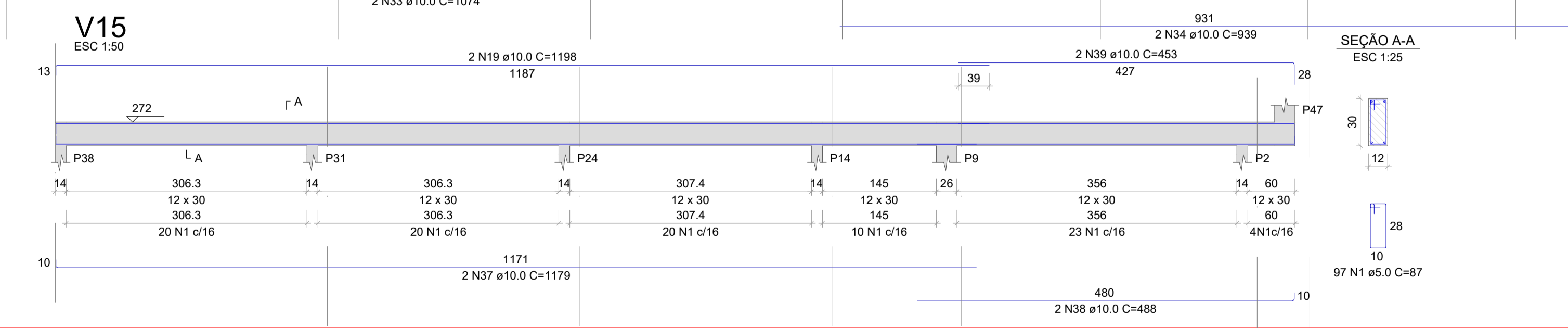
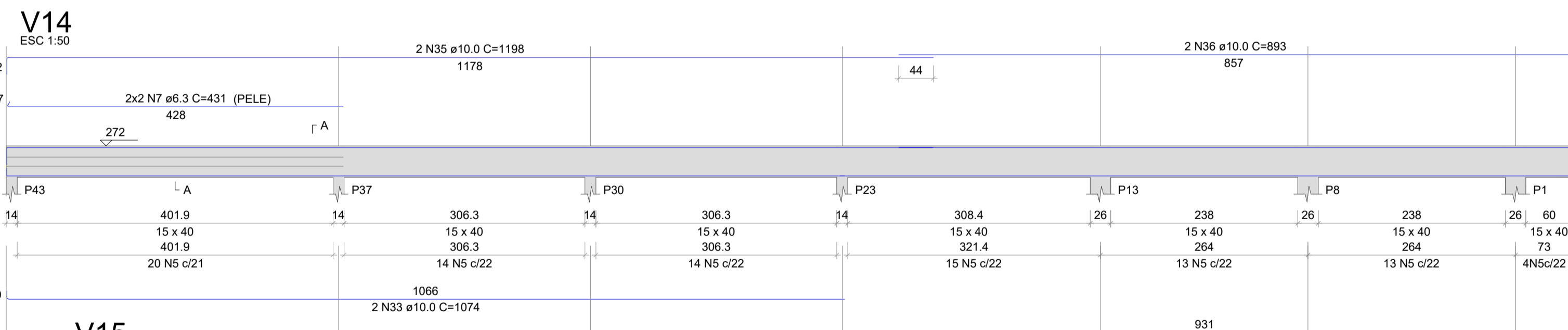
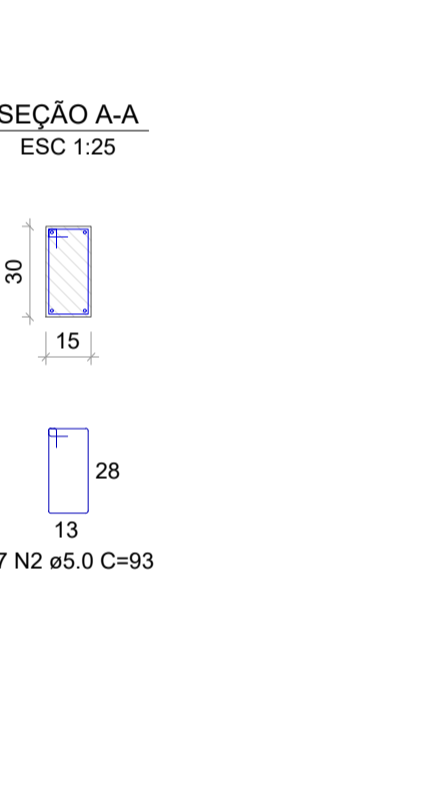
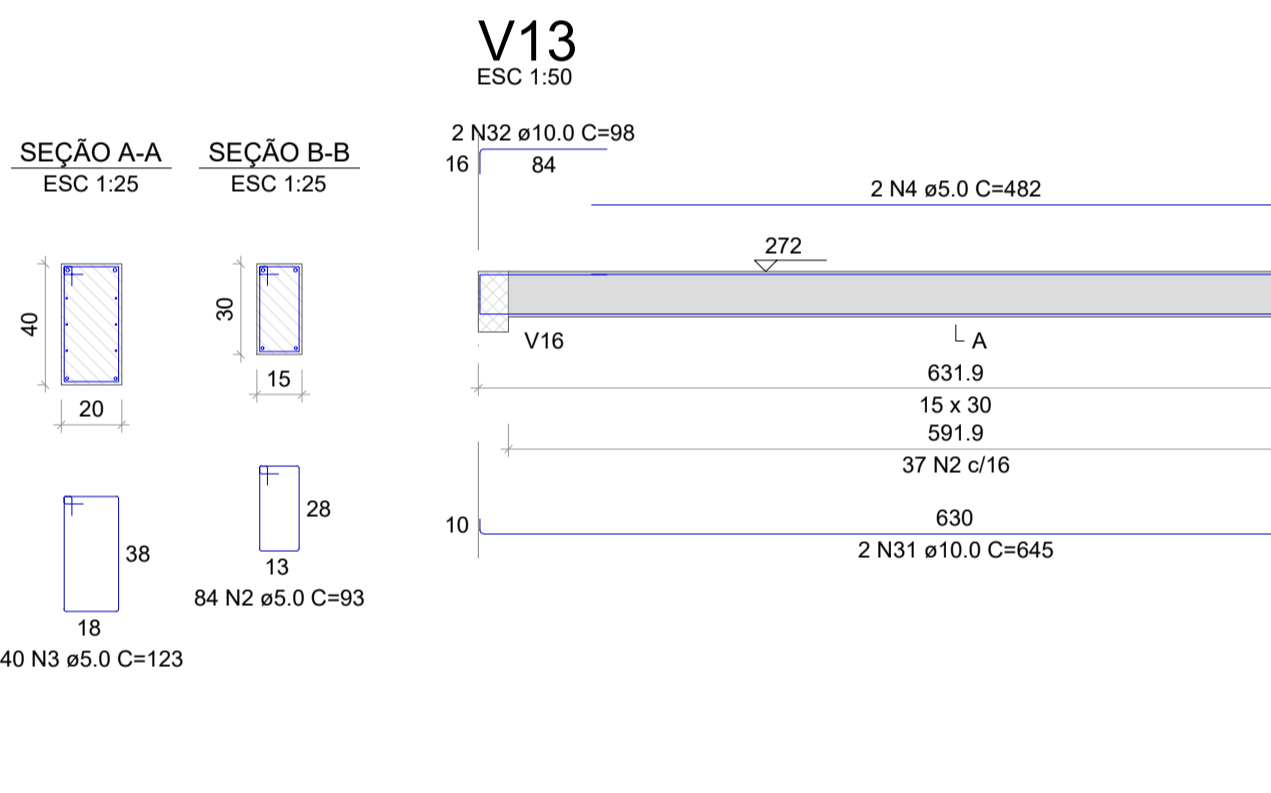
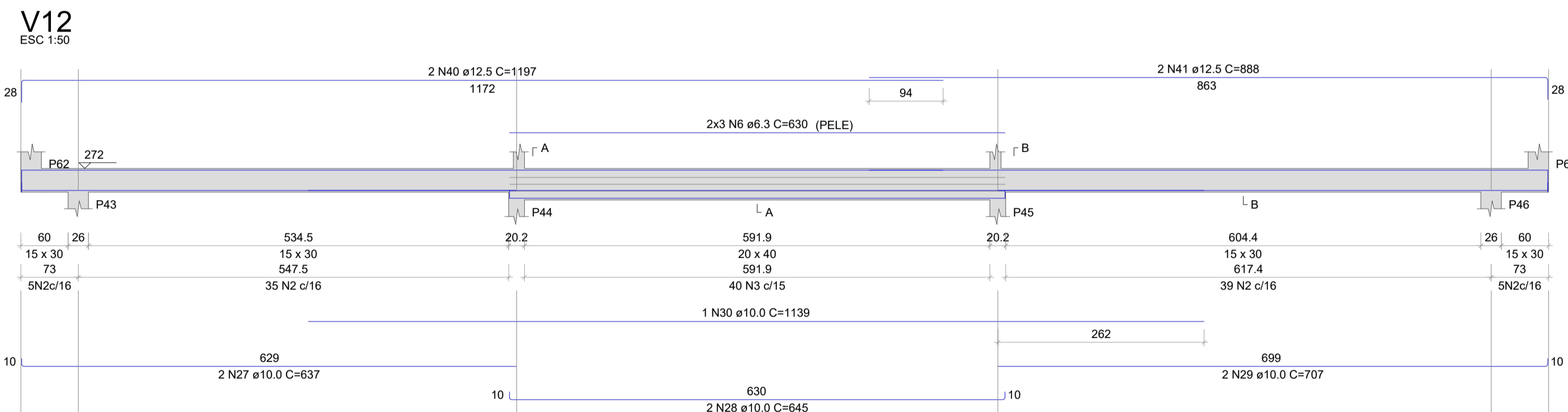
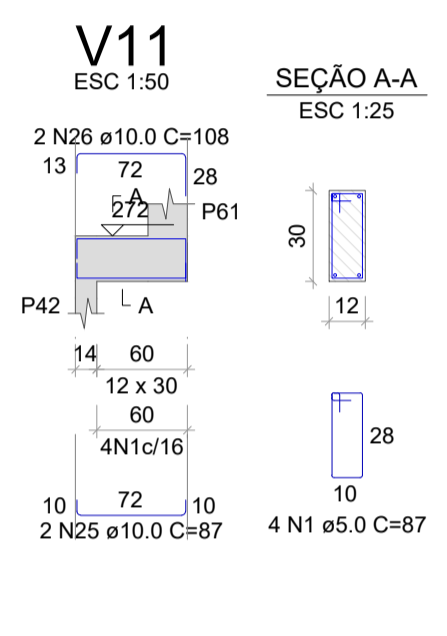
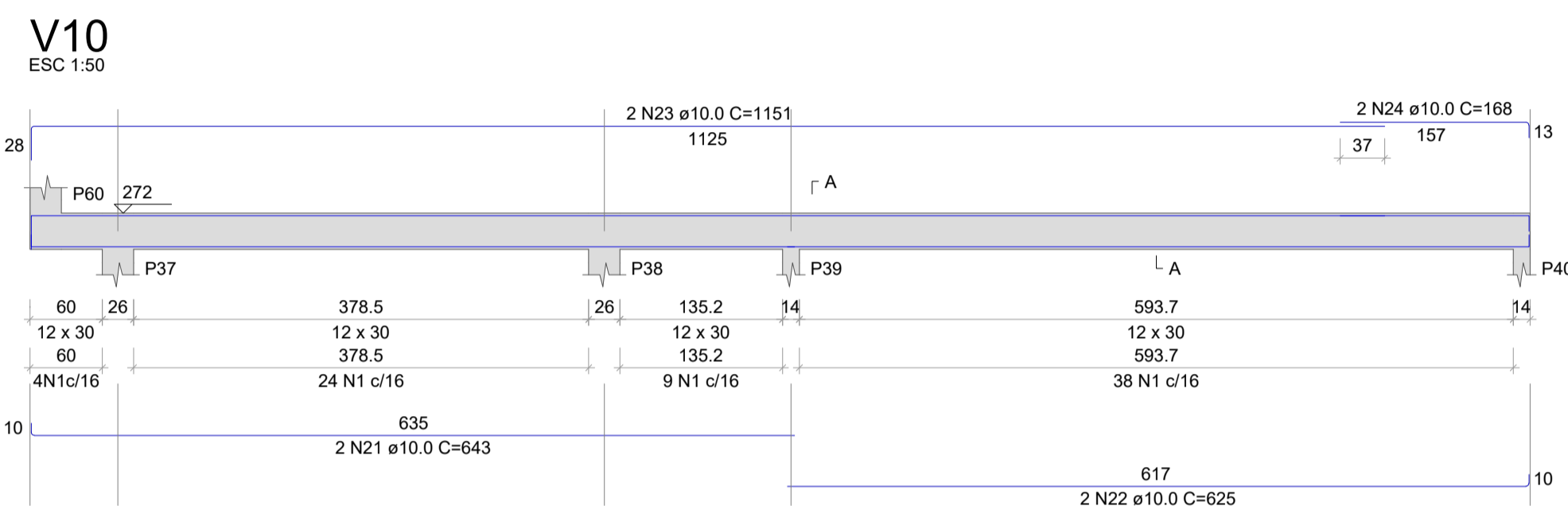
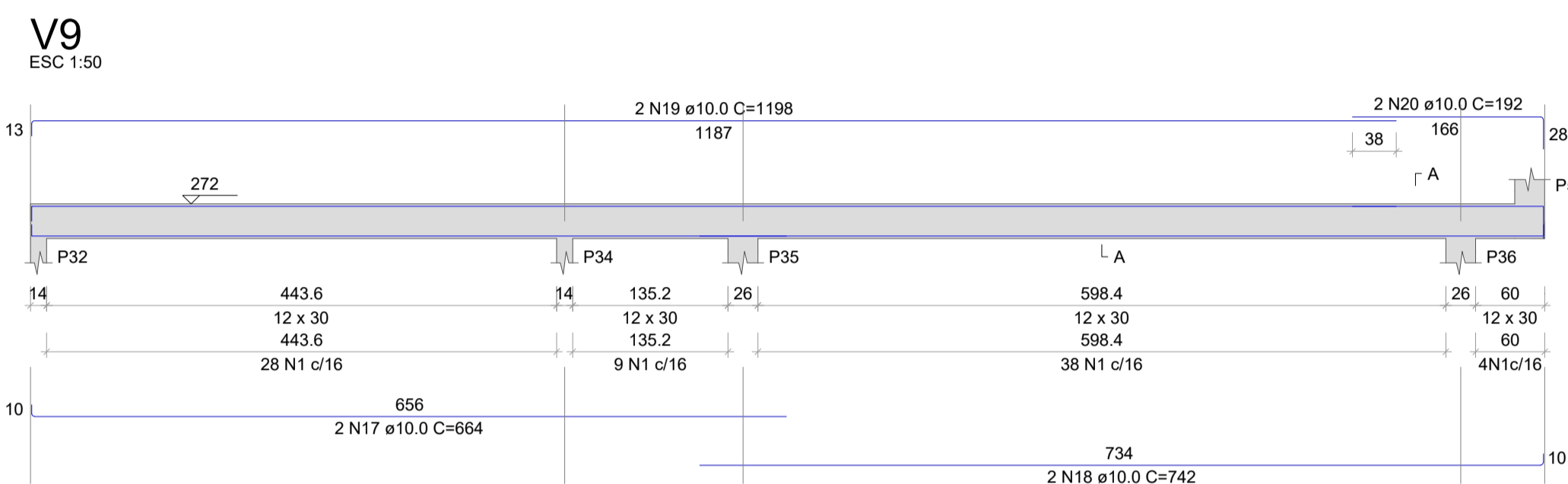
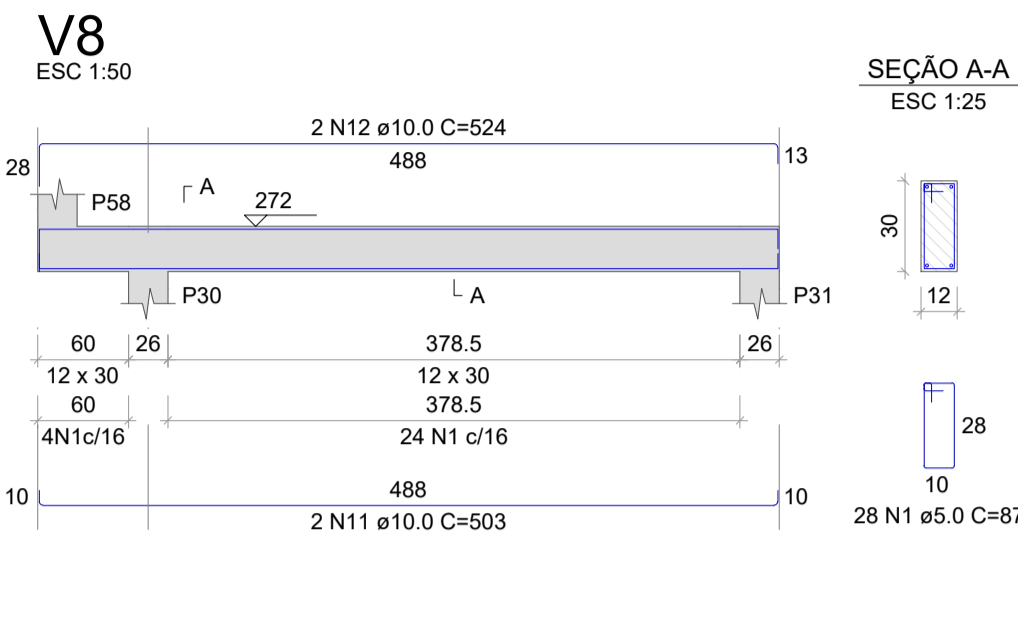
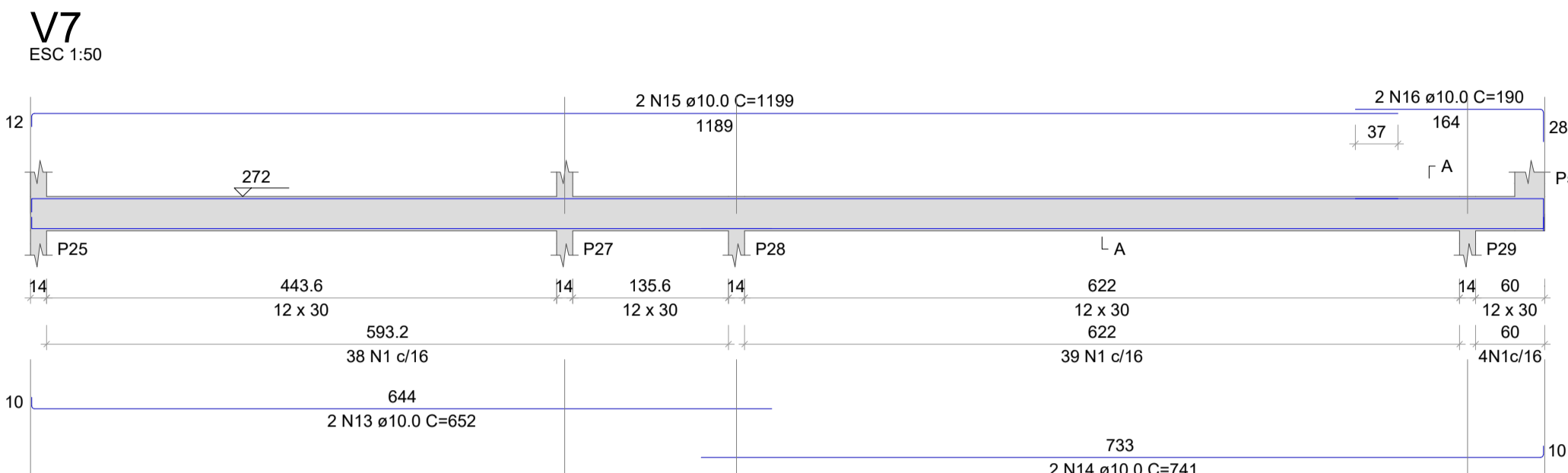
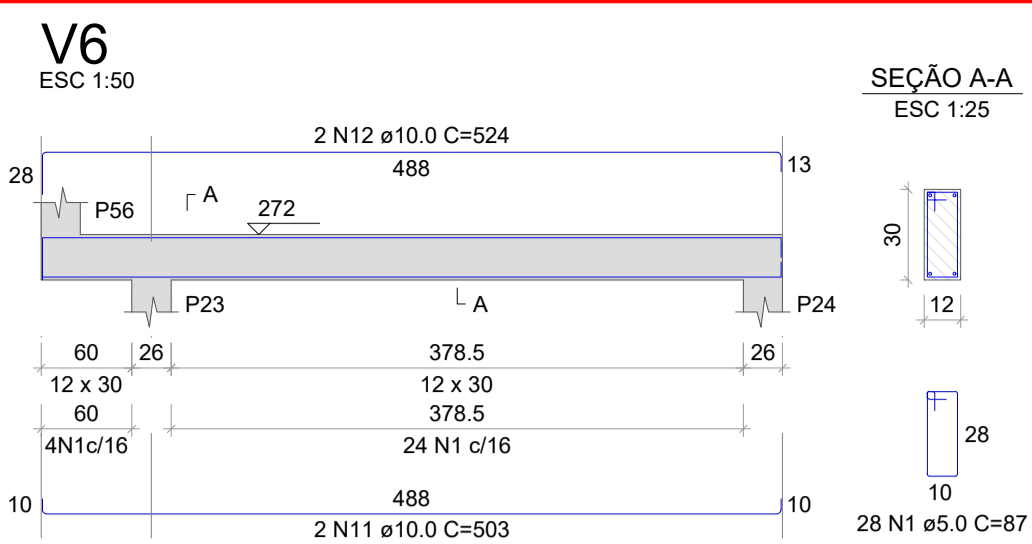
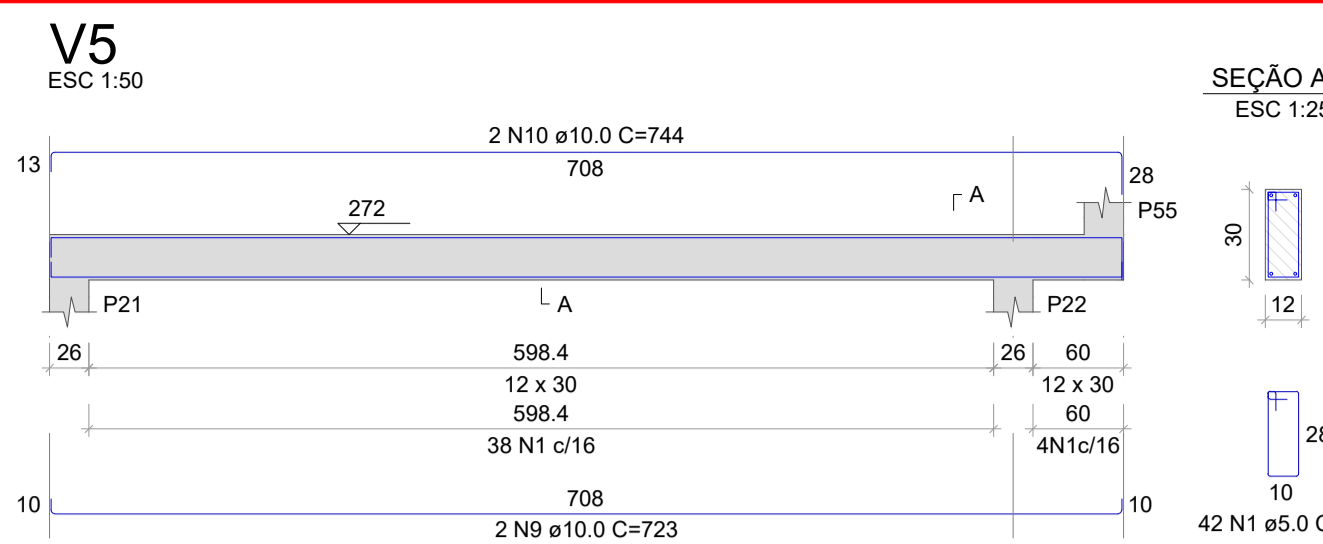
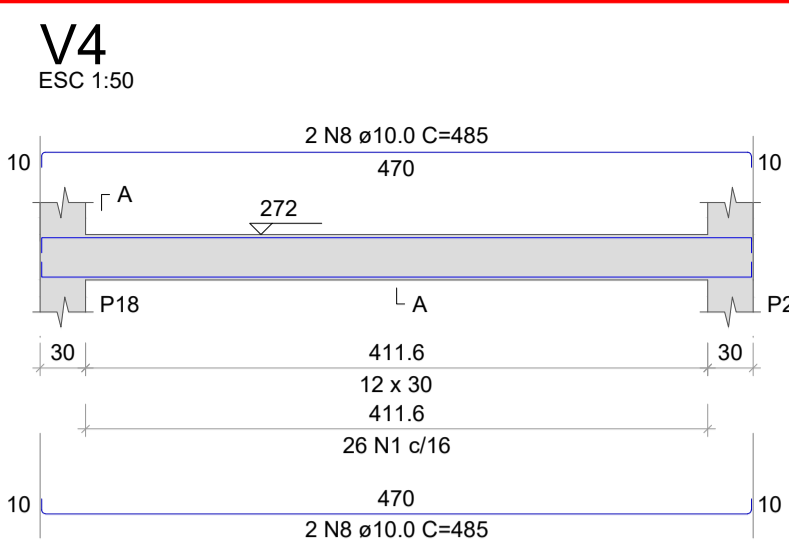
PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA



RESUMO DO AÇO

AÇO	DIAM (mm)	C. TOTAL (m)	PESO + 0% (kg)
CA50	6.3	55	13.5
	10.0	473.4	291.9
CA60	12.5	41.7	40.2
	5.0	676.7	104.3
PESO TOTAL (kg)			
CA50	345.5		
CA60	104.3		

Volume de concreto (C-25) = 5.34 m³  
 Área de forma = 95.19 m²



PROJETO

PROJETO ARMAÇÃO DAS VIGAS DO TÉRREO - ESC. INDICADA  
 ÁREA CONSTRUÍDA: 360,95M²

RESPONSÁVEL TÉCNICO

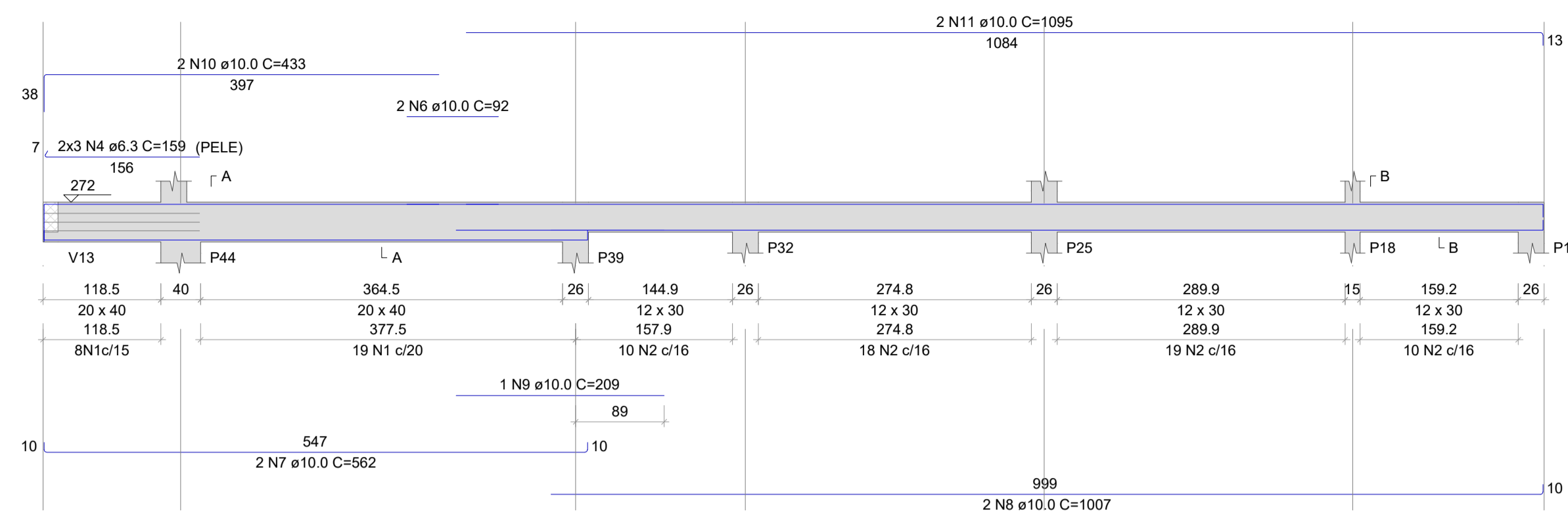
*Lucas Rodrigues Ramos*

ENG. LUCAS RODRIGUES RAMOS  
 CREA/ES 025761/D

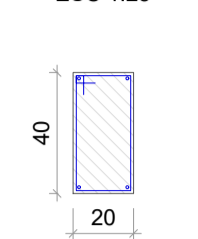
PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA



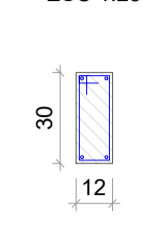
**V16**  
ESC 1:50



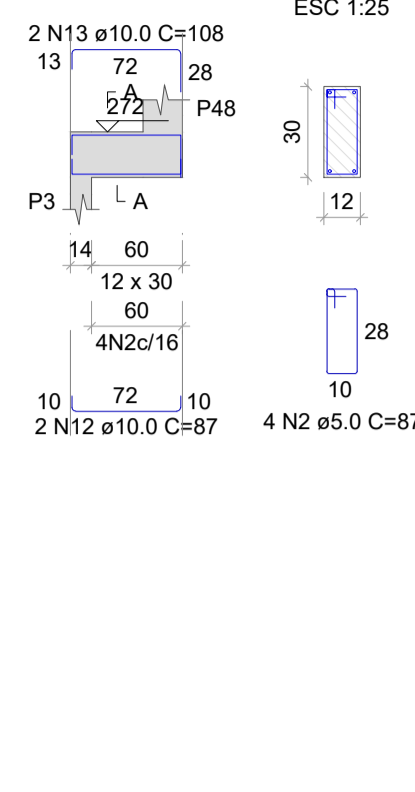
SEÇÃO A-A  
ESC 1:25



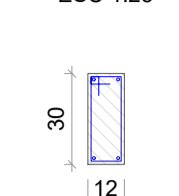
SEÇÃO B-B  
ESC 1:25



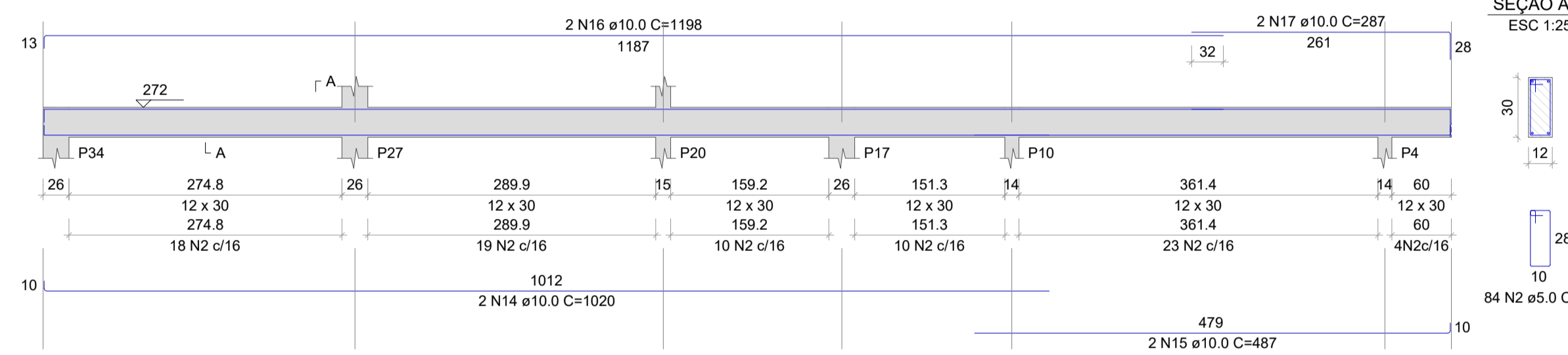
**V17**  
ESC 1:50



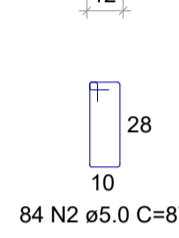
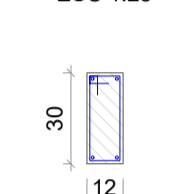
SEÇÃO A-A  
ESC 1:25



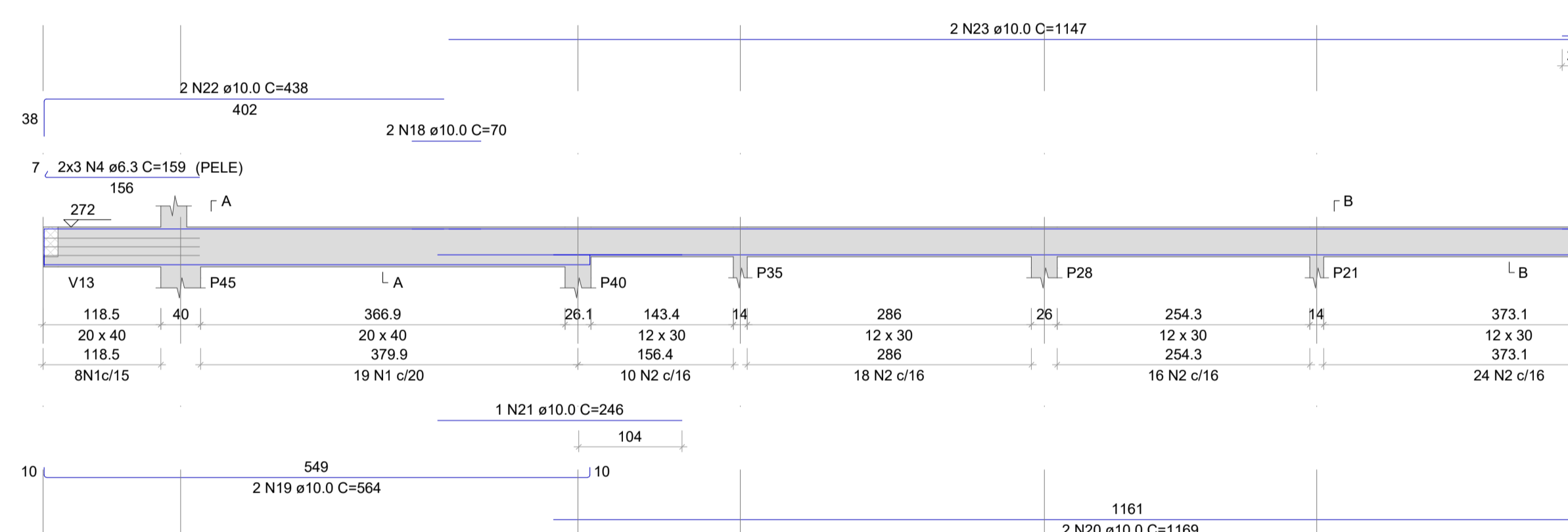
**V18**  
ESC 1:50



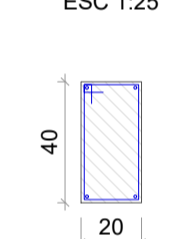
SEÇÃO A-A  
ESC 1:25



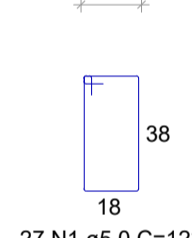
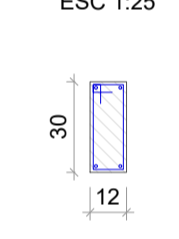
**V19**  
ESC 1:50



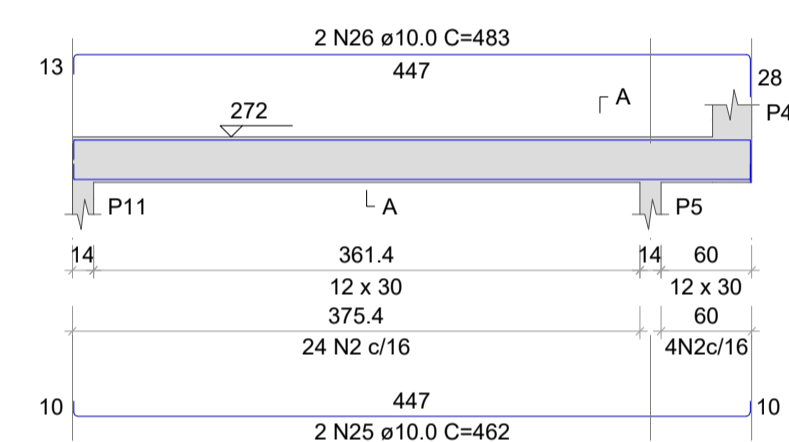
SEÇÃO A-A  
ESC 1:25



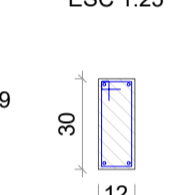
SEÇÃO B-B  
ESC 1:25



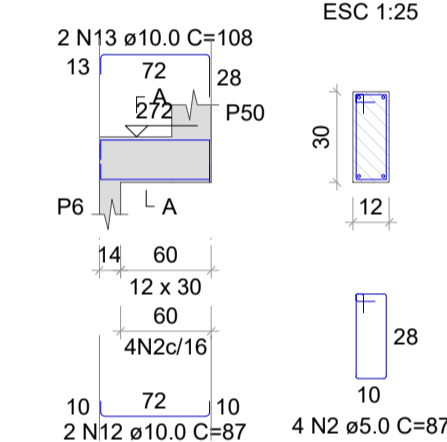
**V20**  
ESC 1:50



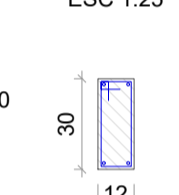
SEÇÃO A-A  
ESC 1:25



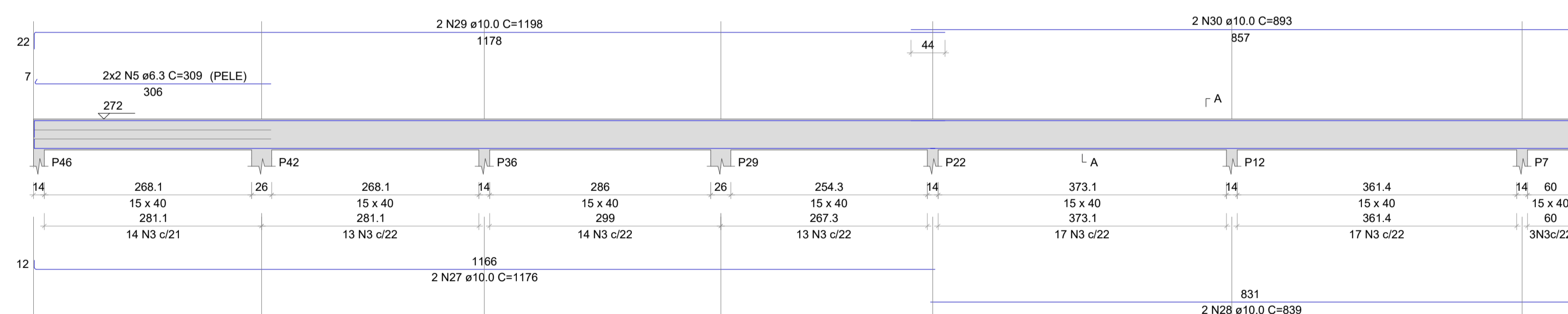
**V21**  
ESC 1:50



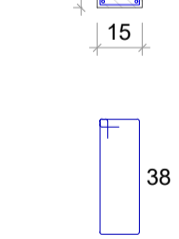
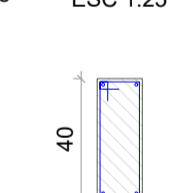
SEÇÃO A-A  
ESC 1:25



**V22**  
ESC 1:50



SEÇÃO A-A  
ESC 1:25



RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	31.4	7.7
CA60	10.0	307.9	189.8
CA60	5.0	382.4	58.9

PESO TOTAL (kg)  
CA50 197.5  
CA60 58.9  
Volume de concreto (C-25) = 3.54 m³  
Área de forma = 59.40 m²

PROJETO

PROJETO DE ARMAÇÃO DAS VIGAS DO TÉRREO - ESC. INDICADA  
ÁREA CONSTRUÍDA: 360,95M²

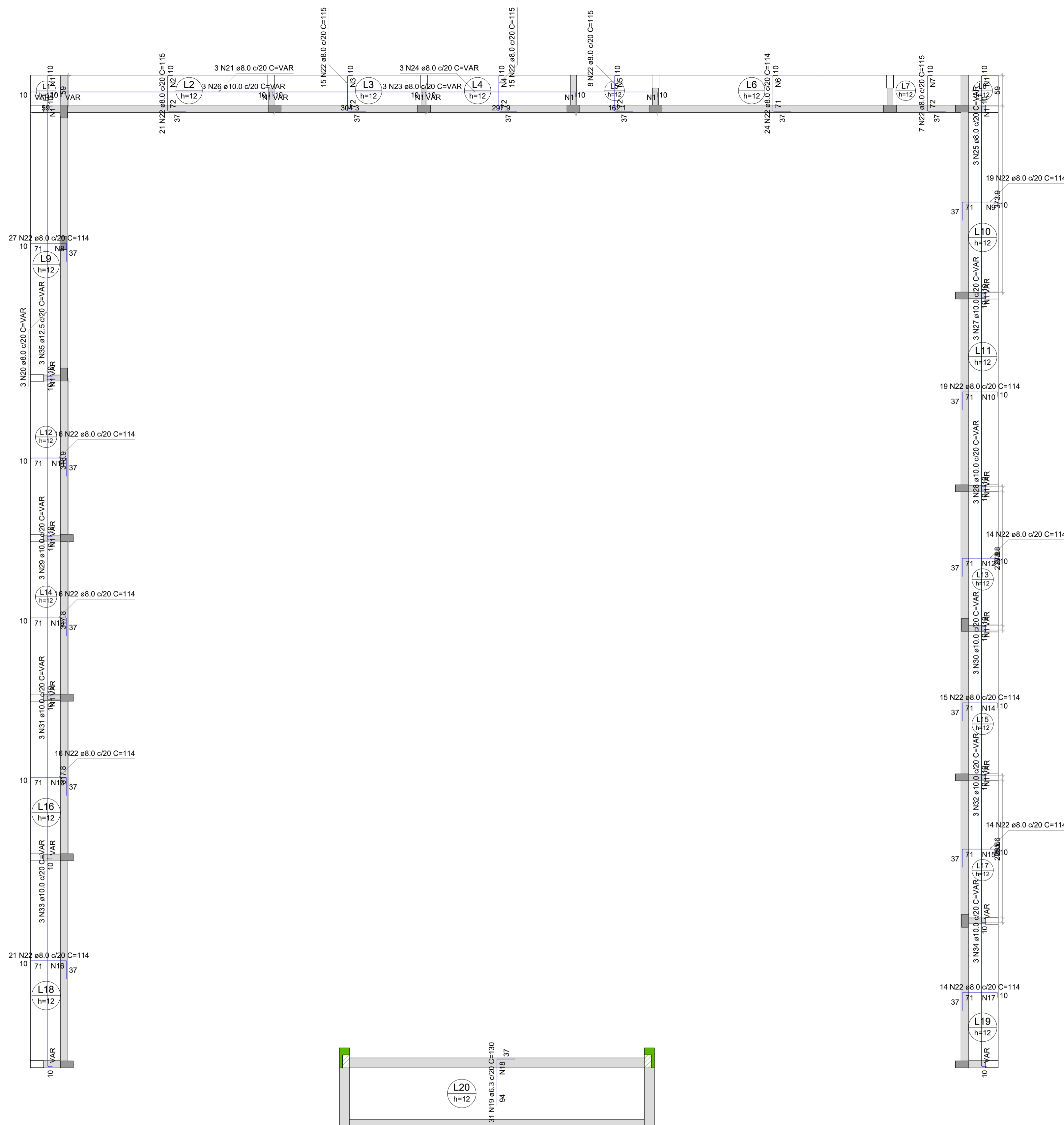
RESPONSÁVEL TÉCNICO

*Lucas Rodrigues Ramos*

ENG. LUCAS RODRIGUES RAMOS  
CREA/ES 025761

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA



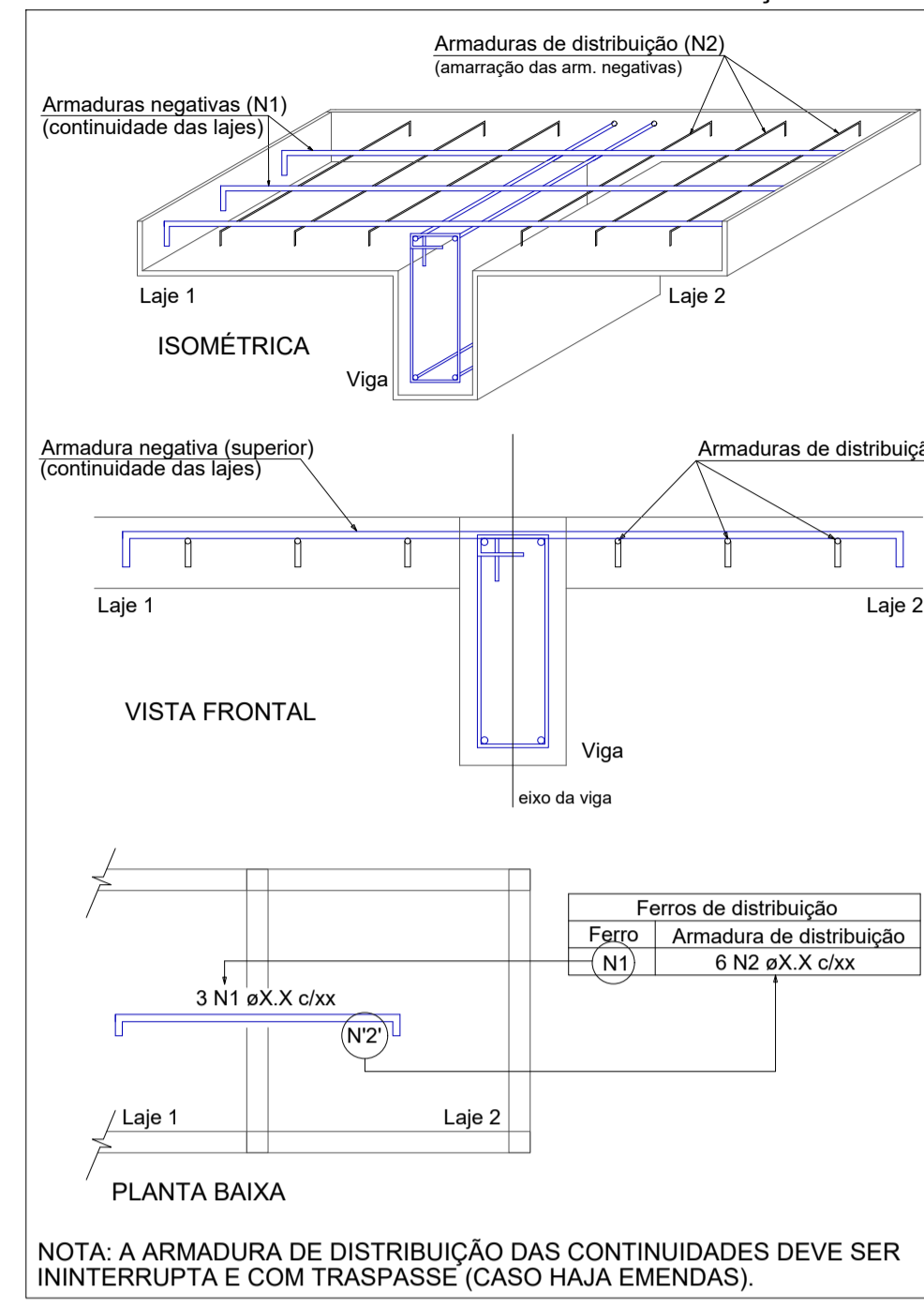


Armação Negativa das Lajes do Térreo

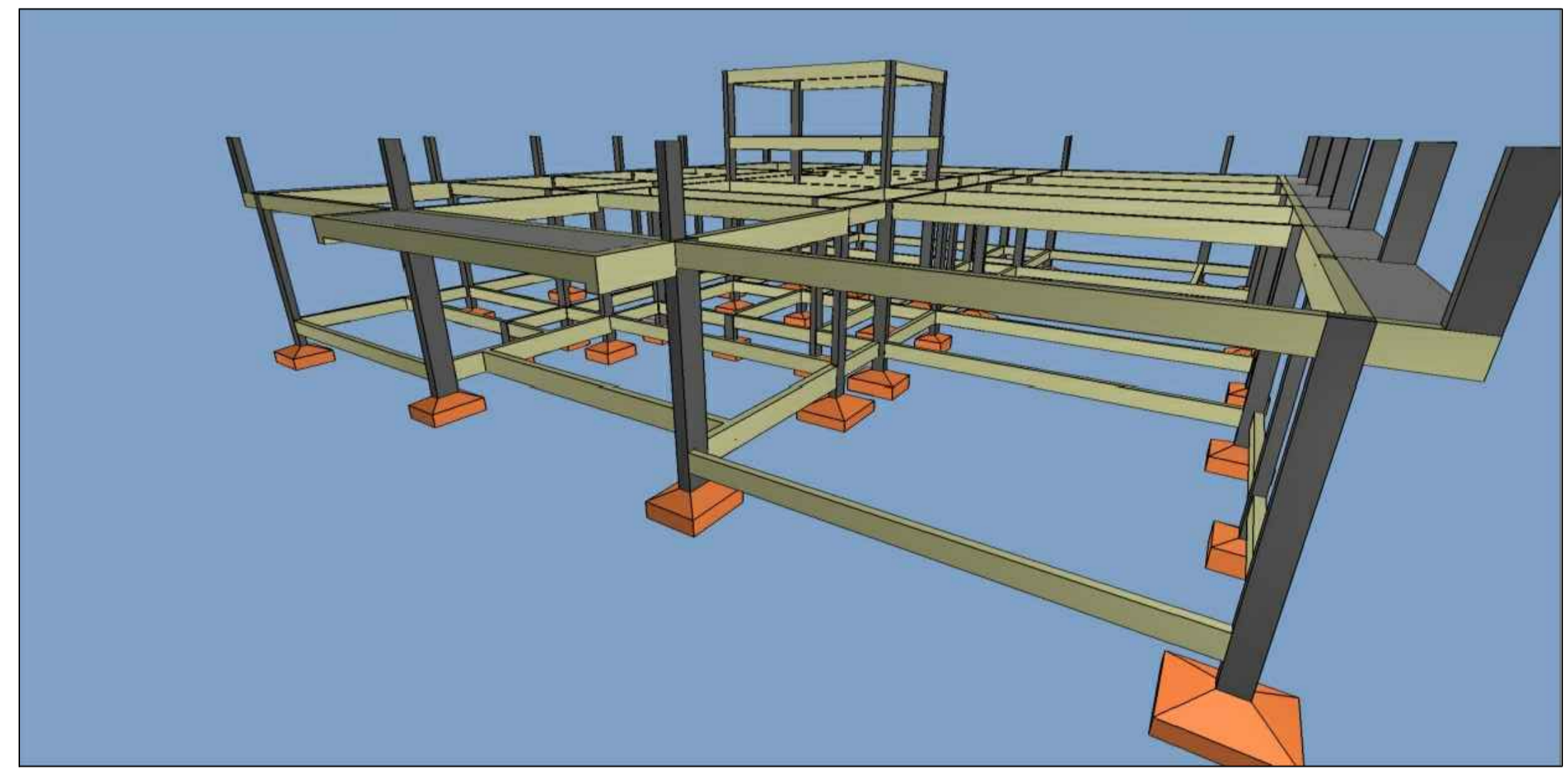
escala 1:50

Armadura	Armadura de distribuição
N20	31 N1 ø5.0 c/20 C=VAR
N21	25 N1 ø5.0 c/20 C=VAR
N22	4 N2 ø5.0 c/20 C=416
N26	37 N1 ø5.0 c/20 C=VAR
N23	31 N1 ø5.0 c/20 C=VAR
N22	4 N3 ø5.0 c/20 C=307
N22	4 N4 ø5.0 c/20 C=300
N24	24 N1 ø5.0 c/20 C=VAR
N22	4 N5 ø5.0 c/20 C=165
N22	4 N6 ø5.0 c/20 C=VAR
N22	4 N7 ø5.0 c/20 C=150
N25	23 N1 ø5.0 c/20 C=VAR
N35	58 N1 ø5.0 c/15 C=VAR
N22	4 N8 ø5.0 c/20 C=541
N22	4 N9 ø5.0 c/20 C=375
N27	39 N1 ø5.0 c/20 C=VAR
N22	4 N10 ø5.0 c/20 C=387
N28	34 N1 ø5.0 c/20 C=VAR
N22	4 N11 ø5.0 c/20 C=321
N29	33 N1 ø5.0 c/20 C=VAR
N22	4 N12 ø5.0 c/20 C=261
N30	30 N1 ø5.0 c/20 C=VAR
N31	33 N1 ø5.0 c/20 C=VAR
N22	4 N13 ø5.0 c/20 C=320
N22	4 N14 ø5.0 c/20 C=299
N32	30 N1 ø5.0 c/20 C=VAR
N33	36 N1 ø5.0 c/20 C=VAR
N22	4 N15 ø5.0 c/20 C=320
N22	4 N16 ø5.0 c/20 C=288
N34	30 N1 ø5.0 c/20 C=VAR
N22	4 N17 ø5.0 c/20 C=415
N22	4 N18 ø5.0 c/20 C=288
N19	5 N18 ø5.0 c/20 C=612

DETALHE DA ARMADURA SUPERIOR DE CONTINUIDADE DA LAJE E MONTAGEM DA ARMADURA DE DISTRIBUIÇÃO



RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	40.3	9.9
	8.0	402.2	158.7
	10.0	183.5	113.1
	12.5	26.5	25.5
	5.0	589.9	90.9
PESO TOTAL (kg)			
CA50		307.3	
CA60		90.9	
Volume de concreto (C-25) = 0.00 m³			
Área de forma = 0.00 m²			



PROJETO

PROJETO ESTRUTURAL - CENTRO DE REFERÊNCIA DE ASSISTÊNCIA SOCIAL - CRAS  
UNIDADE PARA ATENDIMENTO DE ATÉ 1000 FAMÍLIAS/ANO

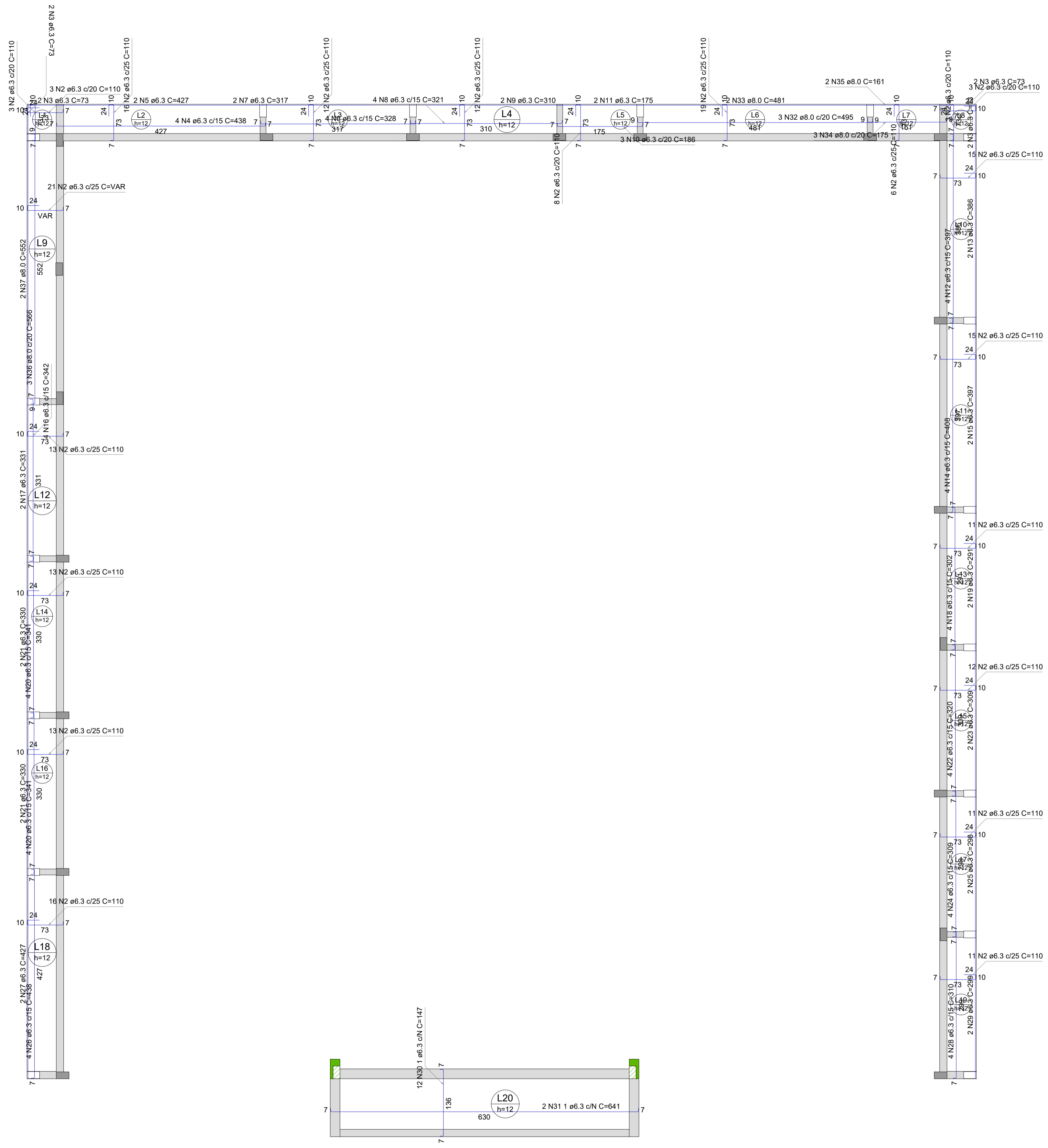
PROJ. ARMAÇÃO NEGATIVA DAS LAJES DO TÉRREO - ESC. INDICADA  
ÁREA CONSTRUIDA: 360,95M²

RESPONSÁVEL TÉCNICO

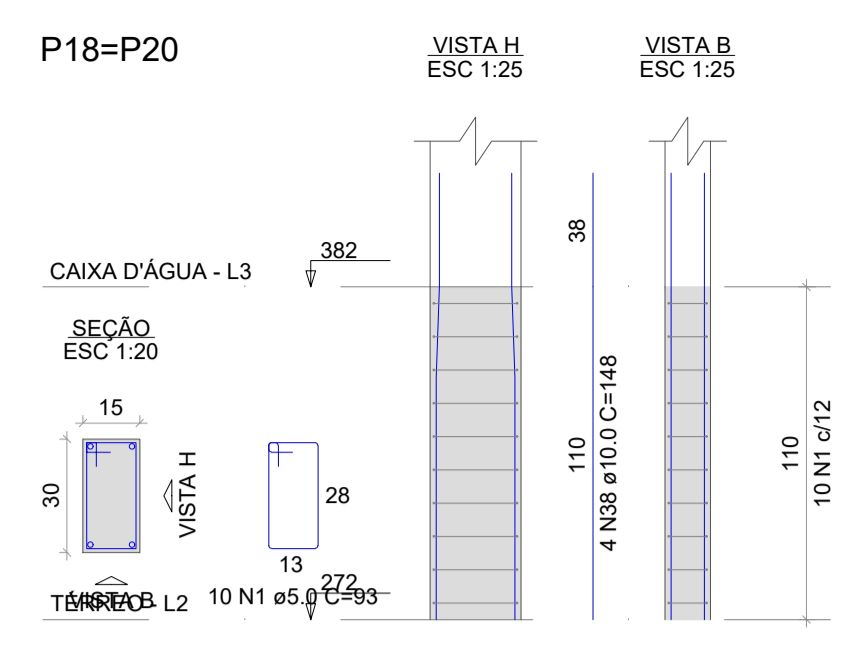
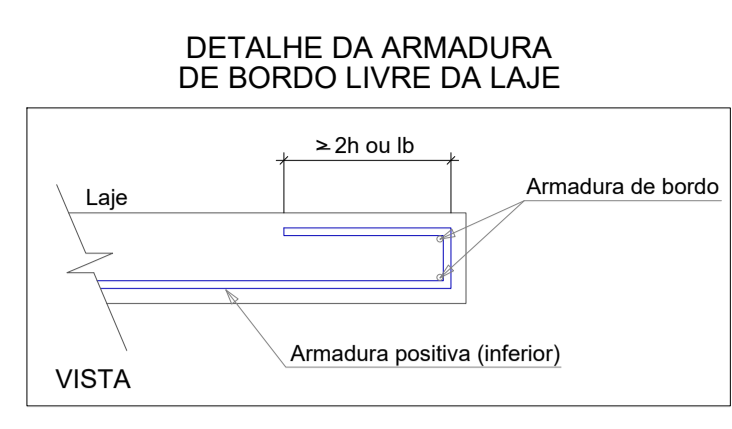
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CREA/ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA





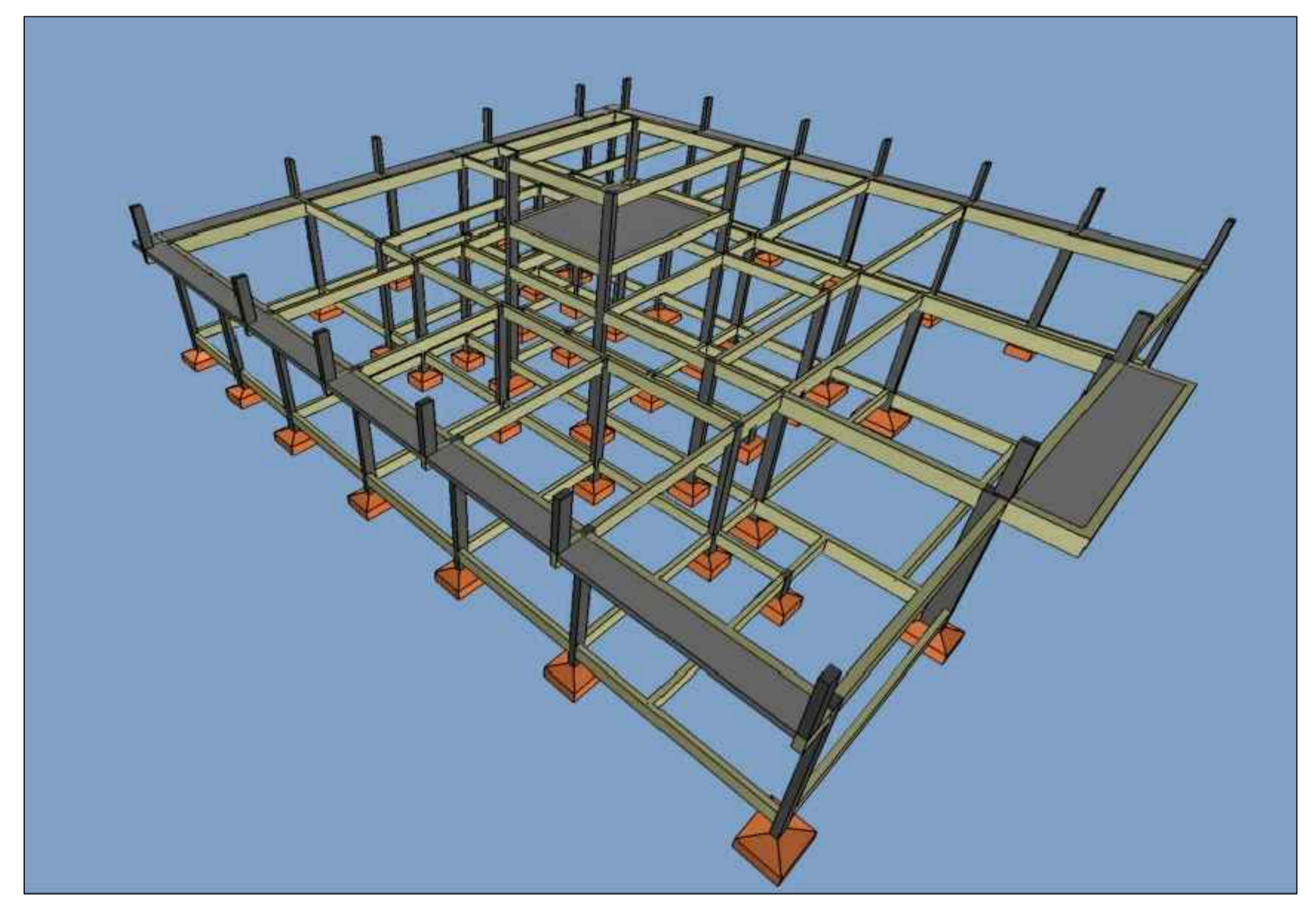
Armação Positiva das Lajes do Térreo  
escala 1:50



RESUMO DO AÇO

AÇO	DIAM (mm)	C. TOTAL (m)	PESO + 0% (kg)
CA50	6.3	577.8	141.4
	8.0	61	24.1
	10.0	11.8	7.3
CA60	5.0	18.6	2.9
PESO TOTAL (kg)			
CA50	172.7		
CA60	2.9		

Volume de concreto (C-25) = 4.55 m³  
Área de forma = 48.84 m²



PROJETO

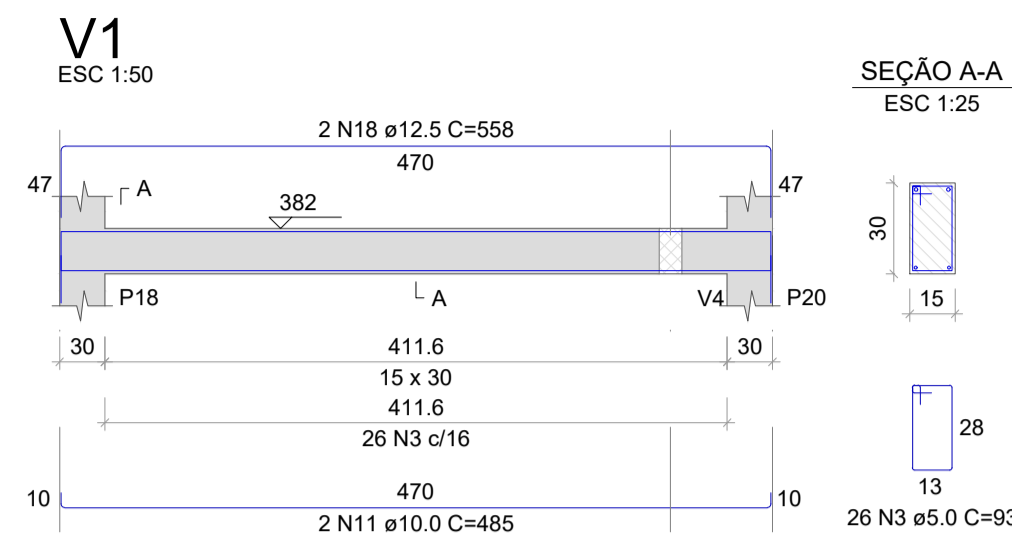
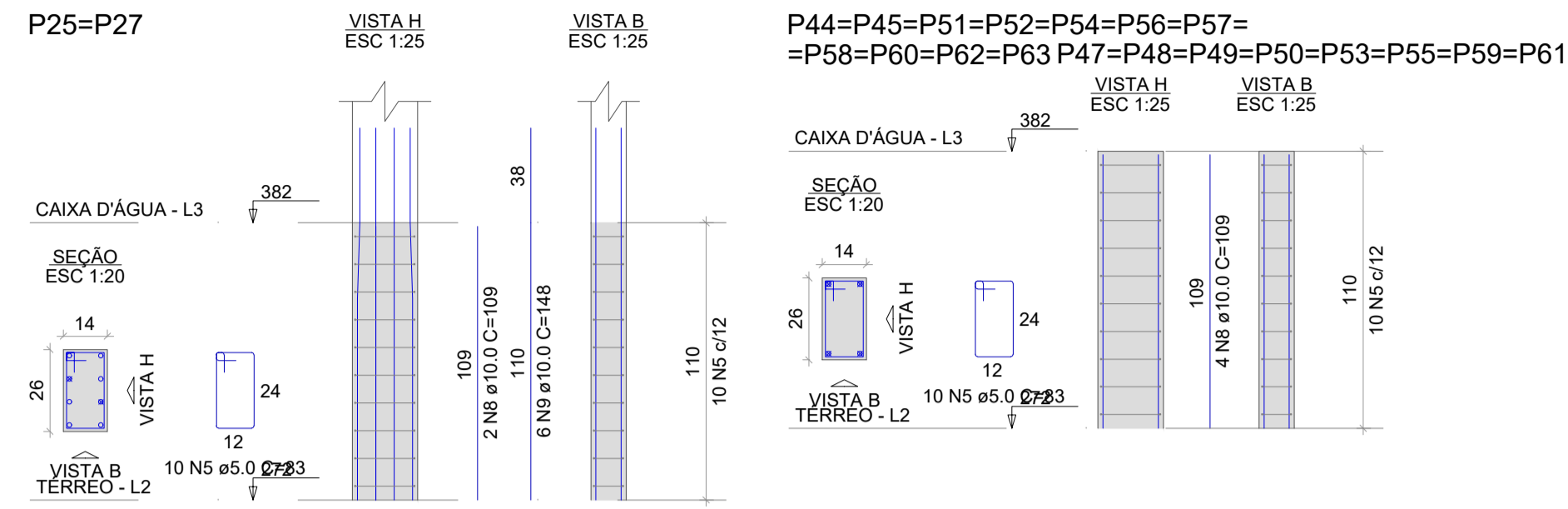
ARMAÇÃO POSITIVA DAS LAJES DO TÉRREO - ESC. INDICADA  
ÁREA CONSTRUÍDA: 360,95M²

RESPONSÁVEL TÉCNICO

*Lucas Rodrigues Ramos*  
ENG. LUCAS RODRIGUES RAMOS  
CREA/ES 025761/D

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA

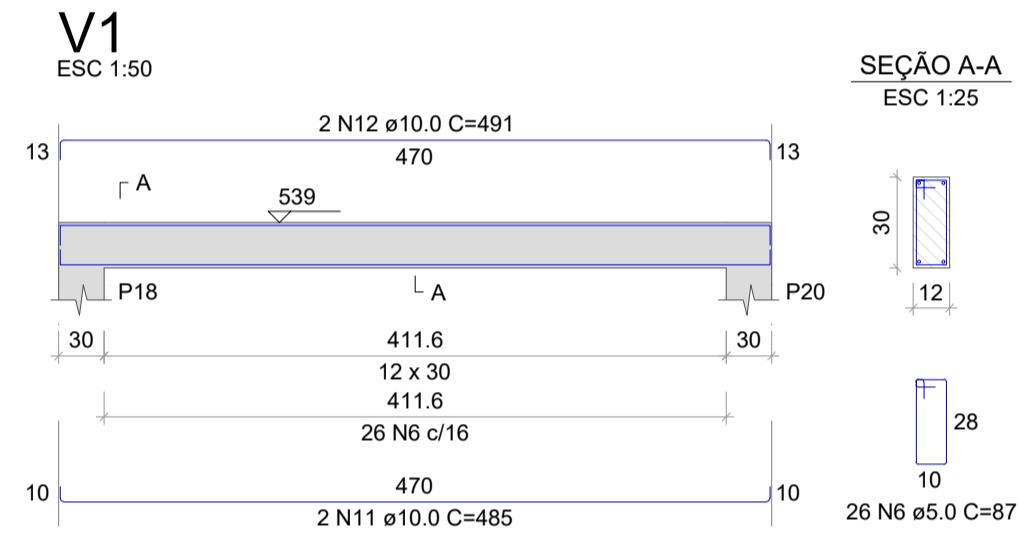
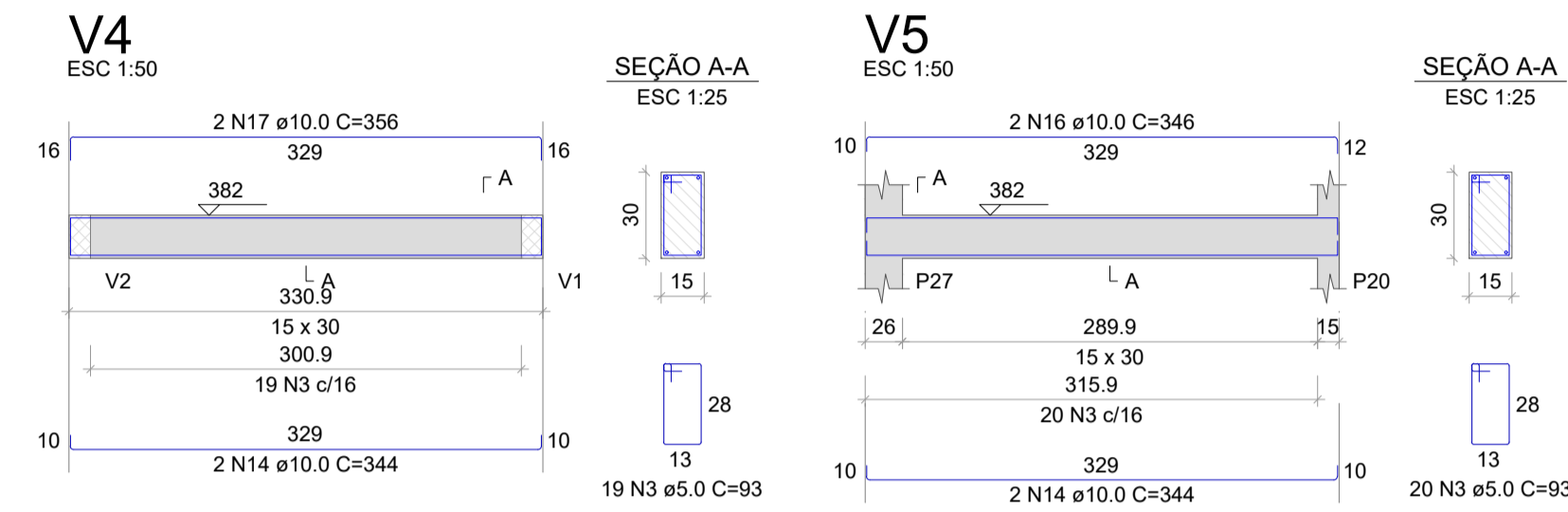
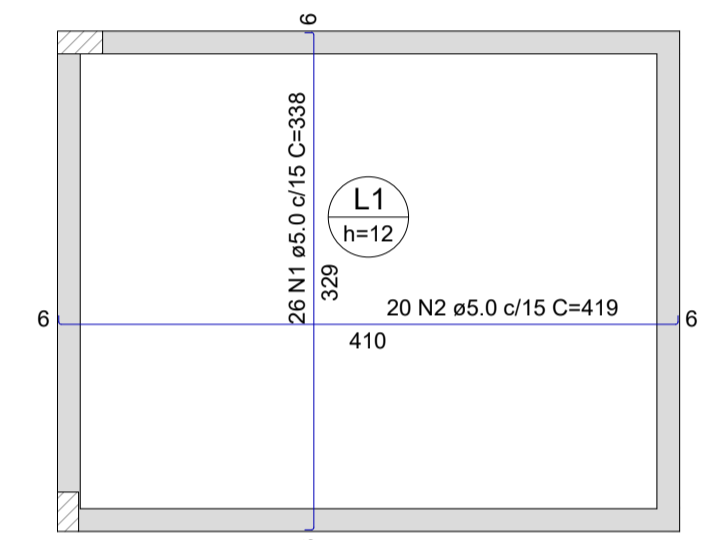
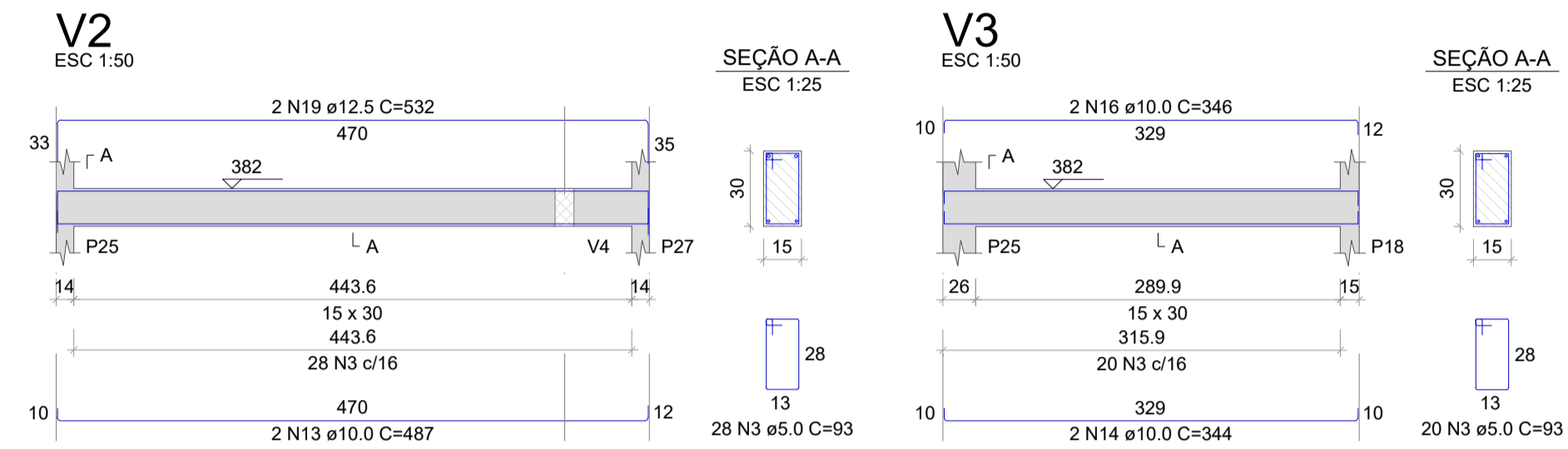




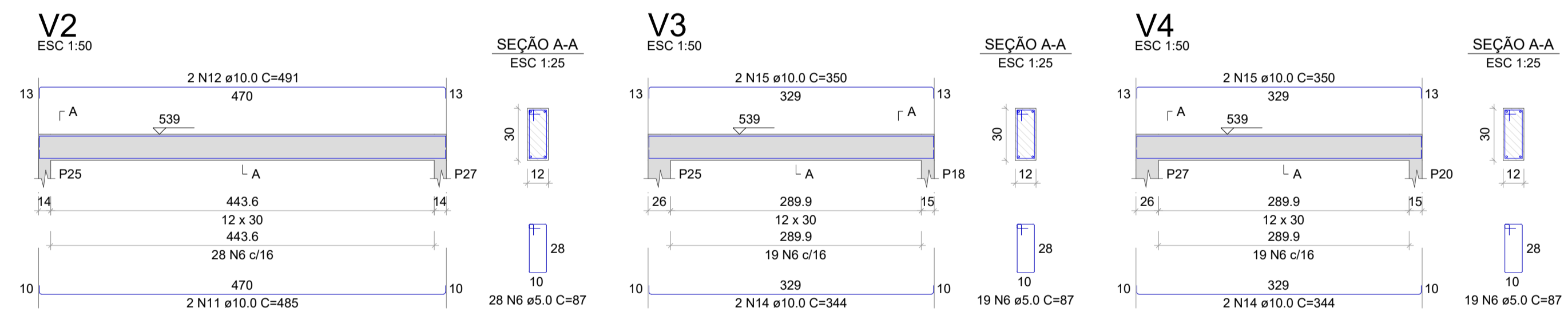
RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	232	143
CA60	12.5	21.8	21
CA60	5.0	534.8	82.4
<b>PESO TOTAL (kg)</b>			
CA50		164	
CA60		82.4	

Volume de concreto (C-25) = 3.63 m³  
Área de forma = 54.99 m²



### Armação Positiva Laje da Caixa D'água



PROJETO

PROJ. ARM. POS. E NEG. DA LAJE DA CX. D'ÁGUA, PILARES E VIGAS - ESC. INDICADA  
ÁREA CONSTRUIDA: 360,95M²

RESPONSÁVEL TÉCNICO

ENG. LUCAS RODRIGUES RAMOS  
CREA/ES 025761

PREFEITURA MUNICIPAL DE ATÍLIO VIVÁCQUA

