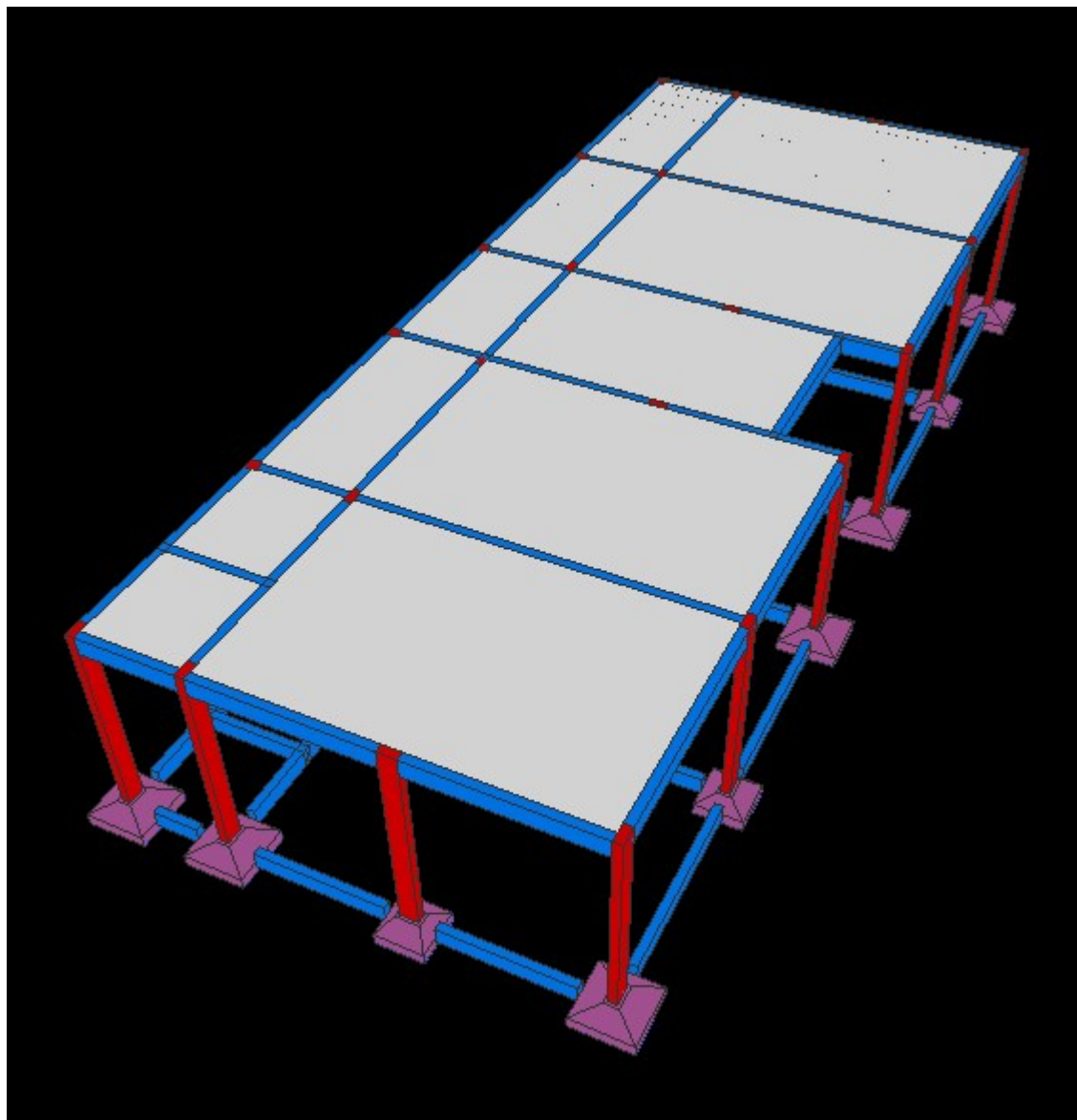



Baricentros de pilares		
Pilar	X cm	Y cm
P1	5.0	787.5
P2	404.5	787.5
P3	804.0	787.5
P4	1135.0	787.5
P5	1534.5	787.5
P6	1934.0	787.5
P7	-3.0	480.0
P8	812.0	480.0
P9	1127.0	480.0
P10	1942.0	480.0
P11	5.0	172.5
P12	404.5	172.5
P13	804.0	172.5
P14	1135.0	172.5
P15	1534.5	172.5
P16	1934.0	172.5
P17	-0.0	-0.0
P18	404.5	-0.0
P19	812.0	-0.0
P20	1127.0	-0.0
P21	1534.5	-0.0
P22	1934.0	-3.0





PROPRIETÁRIO(A):

VICENTE PATRÍCIO DE SOUZA JÚNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):

MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

TÍTULO: PROJETO ESTRUTURAL  
CONSTRUÇÃO DE SALAS DE RECURSOS NO CMEI  
AUXILIADORA DE FÁTIMA FIALHO LIMA

CONCRETO  
fck = MPa  
ECS = Ver na planta

CLIENTE  
Prefeitura Municipal de São Miguel do Anta/MG

OBRAS  
Salas Cemei

TÍTULO  
Fundação  
Planta de Locação

OBRA: N.º  
0001

DES. N.º  
001

REV. N.º  
00

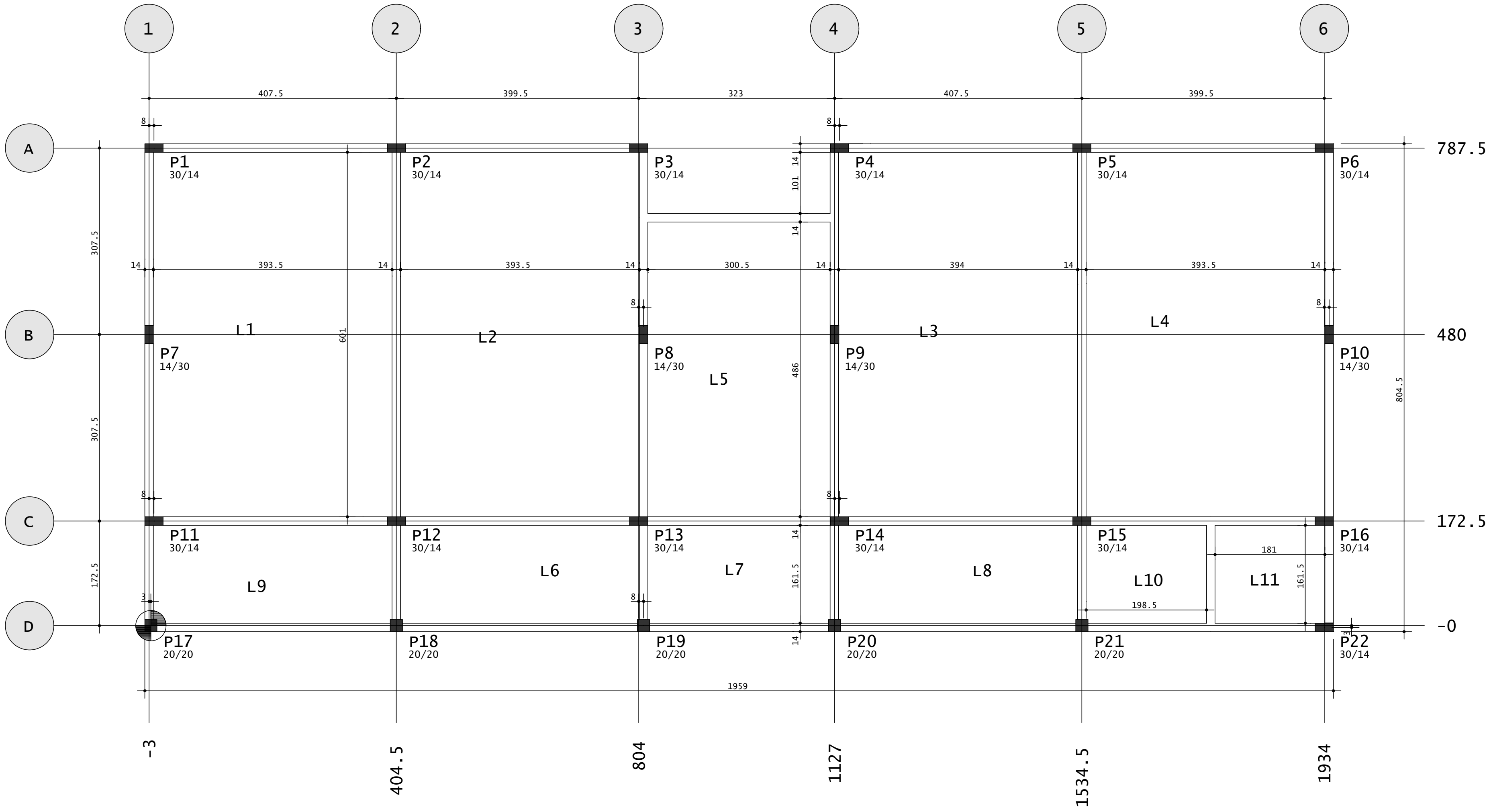
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30/07/2025


ESCALA  
1:50

DESENHO  
SAL-FUN-FOR-001-R00

COORD.

ENG. N.º

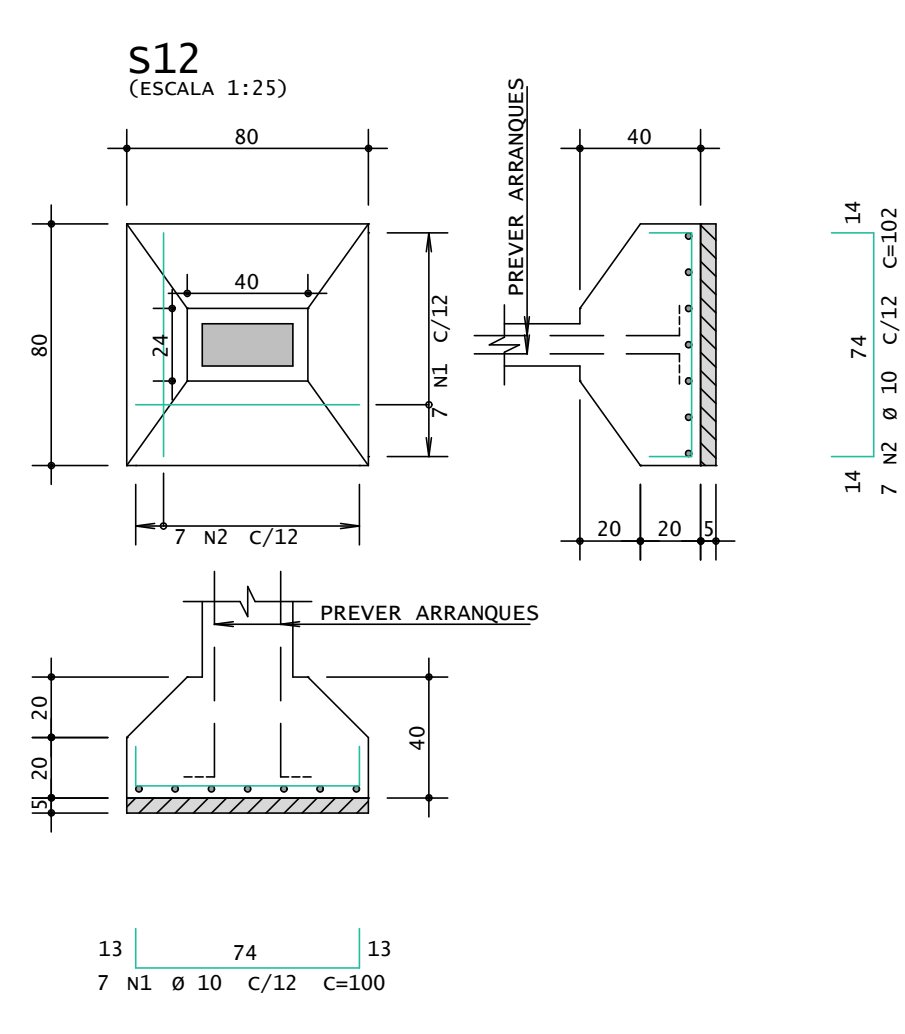
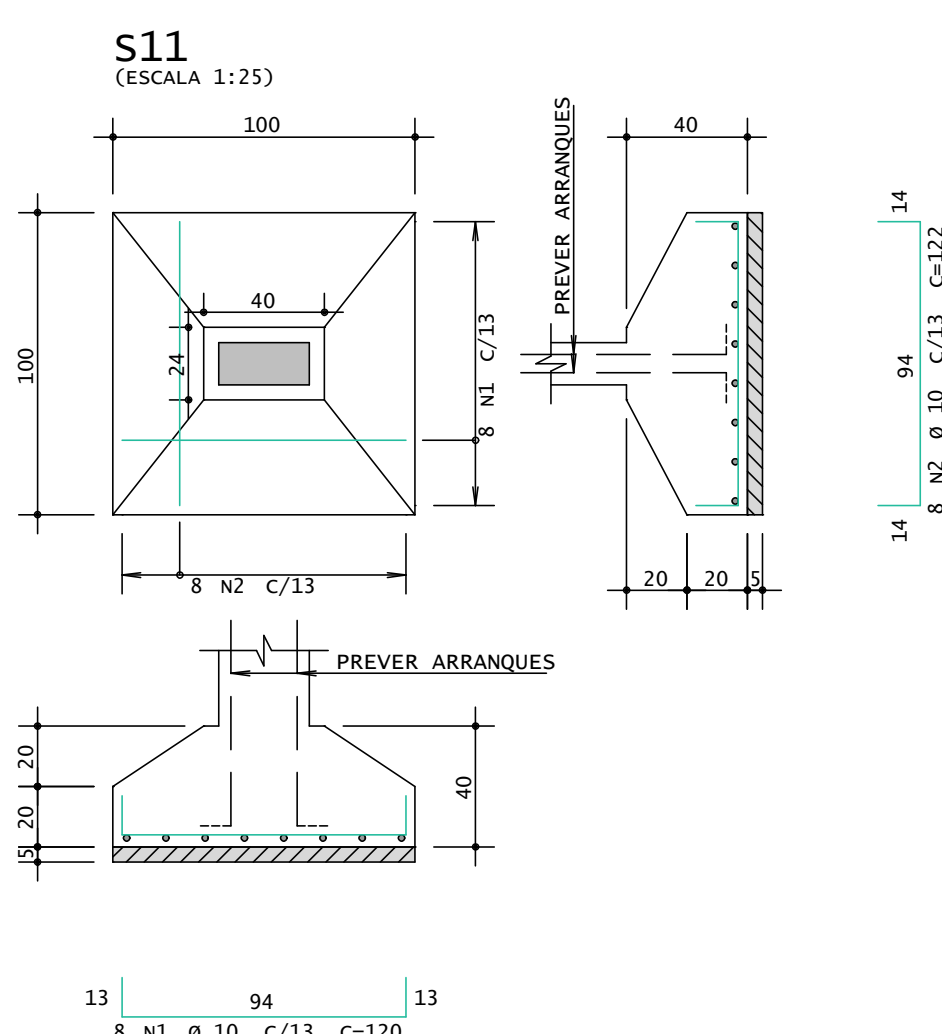
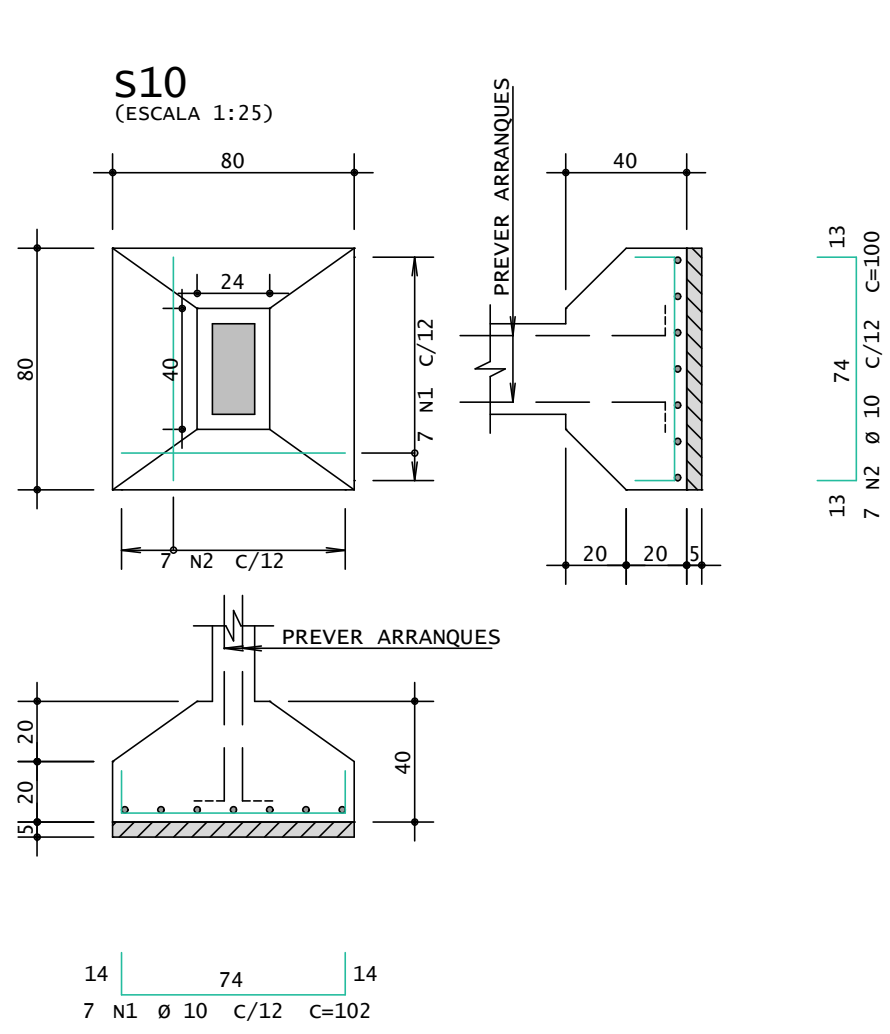
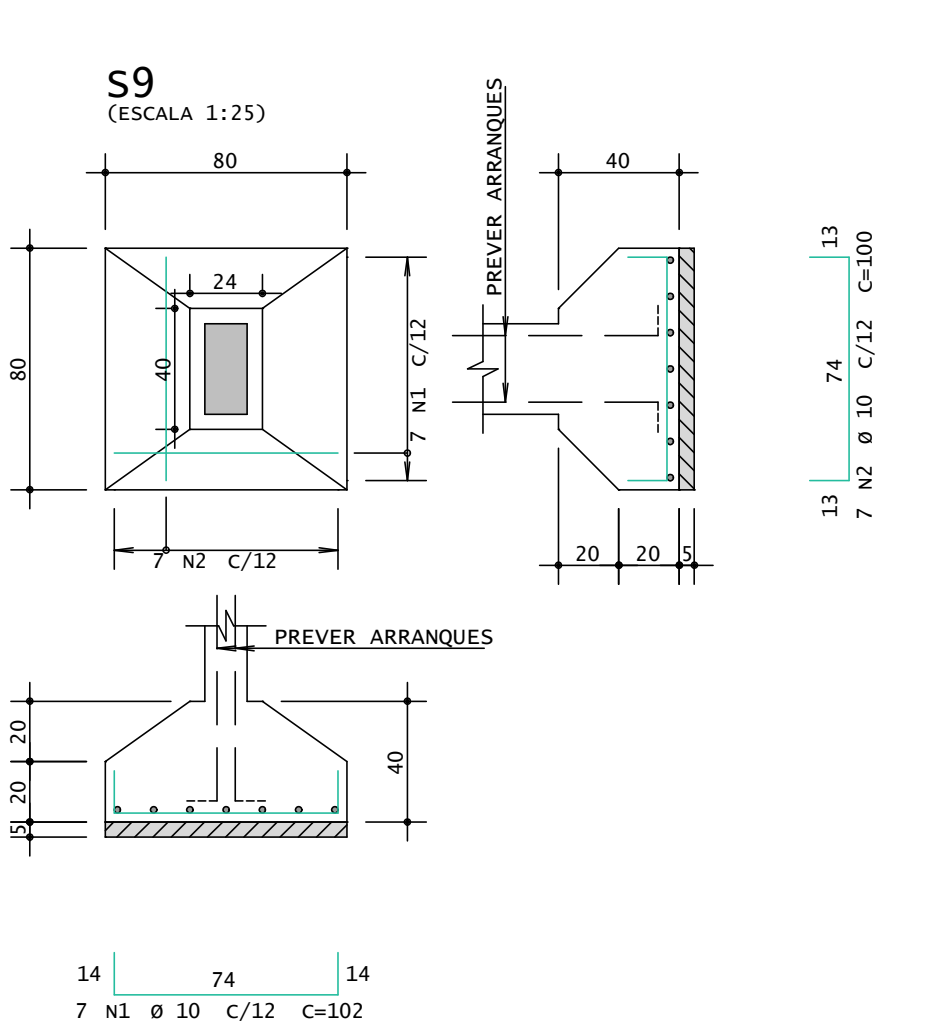
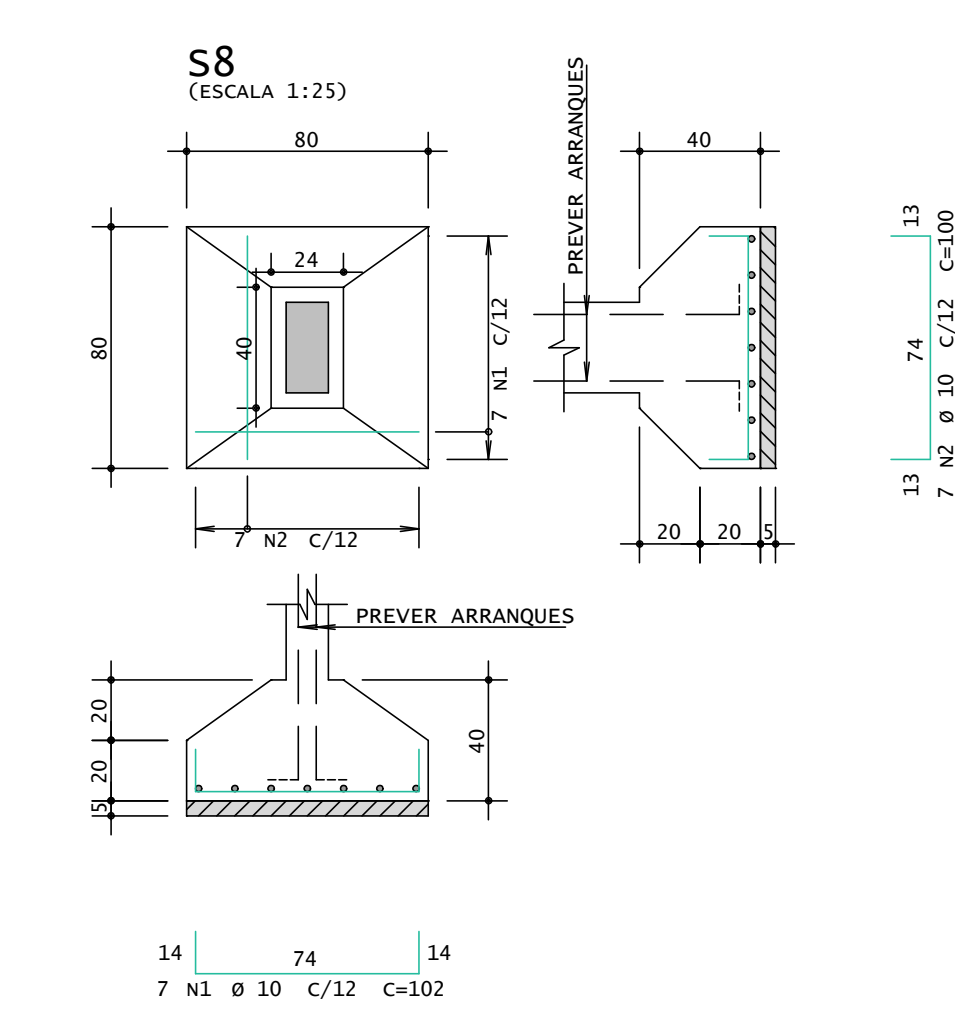
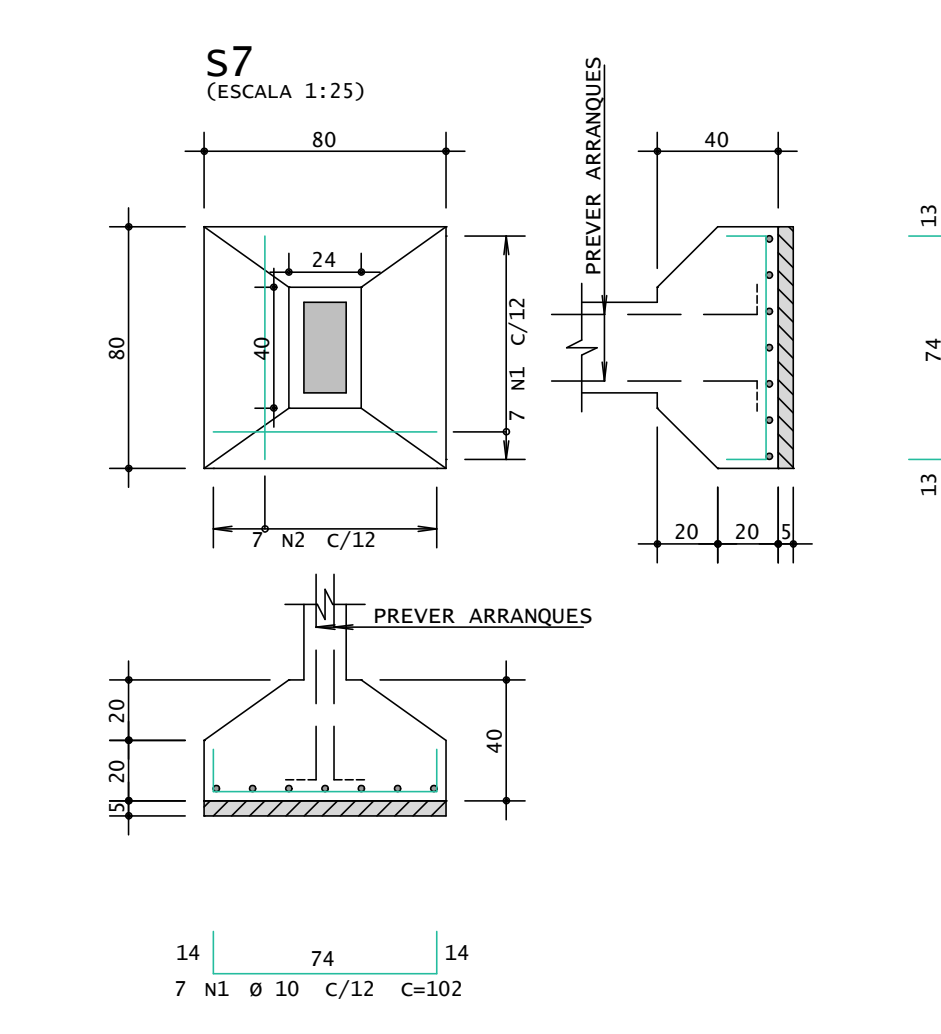
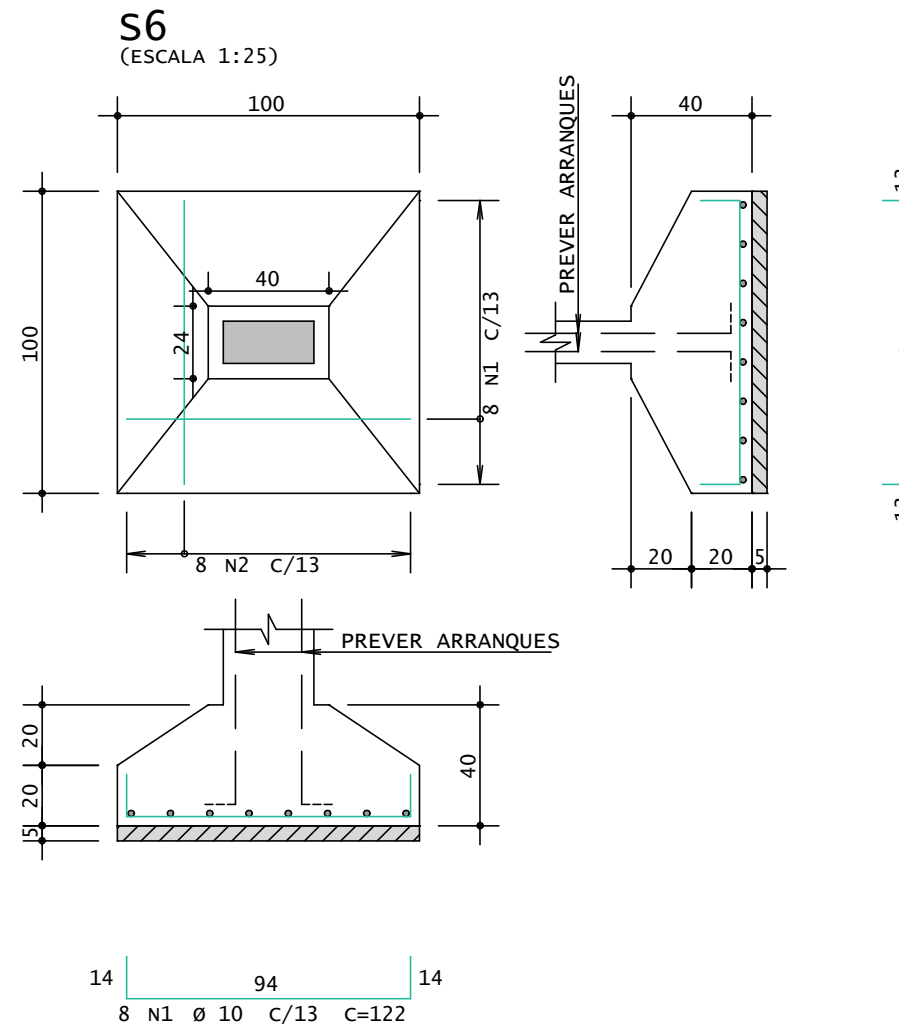
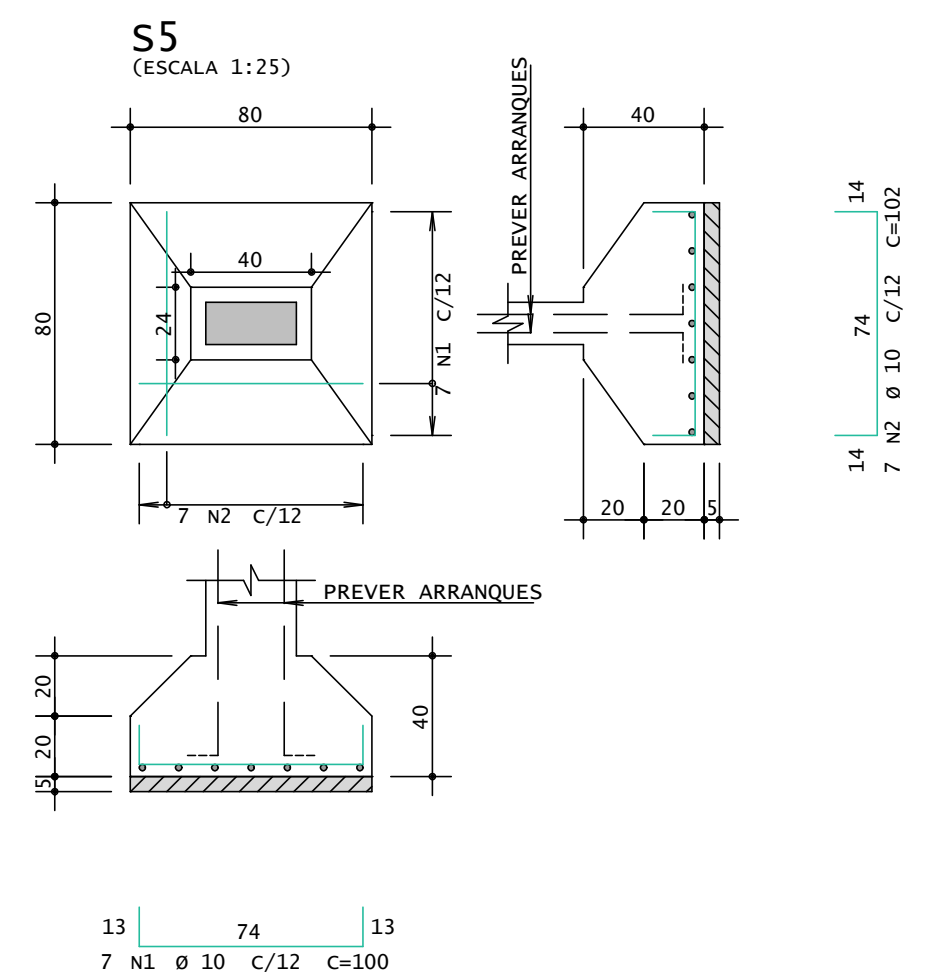
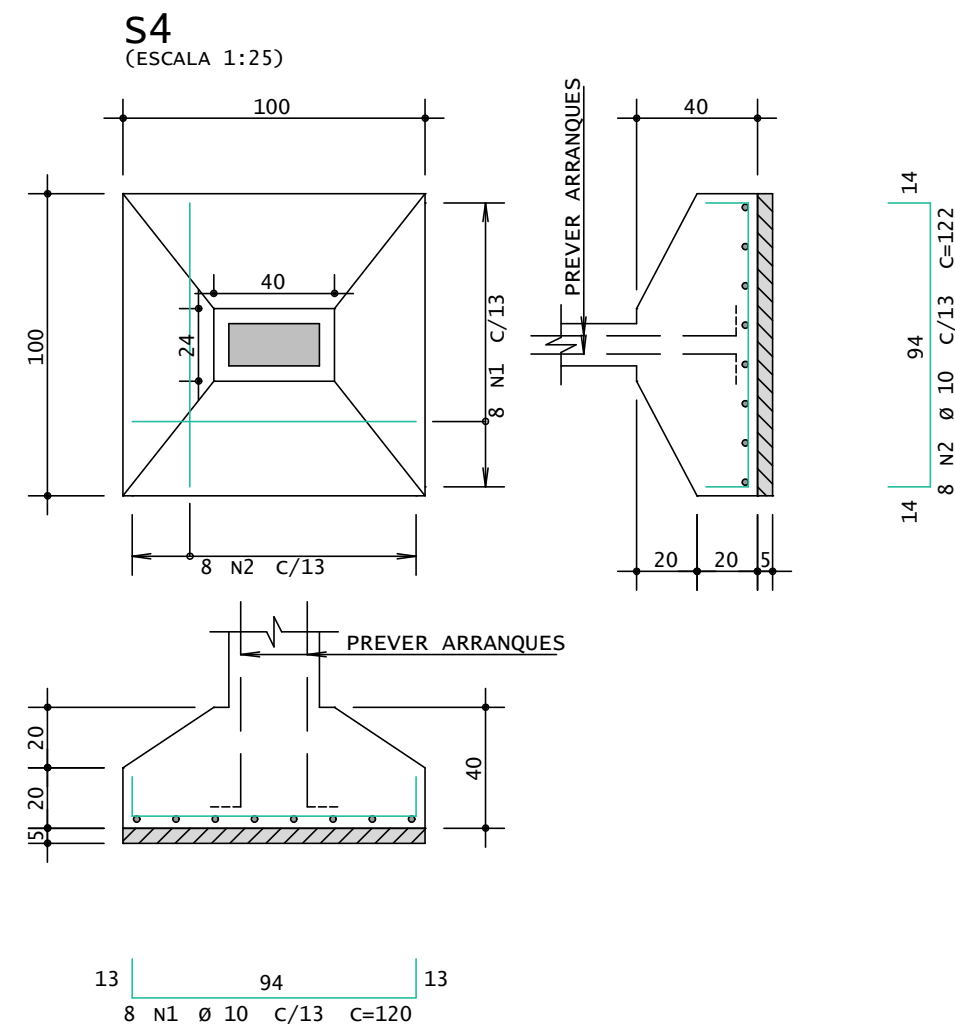
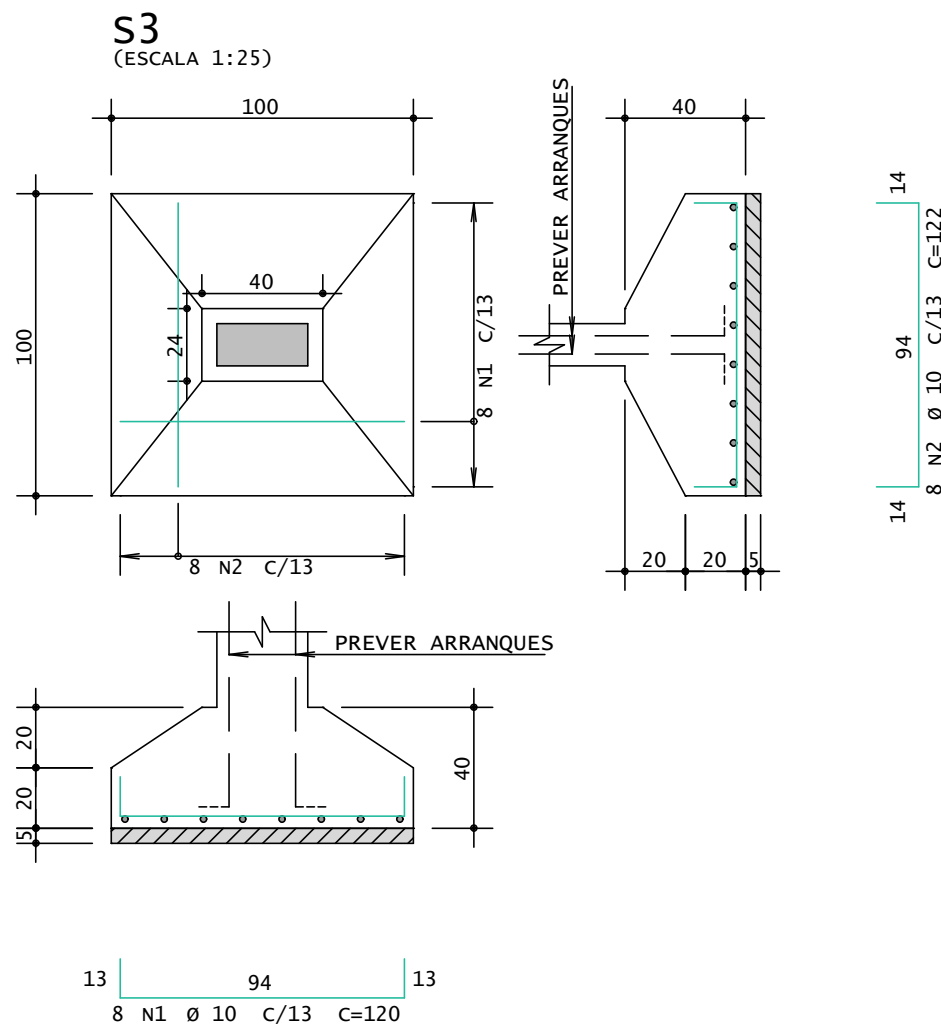
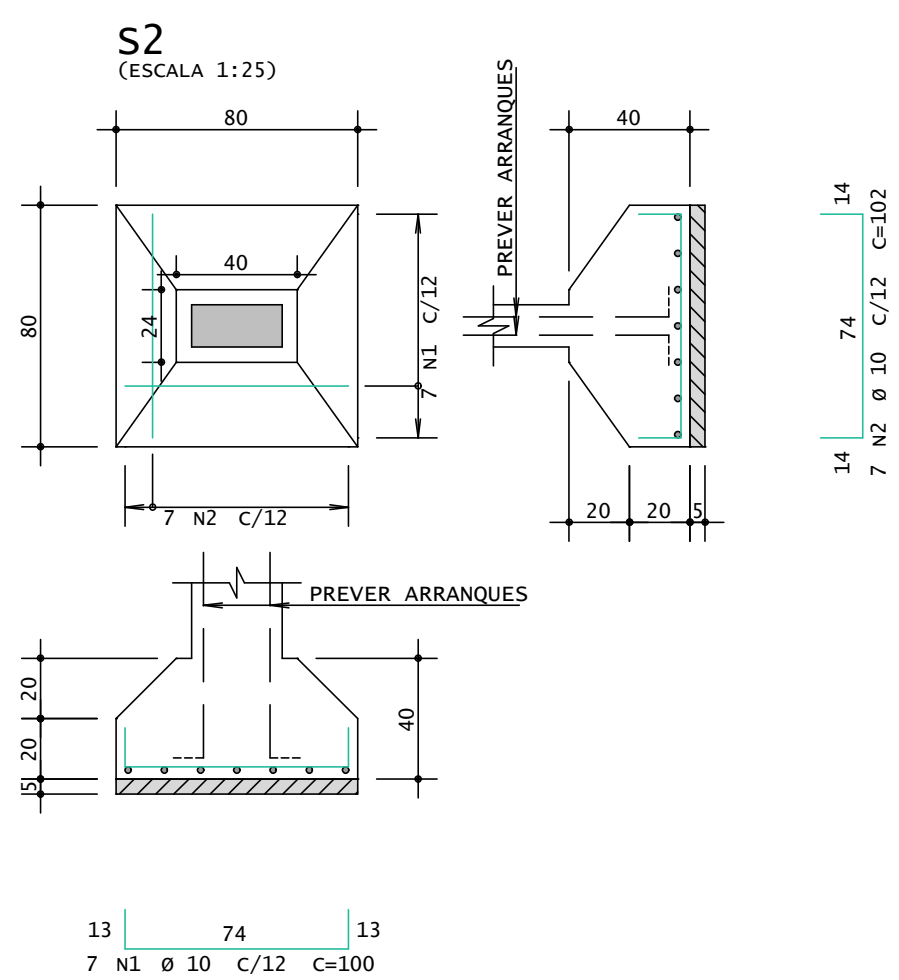
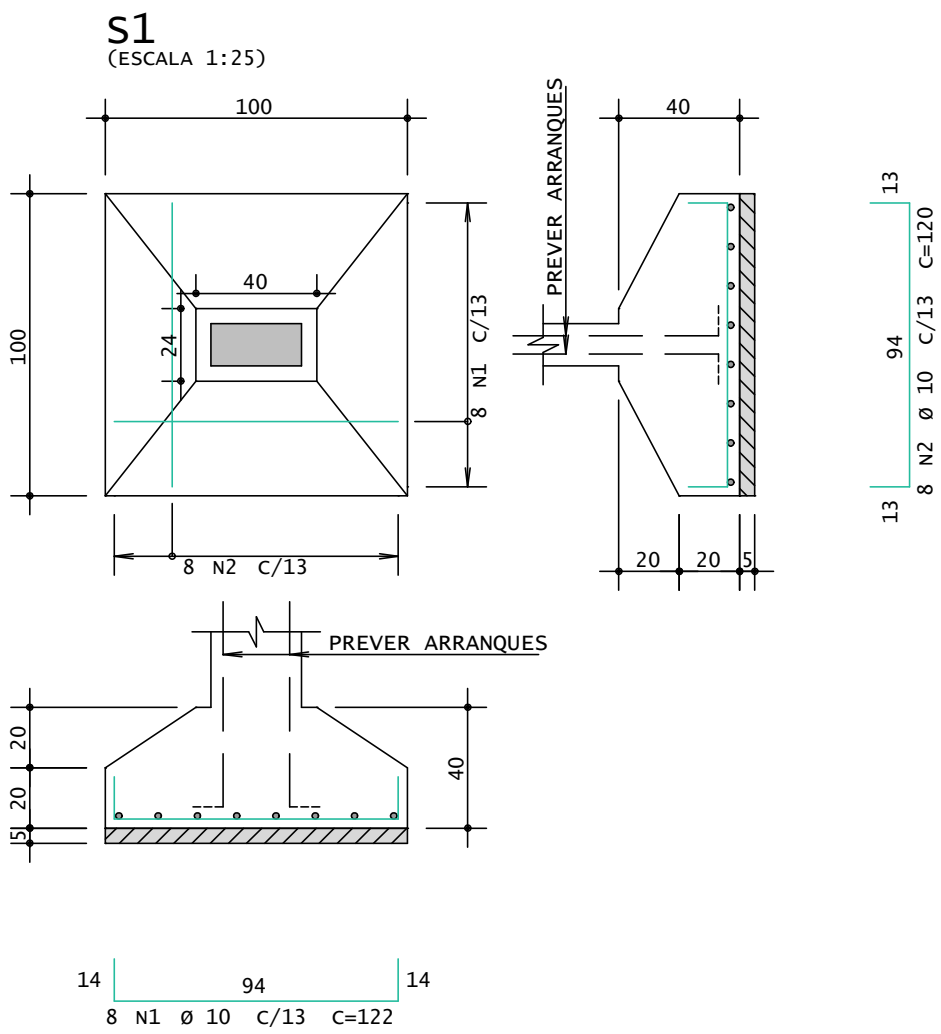




**PROPRIETÁRIO(A):**  
VICENTE PATRÍCIO DE SOUZA JÚNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

**RESPONSÁVEL TÉCNICO(A):**  
MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO fck = MPa ECS = Ver na Planta				OBRA: N.º <b>0001</b>
CLIENTE Prefeitura Municipal de São Miguel do Anta/MG				DES. N.º <b>002</b>
OBRA Salas Cemei				REV. N.º <b>00</b>
TÍTULO Fundação Planta de Forma				ENG. N.º
DATA 30/07/2025	ESCALA 1:50	DESENHO SAL-FUN-FOR-002-R00	COORD.	



	AÇO	POS	BIT	QUANT	COMPRIMENTO	
					UNIT	TOTAL
			mm		cm	cm
S1	50A	1	10	8	122	976
	50A	2	10	8	120	960
S2	50A	1	10	7	100	700
	50A	2	10	7	102	714
S3	50A	1	10	8	120	960
	50A	2	10	8	122	976
S4	50A	1	10	8	120	960
	50A	2	10	8	122	976
S5	50A	1	10	7	100	700
	50A	2	10	7	102	714
S6	50A	1	10	8	122	976
	50A	2	10	8	120	960
S7	50A	1	10	7	102	714
	50A	2	10	7	100	700
S8	50A	1	10	7	102	714
	50A	2	10	7	100	700
S9	50A	1	10	7	102	714
	50A	2	10	7	100	700
S10	50A	1	10	7	102	714
	50A	2	10	7	100	700
S11	50A	1	10	8	120	960
	50A	2	10	8	122	976
S12	50A	1	10	7	100	700
	50A	2	10	7	102	714

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
50A	10	196	121
Peso Total		50A =	121 kgf

PROPRIETÁRIO(A):

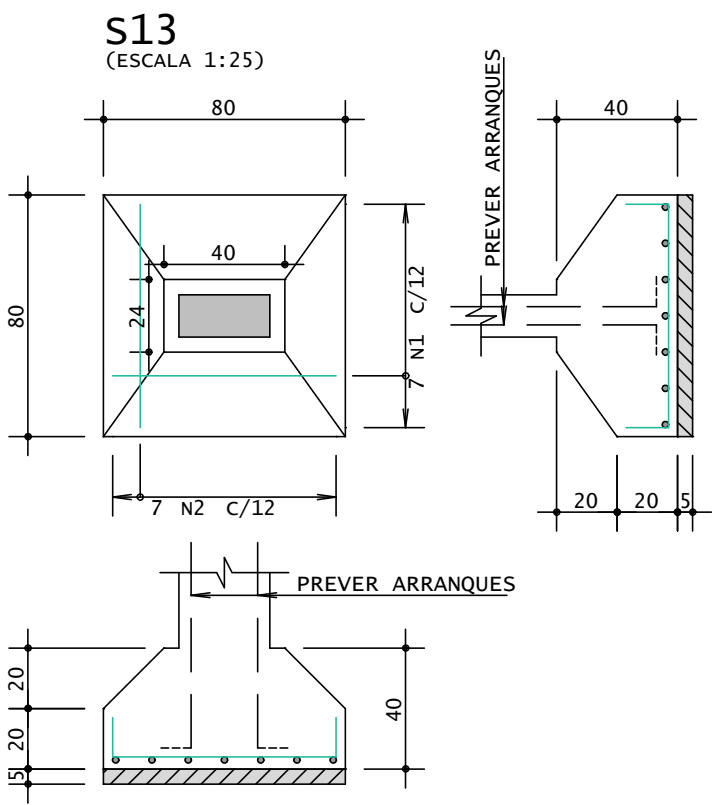
VICENTE PATRÍCIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):

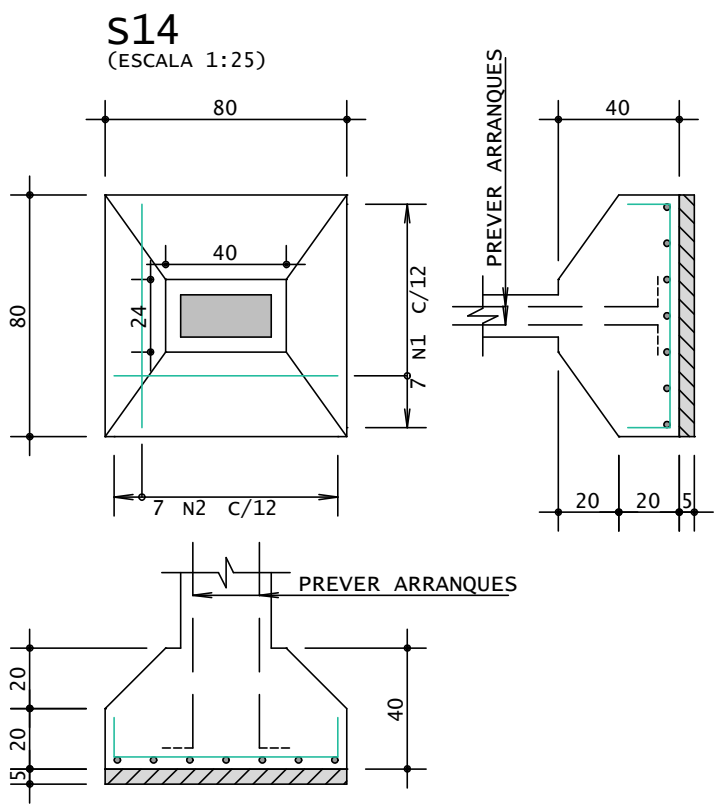
MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO fck = 25 MPa ECS = Ver na <b>Planta</b>			OBRA - N.º <b>0001</b>	
CLIENTE <i>Prefeitura Municipal de São Miguel do Anta/MG</i>			DES. N.º <b>013</b>	
OBRA <i>Salas Cemei</i>			REV. N.º <b>00</b>	
TÍTULO <i>Fundação Sapatas</i>				
S1 / S2 / S3 / S4 / S5 / S6 / S7 / S8 / S9 / S10 / S11 / S12				
DATA 30/07/2025	ESCALA 1:25	DESENHO SAL-FUN-FUN-013-R00	COORD.	ENG. N.º

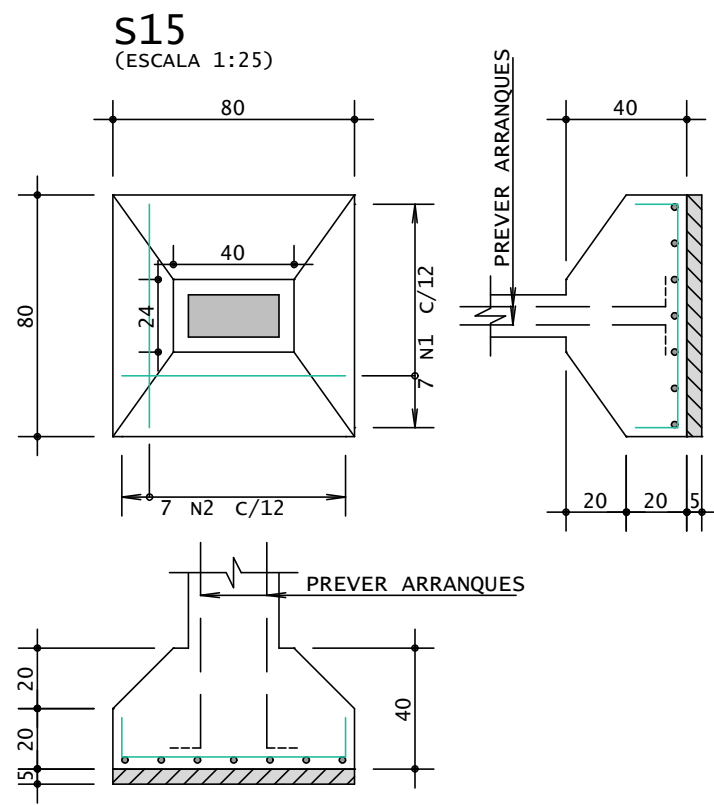




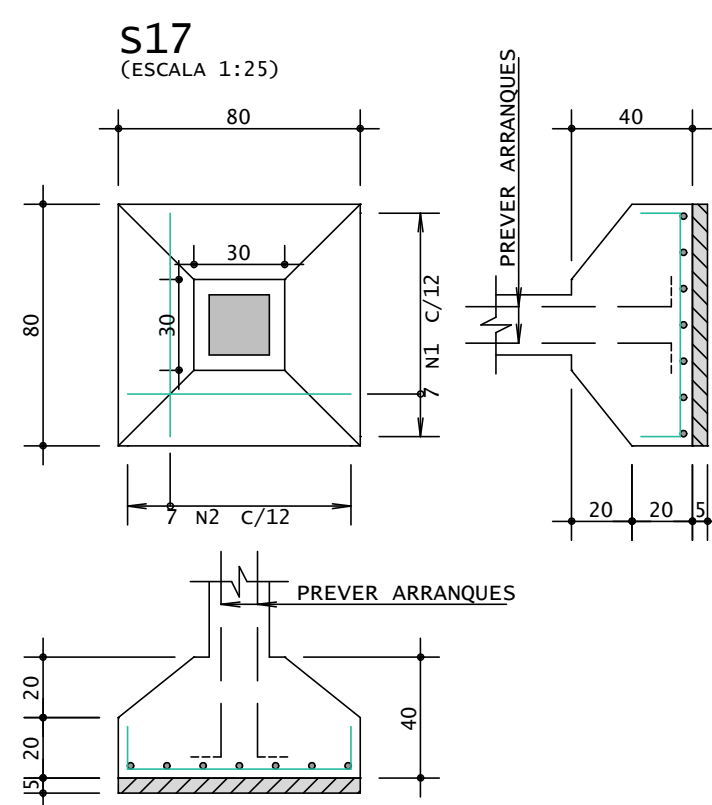
13 74 13  
7 N1 Ø 10 C/12 C=100



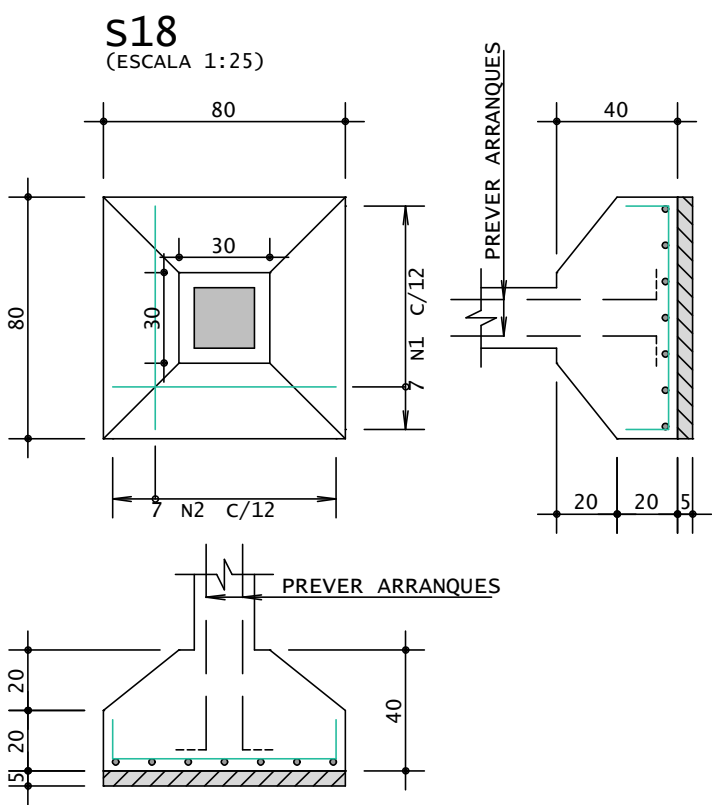
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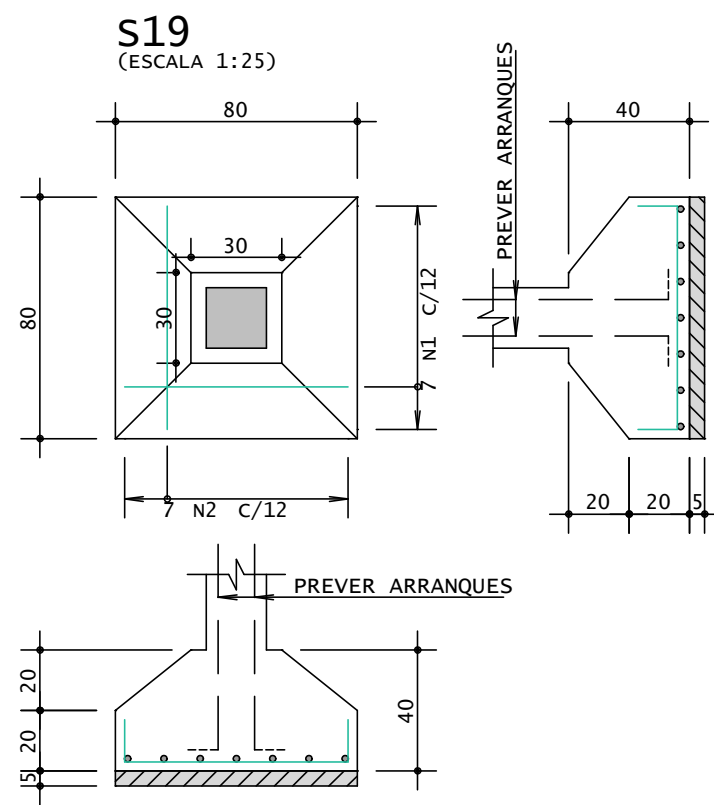
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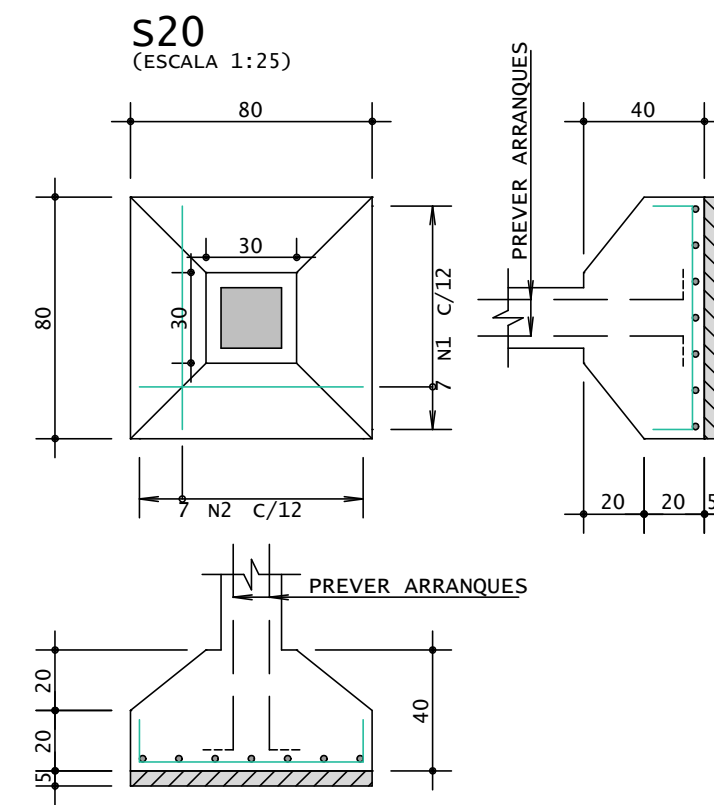
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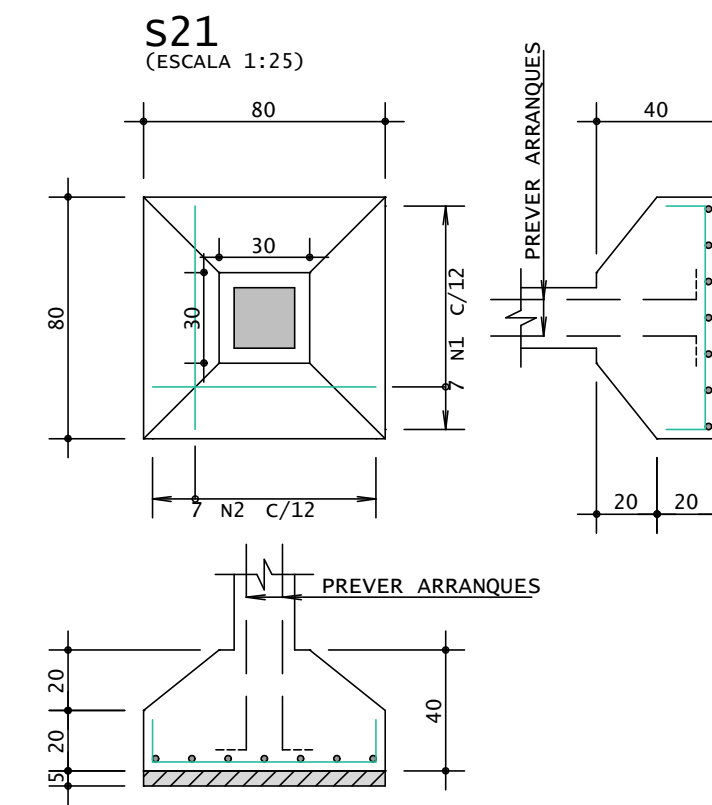
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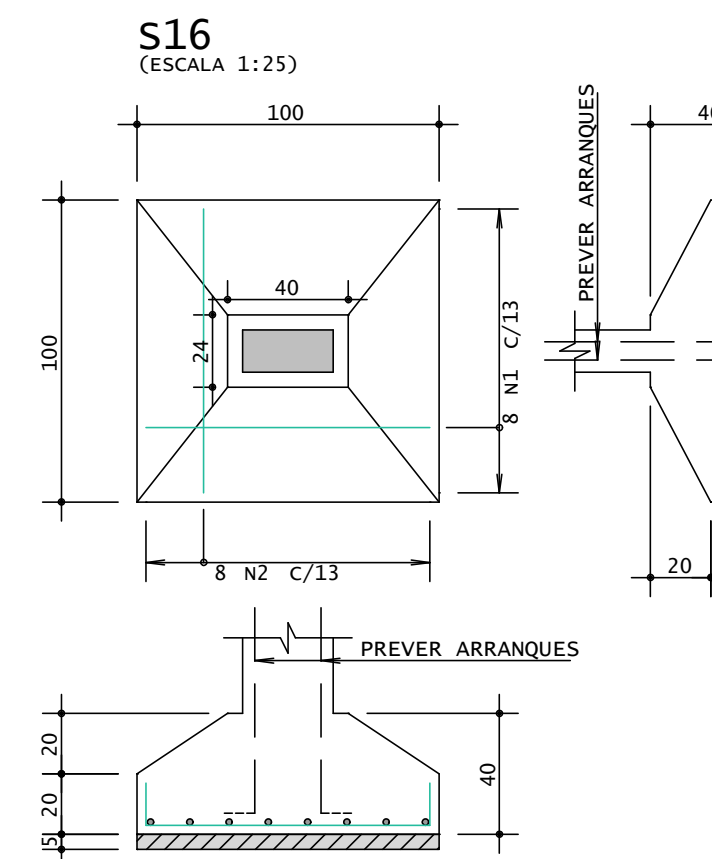
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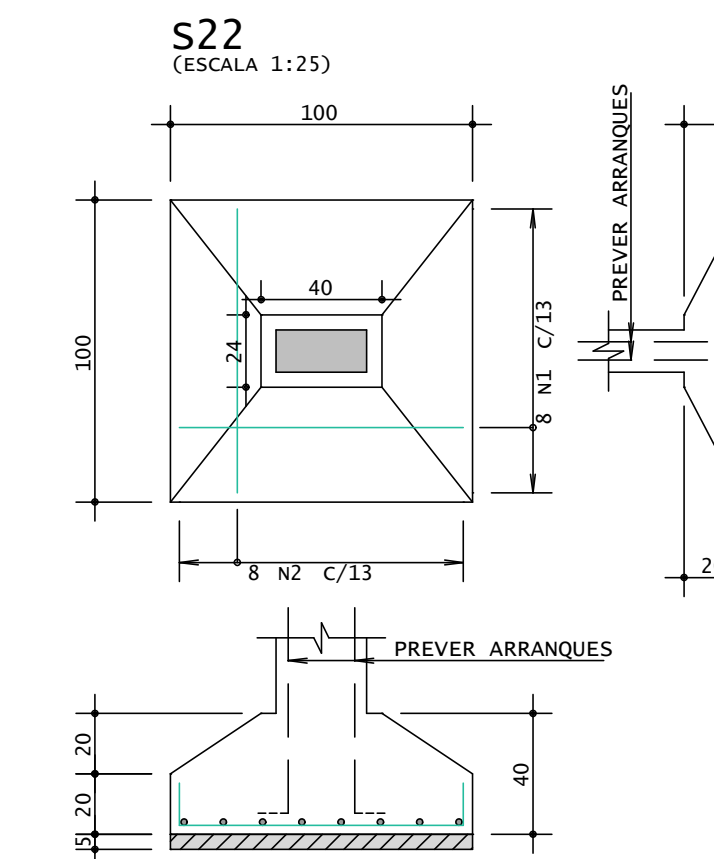
14 74 14  
7 N1 Ø 10 C/12 C=102



14 74 14  
7 N1 Ø 10 C/12 C=102




14 94 14  
8 N1 Ø 10 C/13 C=122



14 94 14  
8 N1 Ø 10 C/13 C=122

	AÇO	POS	BIT mm	QUANT	COMPRIMENTO	
					UNIT	TOTAL
					cm	cm
S13	50A	1	10	7	100	700
	50A	2	10	7	102	714
S14	50A	1	10	7	100	700
	50A	2	10	7	102	714
S15	50A	1	10	7	100	700
	50A	2	10	7	102	714
S16	50A	1	10	7	100	700
	50A	2	10	7	102	714
S17	50A	1	10	8	122	976
	50A	2	10	8	120	960
S18	50A	1	10	7	102	714
	50A	2	10	7	100	700
S19	50A	1	10	7	100	700
	50A	2	10	7	102	714
S20	50A	1	10	7	102	714
	50A	2	10	7	100	700
S21	50A	1	10	7	102	714
	50A	2	10	7	100	700
S22	50A	1	10	7	102	714
	50A	2	10	7	100	700
	50A	1	10	8	122	976
	50A	2	10	8	120	960

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
50A	mm	m	kgf
50A	10	152	94
Peso Total		50A =	94 kgf



**VICENTE PATRÍCIO DE SOUZA JUNIOR**  
Prefeito Municipal  
Município de São Miguel do Anta/MG

**MARCO AURÉLIO FERRAREZI AVELAR**  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO  
fck = 25 MPa  
ECS = Ver na Planta

CLIENTE  
*Prefeitura Municipal de São Miguel do Anta/MG*

OBRAS  
*Salas Cemei*

TÍTULO  
*Fundação Sapatas*

S13 / S14 / S15 / S16 / S17 / S18 / S19 / S20 / S21 / S22

DATA  
30/07/2025

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DESENHO  
SAL-FUN-014-R00

COORD.

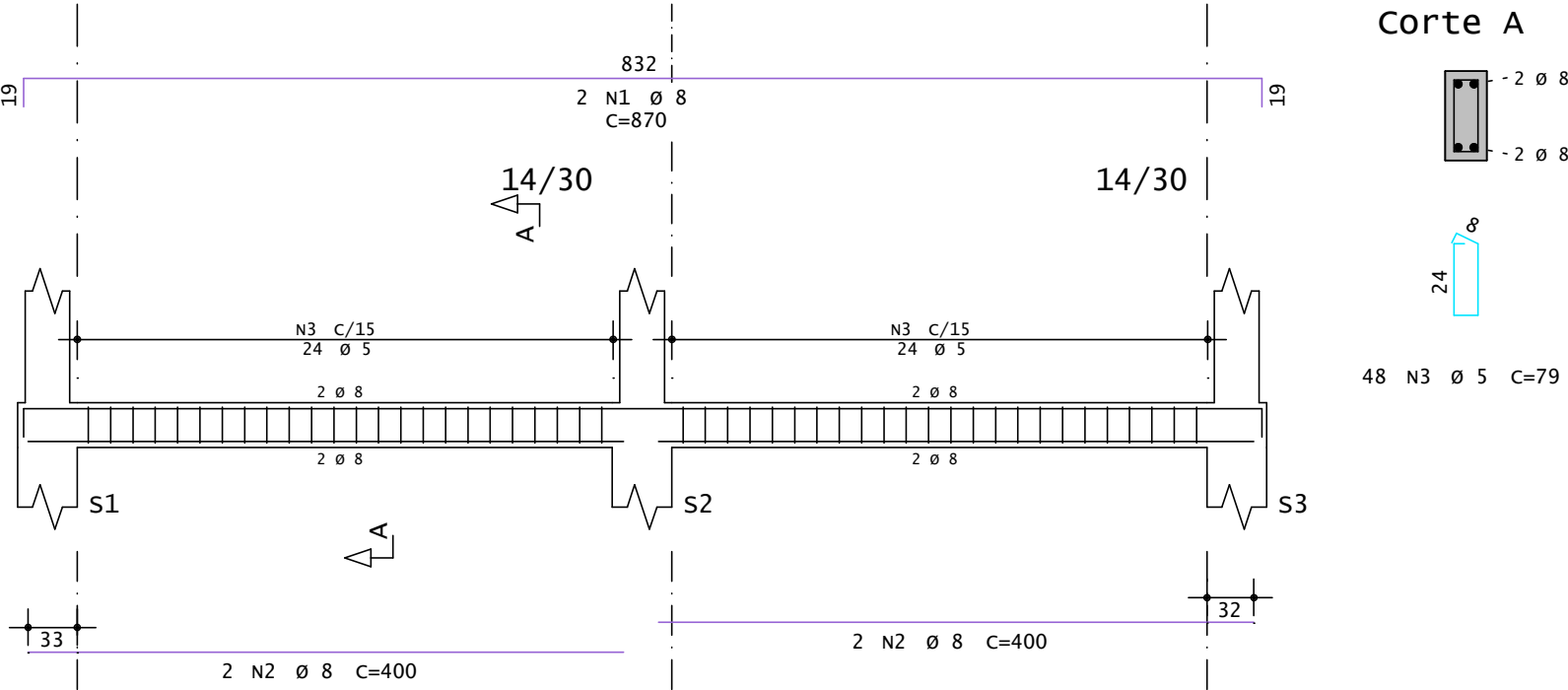
OBRA: N.º  
**0001**

DES. N.º  
**014**

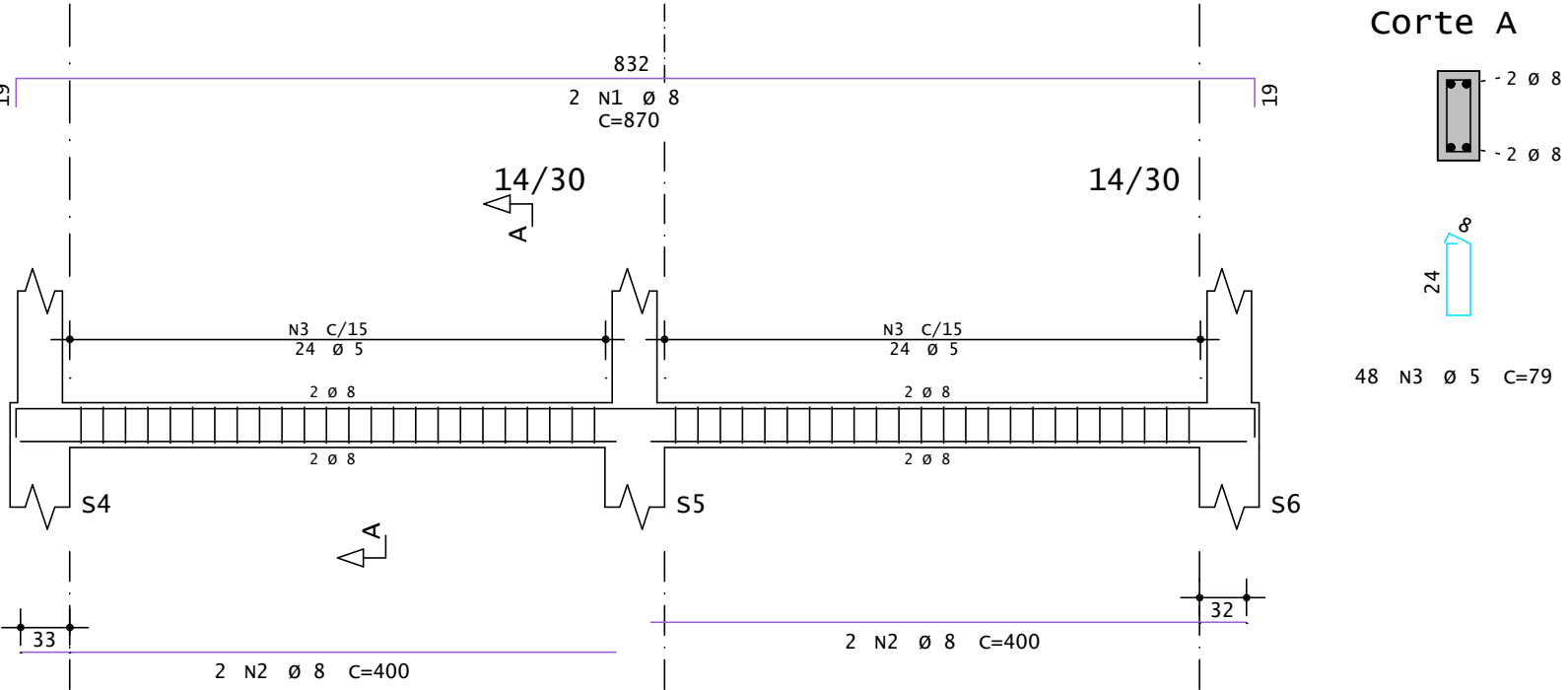
REV. N.º  
**00**

ENG. N.º

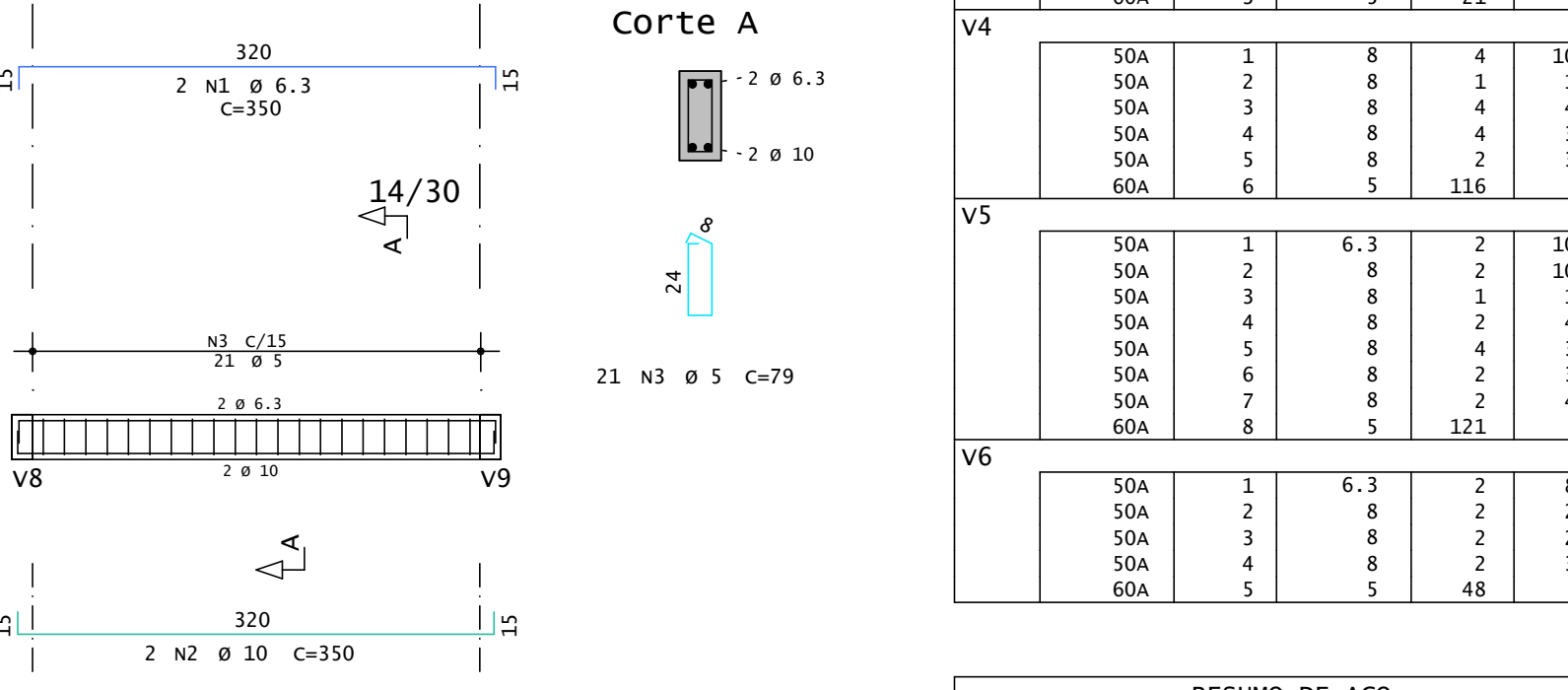
v1



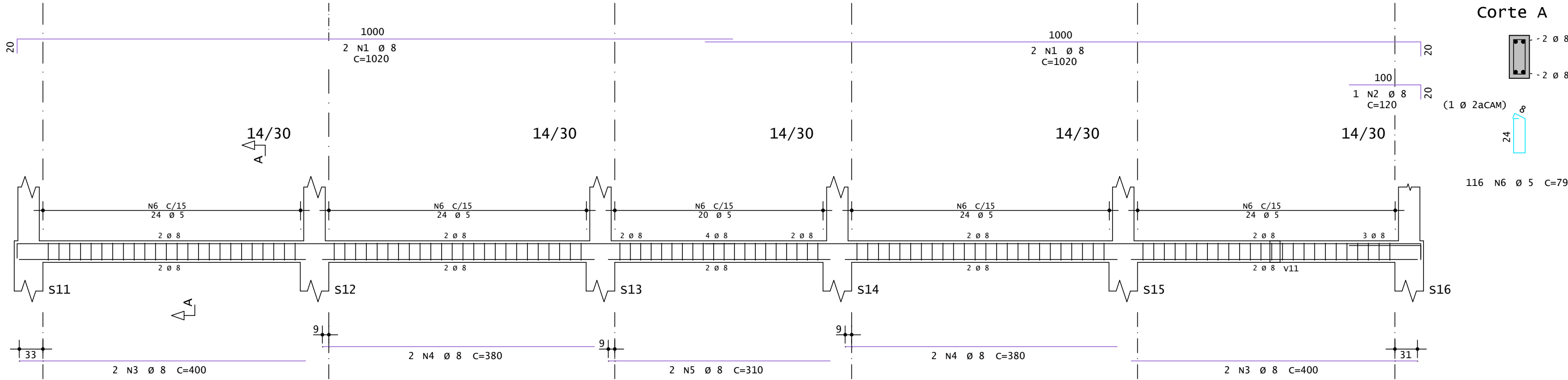
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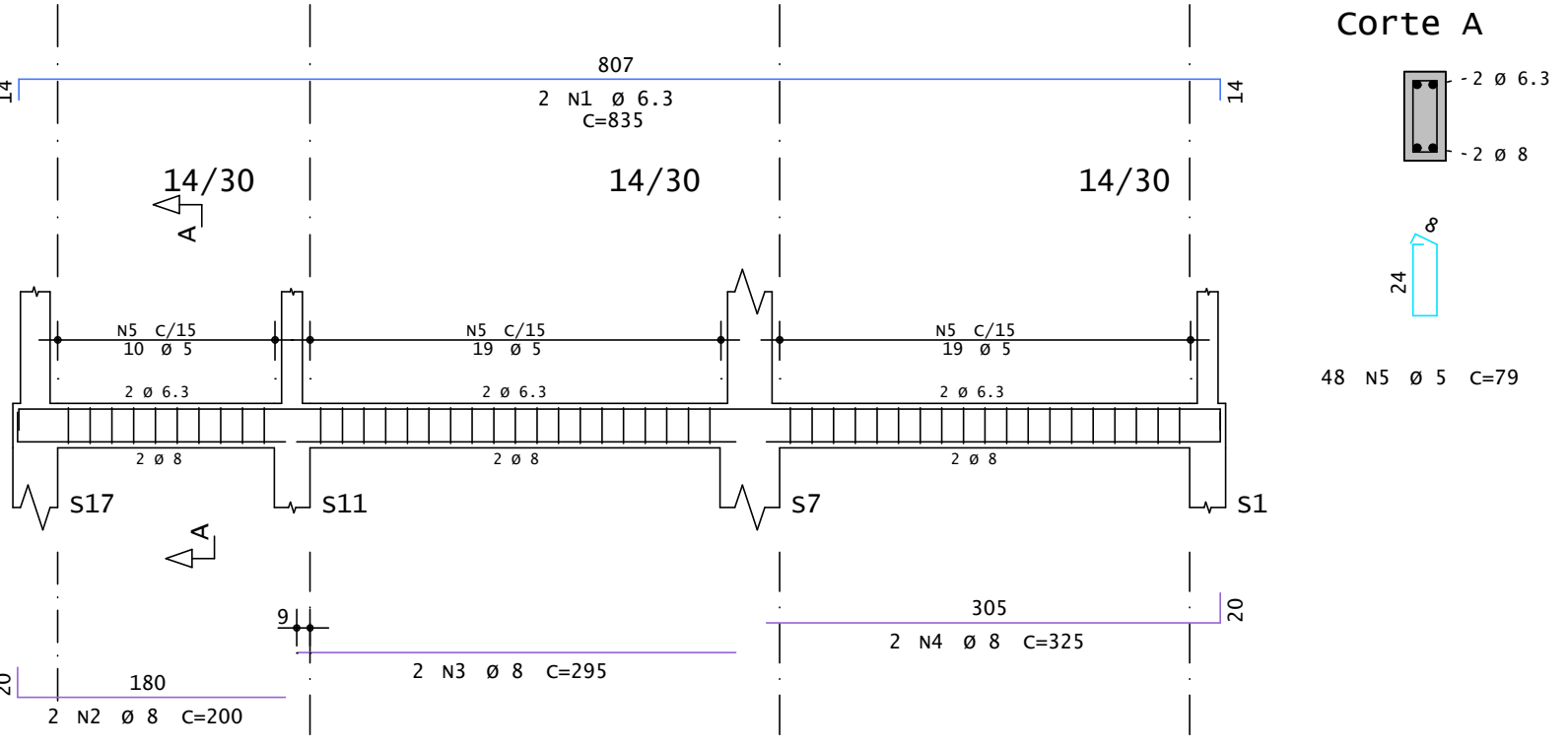
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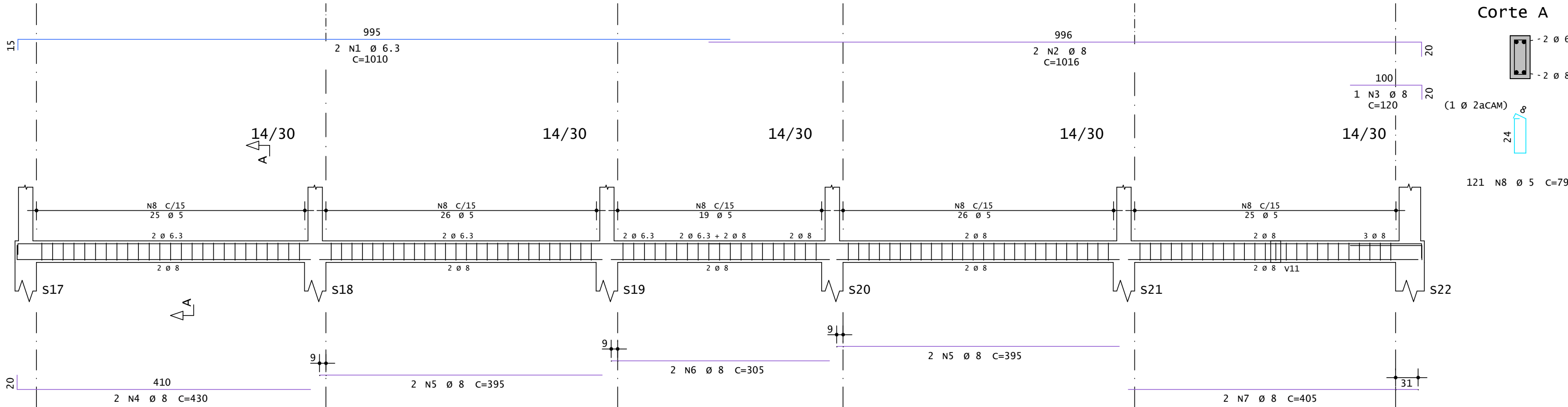
v4



v6



v5



	AÇO	POS	BIT	QUANT	COMPRIMENTO	
					UNIT	TOTAL
			mm		cm	cm
V1	50A	1	8	2	870	1740
	50A	2	8	4	400	1600
	60A	3	5	48	79	3792
V2	50A	1	8	2	870	1740
	50A	2	8	4	400	1600
	60A	3	5	48	79	3792
V3	50A	1	6.3	2	350	700
	50A	2	10	2	350	700
	60A	3	5	21	79	1659
V4	50A	1	8	4	1020	4080
	50A	2	8	1	120	120
	50A	3	8	4	400	1600
	50A	4	8	4	380	1520
	50A	5	8	2	310	620
	60A	6	5	116	79	9164
V5	50A	1	6.3	2	1010	2020
	50A	2	8	2	1016	2032
	50A	3	8	1	120	120
	50A	4	8	2	430	860
	50A	5	8	4	395	1580
	50A	6	8	2	305	610
	50A	7	8	2	405	810
	60A	8	5	121	79	9559
V6	50A	1	6.3	2	835	1670
	50A	2	8	2	200	400
	50A	3	8	2	295	590
	50A	4	8	2	325	650
	60A	5	5	48	79	3792

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	318	49
50A	6.3	44	11
50A	8	223	88
50A	10	7	4
Peso Total			60A = 49 kgf
Peso Total			50A = 103 kgf

PROPRIETÁRIO(A):

VICENTE PATRÍCIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):

MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO

fck = 25 MPa

ECS = 24150 MPa

CLIENTE

Prefeitura Municipal de São Miguel do Anta/MG

OBRA

Salas Cemei

TÍTULO

Viga Baldrame

v1 / v2 / v3 / v4 / v5 / v6

OBRA: N.º

0001

DES. N.º

009

REV. N.º

00

ENG. N.º

00

DATA

30/07/2025

ESCALA

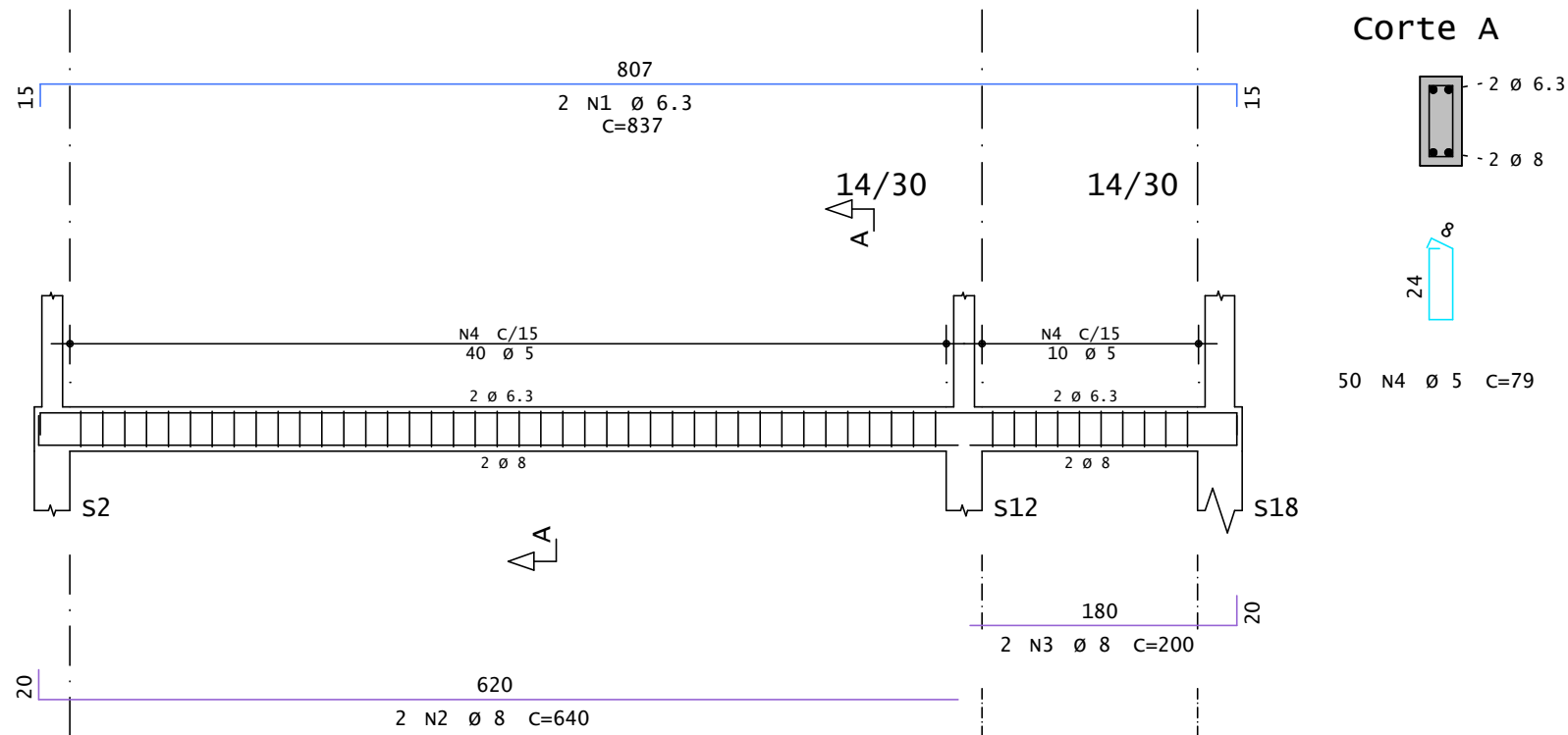
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DESENHO

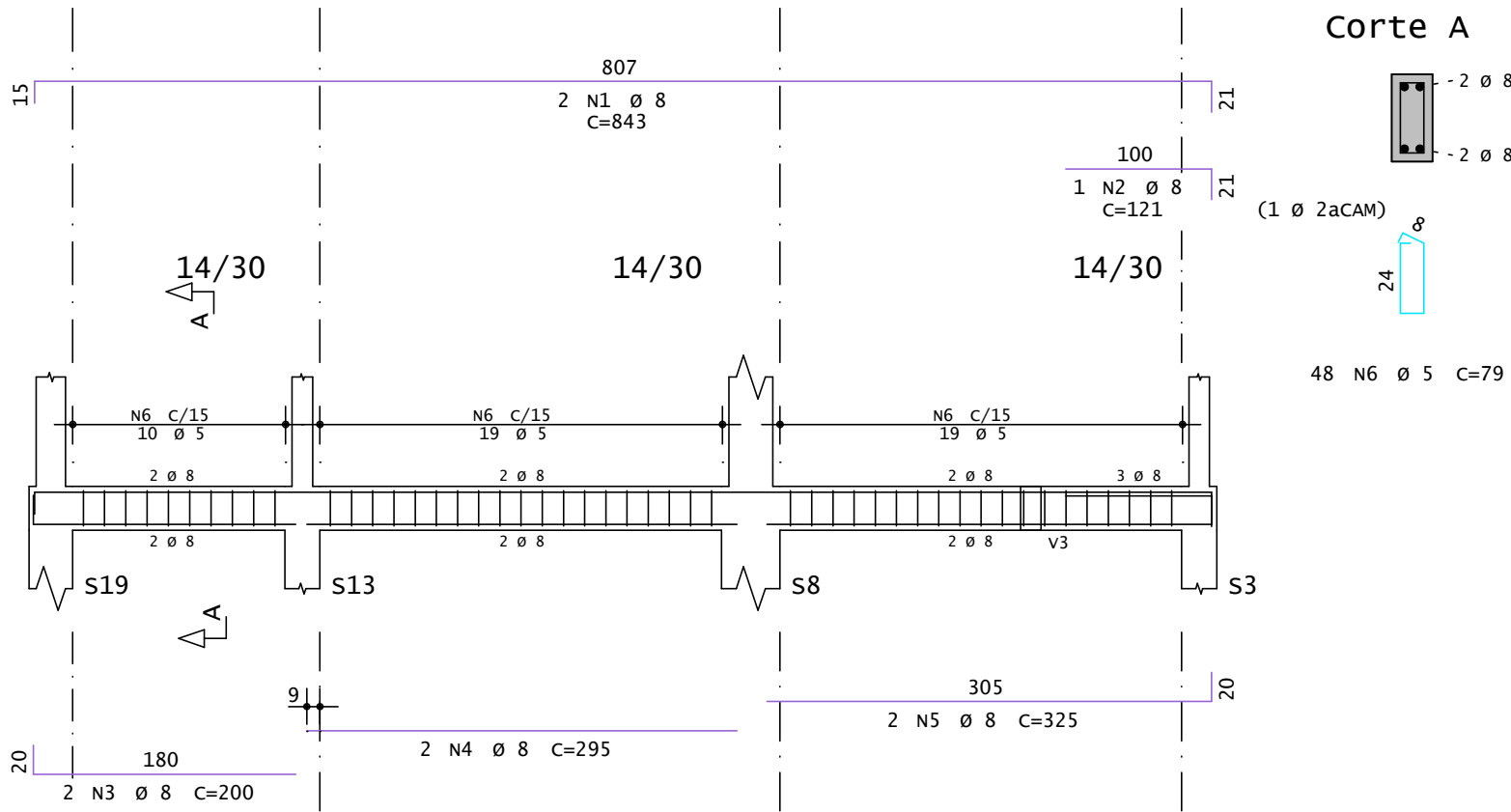
SAL-FUN-VIG-009-R00

COORD.

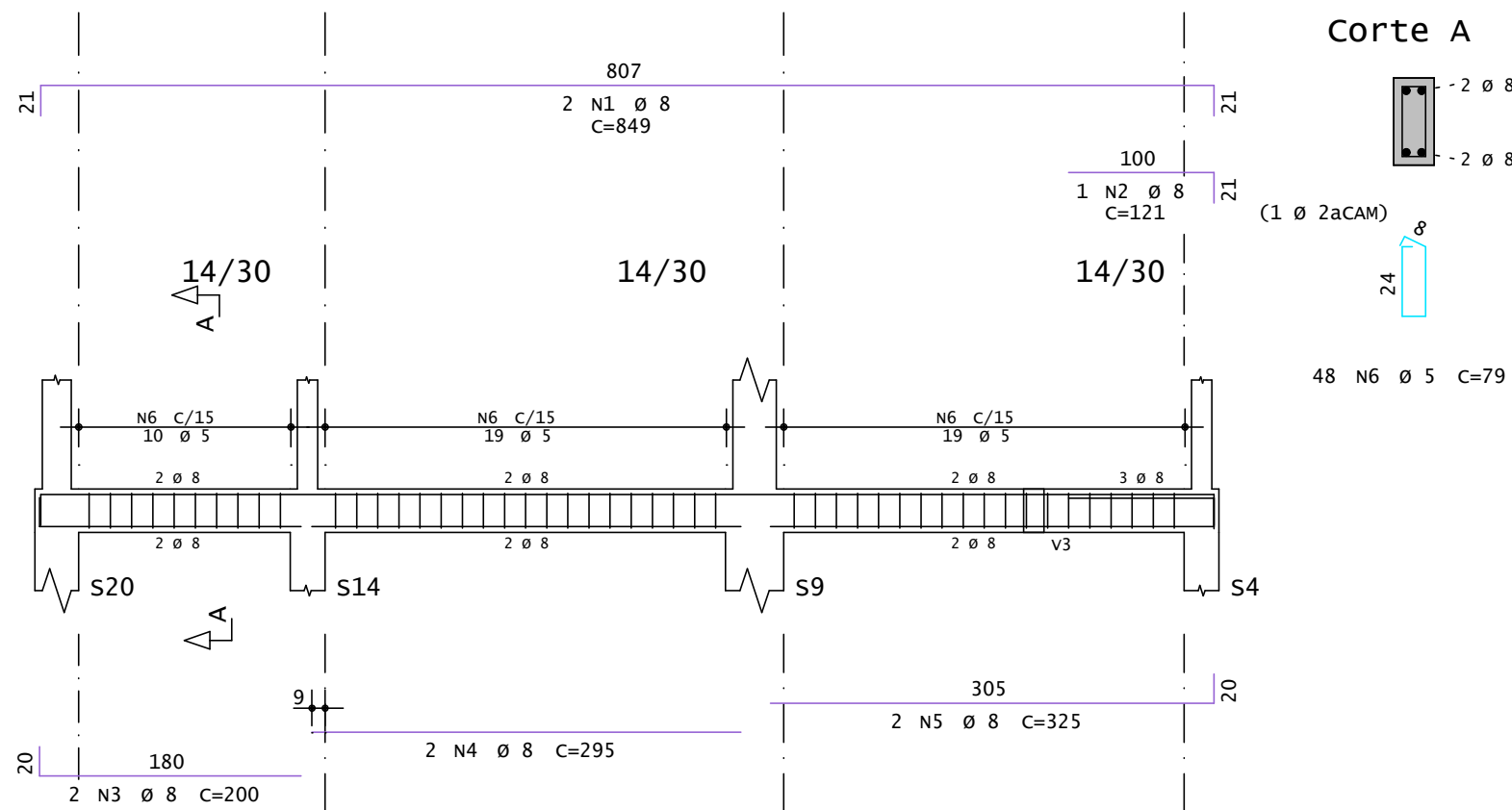
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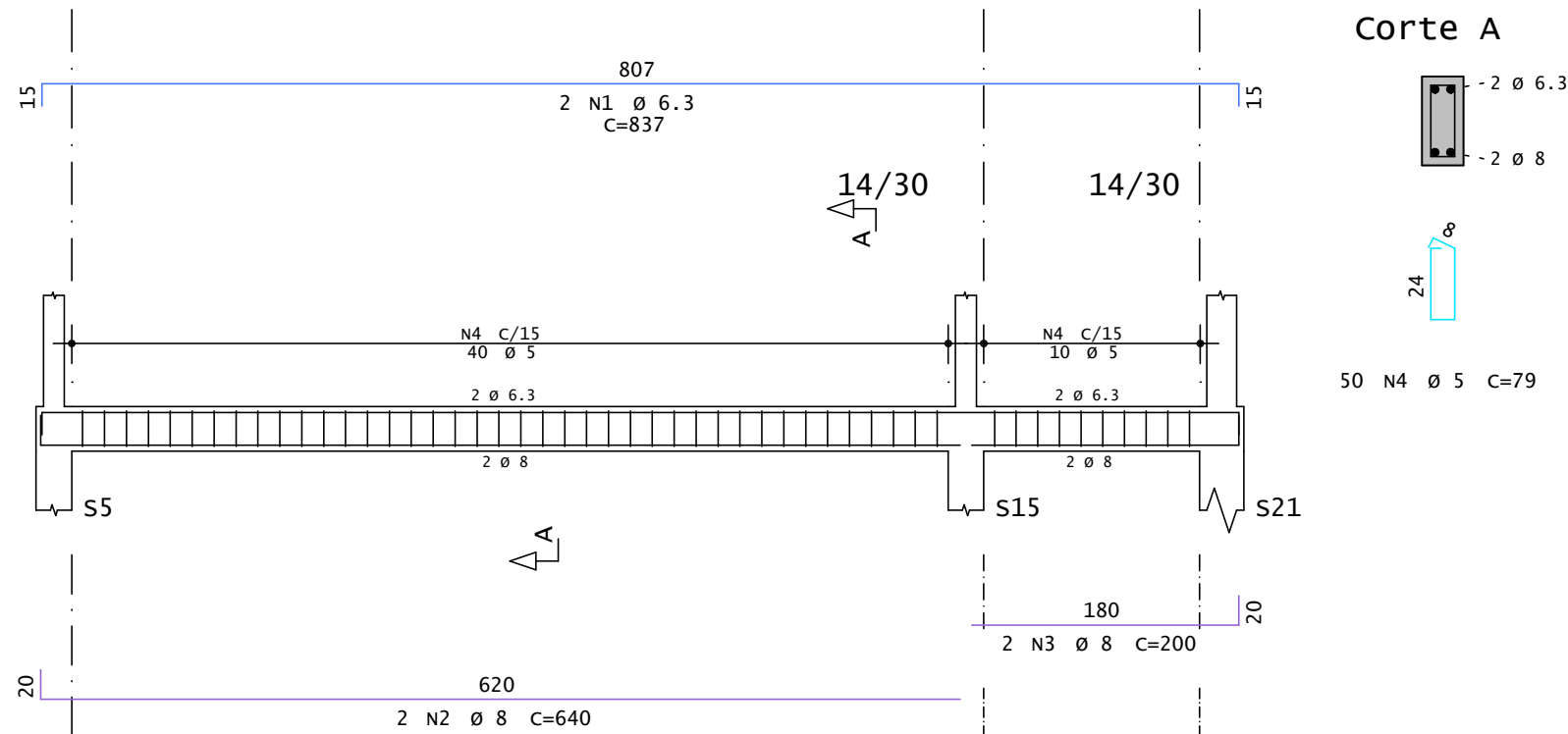
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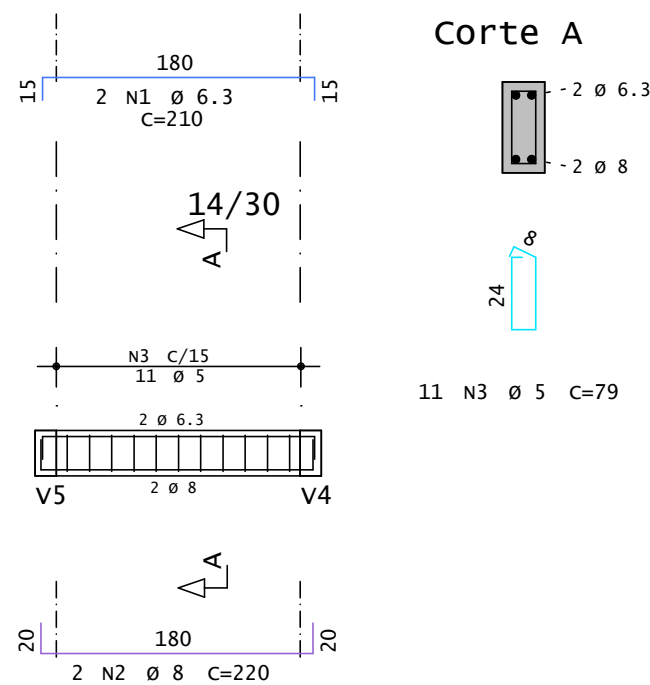
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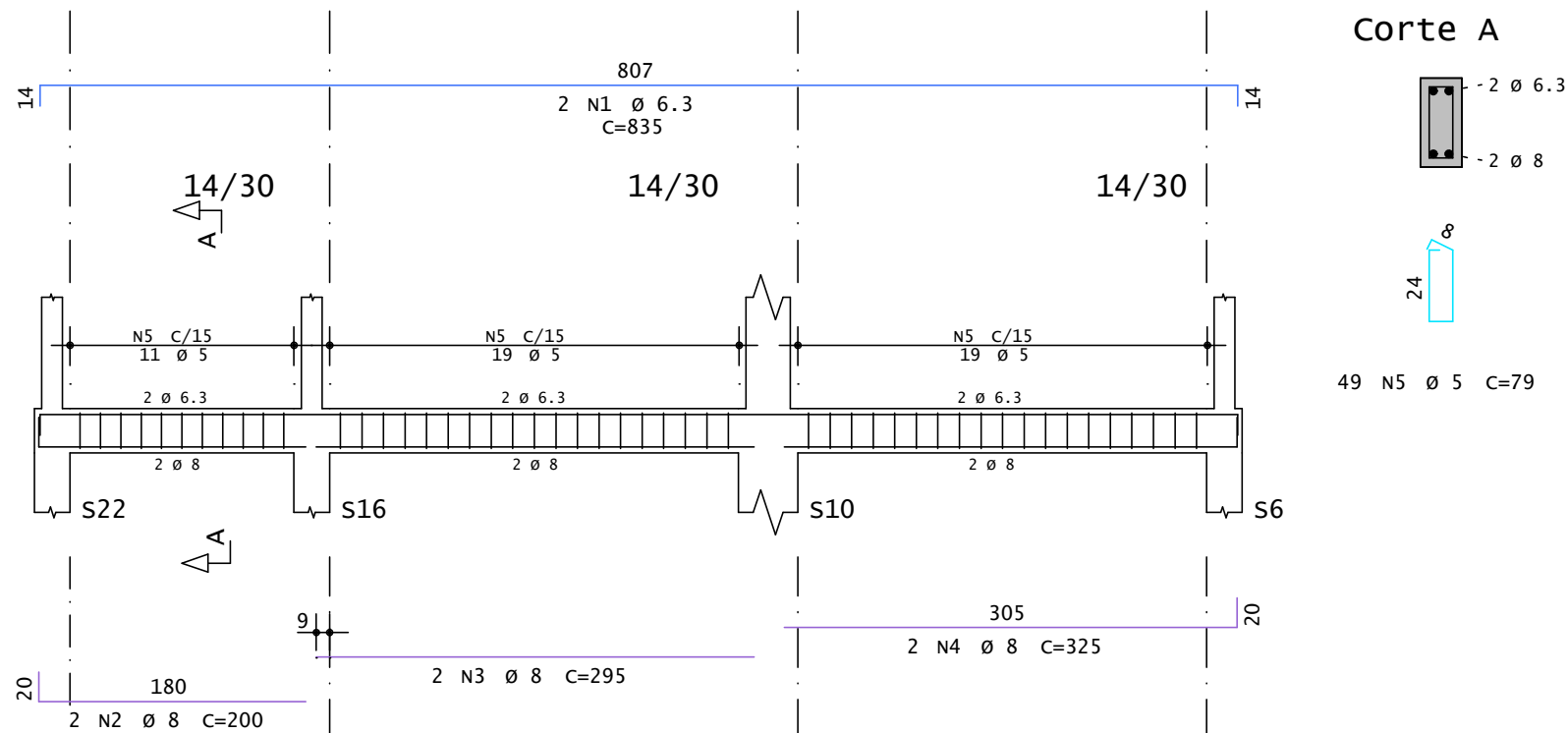
v10



v11



v12



	AÇO	POS	BIT	QUANT	COMPRIMENTO	
					UNIT	TOTAL
					cm	cm
V7	50A	1	6.3	2	837	1674
	50A	2	8	2	640	1280
	50A	3	8	2	200	400
	60A	4	5	50	79	3950
V8	50A	1	8	2	843	1686
	50A	2	8	1	121	121
	50A	3	8	2	200	400
	50A	4	8	2	295	590
	50A	5	8	2	325	650
	60A	6	5	48	79	3792
V9	50A	1	8	2	849	1698
	50A	2	8	1	121	121
	50A	3	8	2	200	400
	50A	4	8	2	295	590
	50A	5	8	2	325	650
	60A	6	5	48	79	3792
V10	50A	1	6.3	2	837	1674
	50A	2	8	2	640	1280
	50A	3	8	2	200	400
	60A	4	5	50	79	3950
V11	50A	1	6.3	2	210	420
	50A	2	8	2	220	440
	50A	3	8	11	79	869
	60A	3	5			
V12	50A	1	6.3	2	835	1670
	50A	2	8	2	200	400
	50A	3	8	2	295	590
	50A	4	8	2	325	650
	50A	5	5	49	79	3871
	60A	5	5	49	79	

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
		mm	kgf
60A	5	202	31
50A	6.3	54	13
50A	8	123	49
Peso Total		60A =	31 kgf
Peso Total		50A =	62 kgf

PROPRIETÁRIO(A):

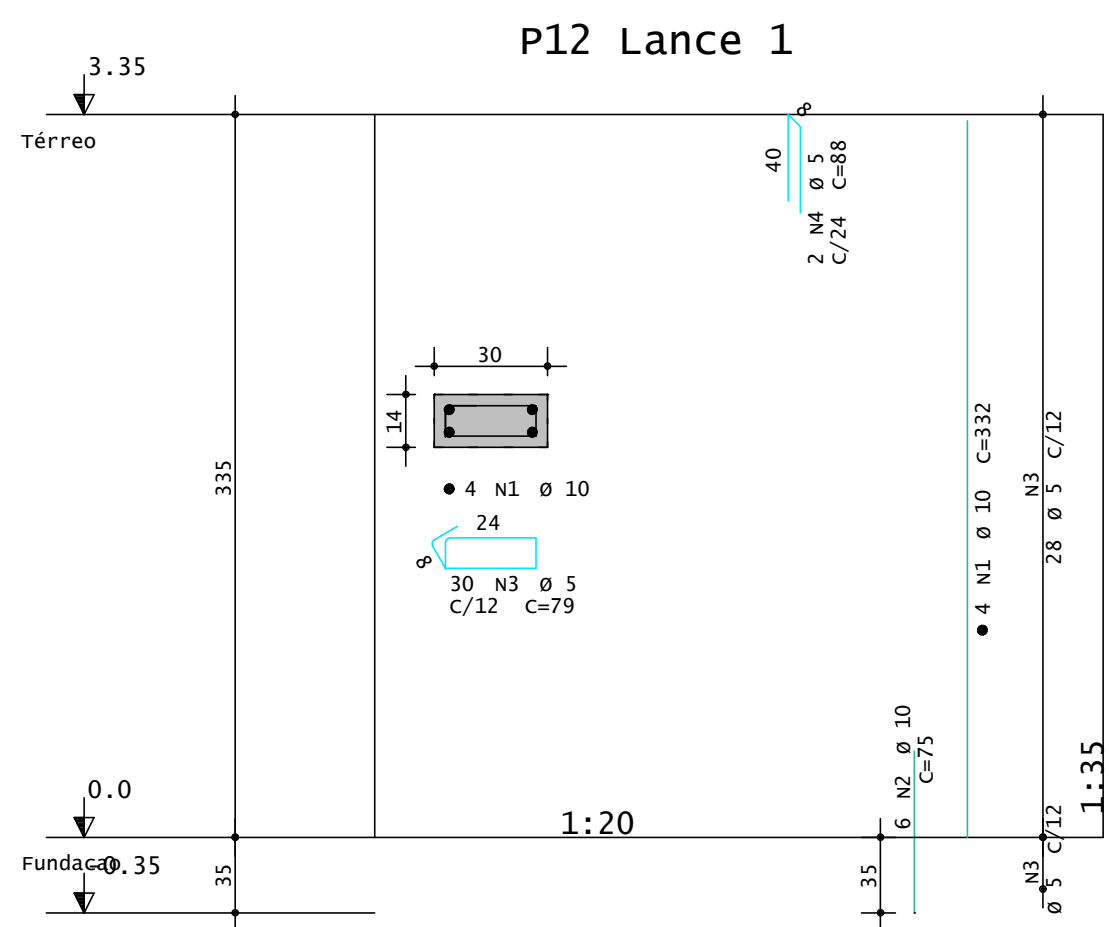
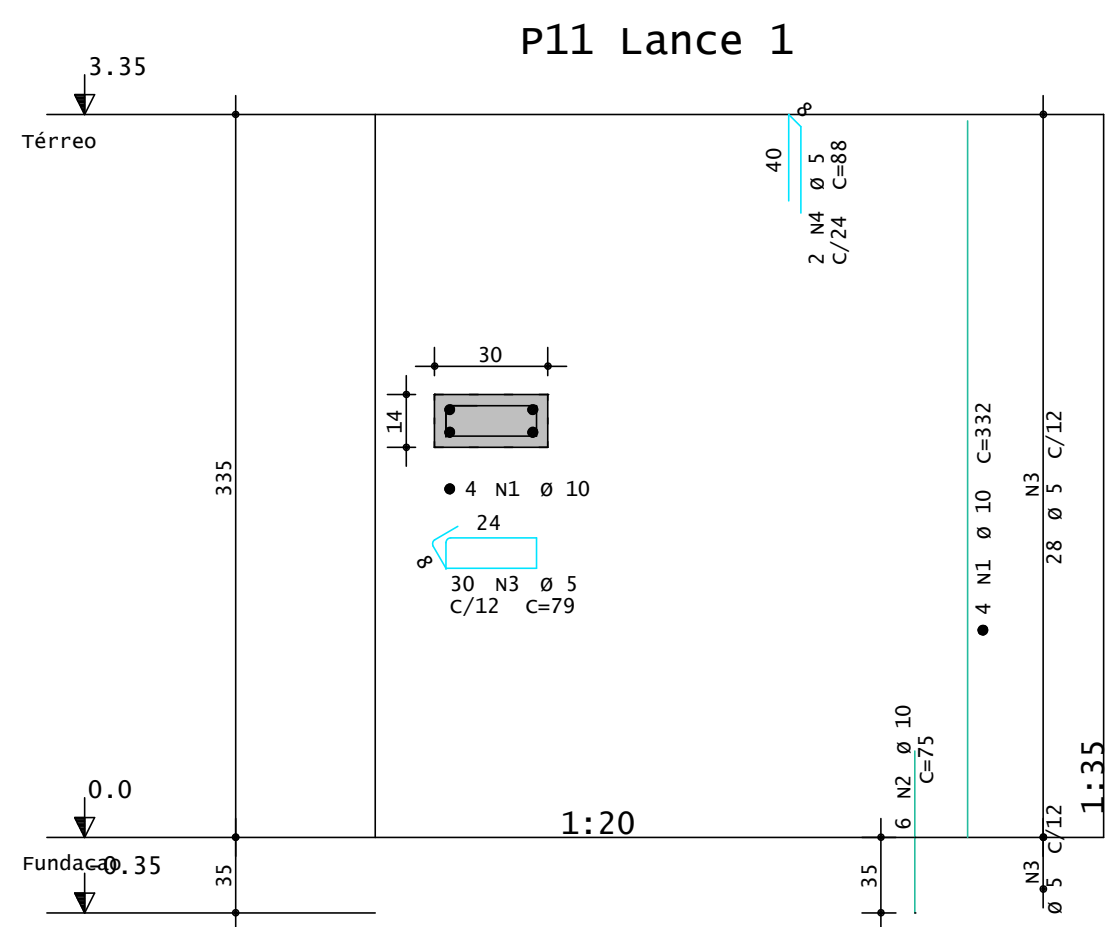
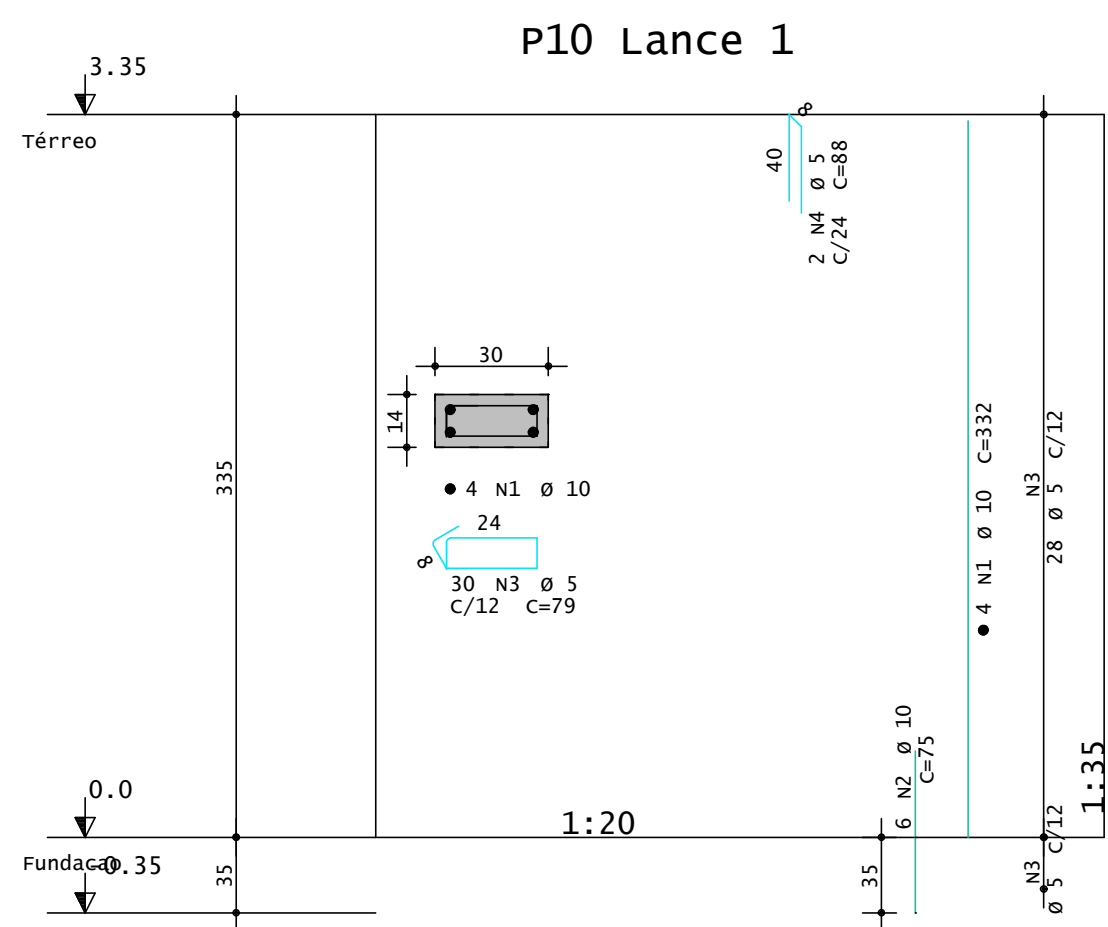
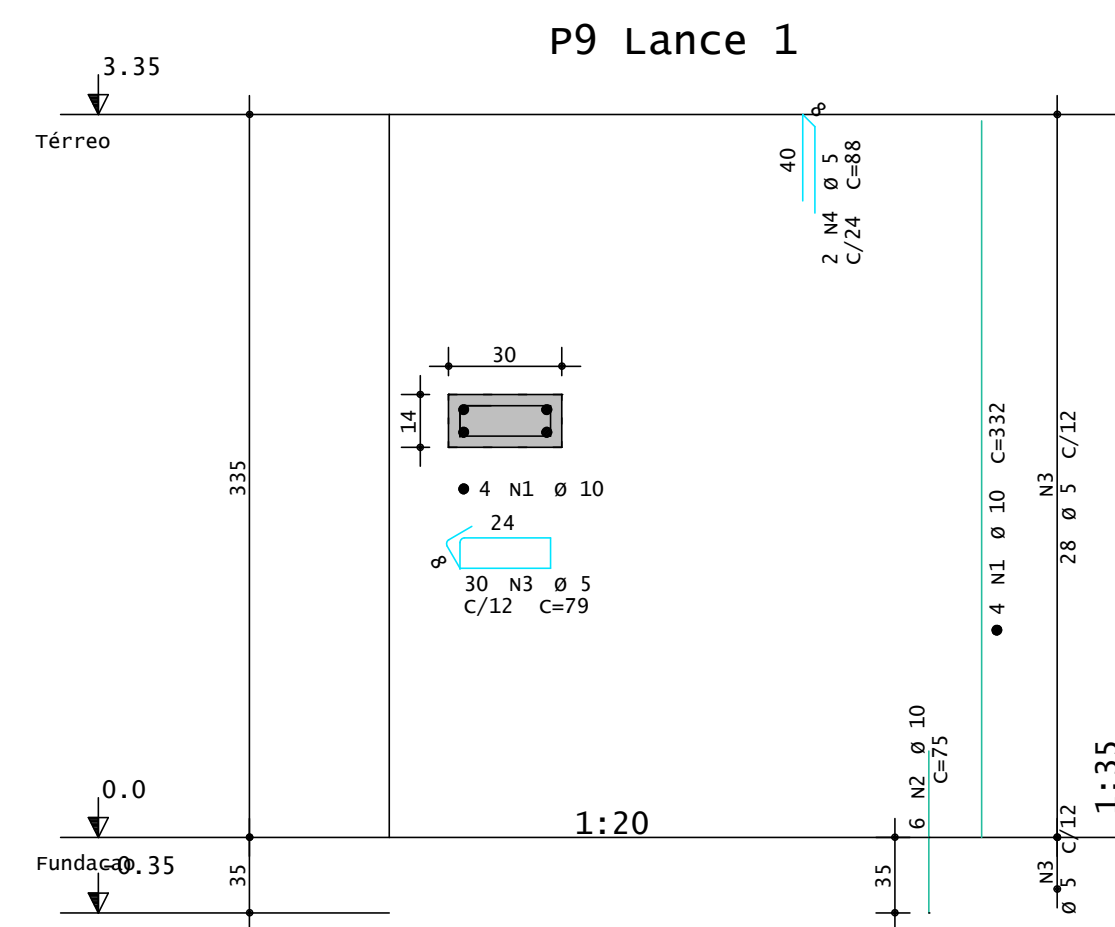
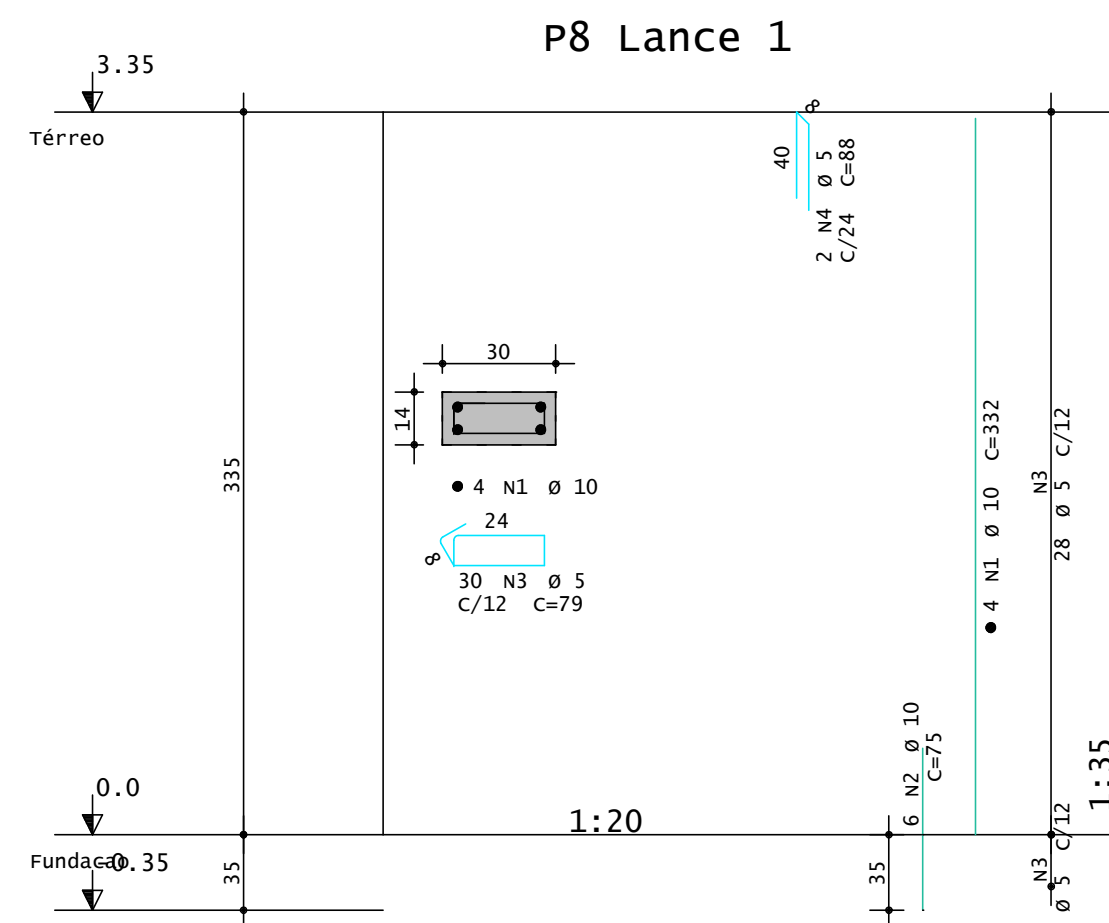
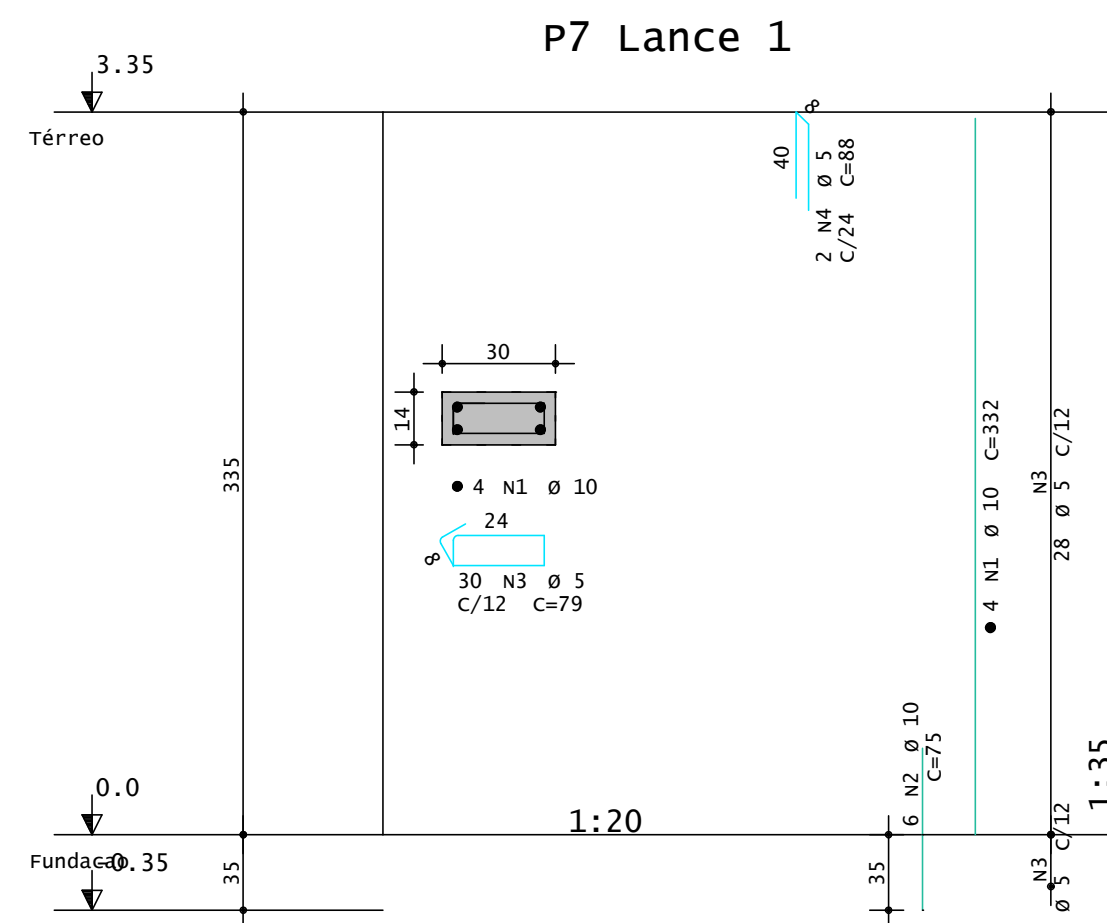
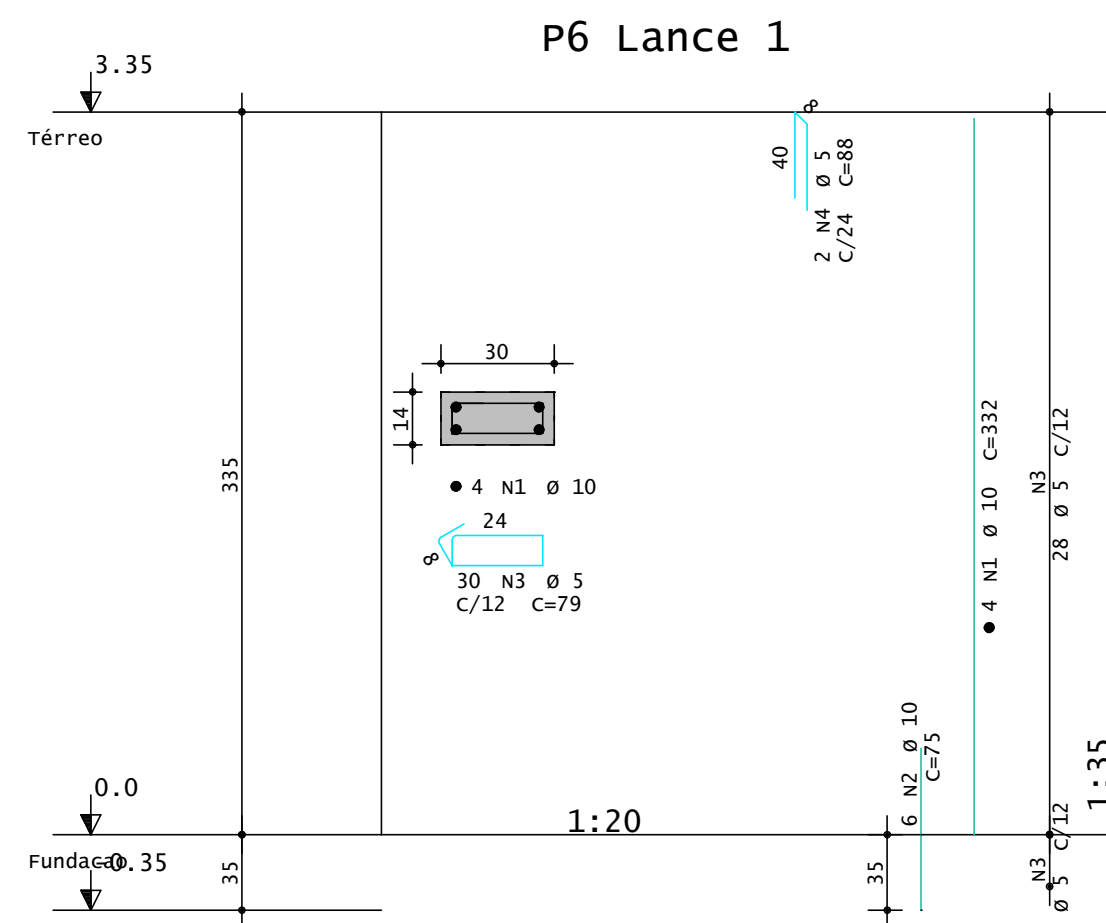
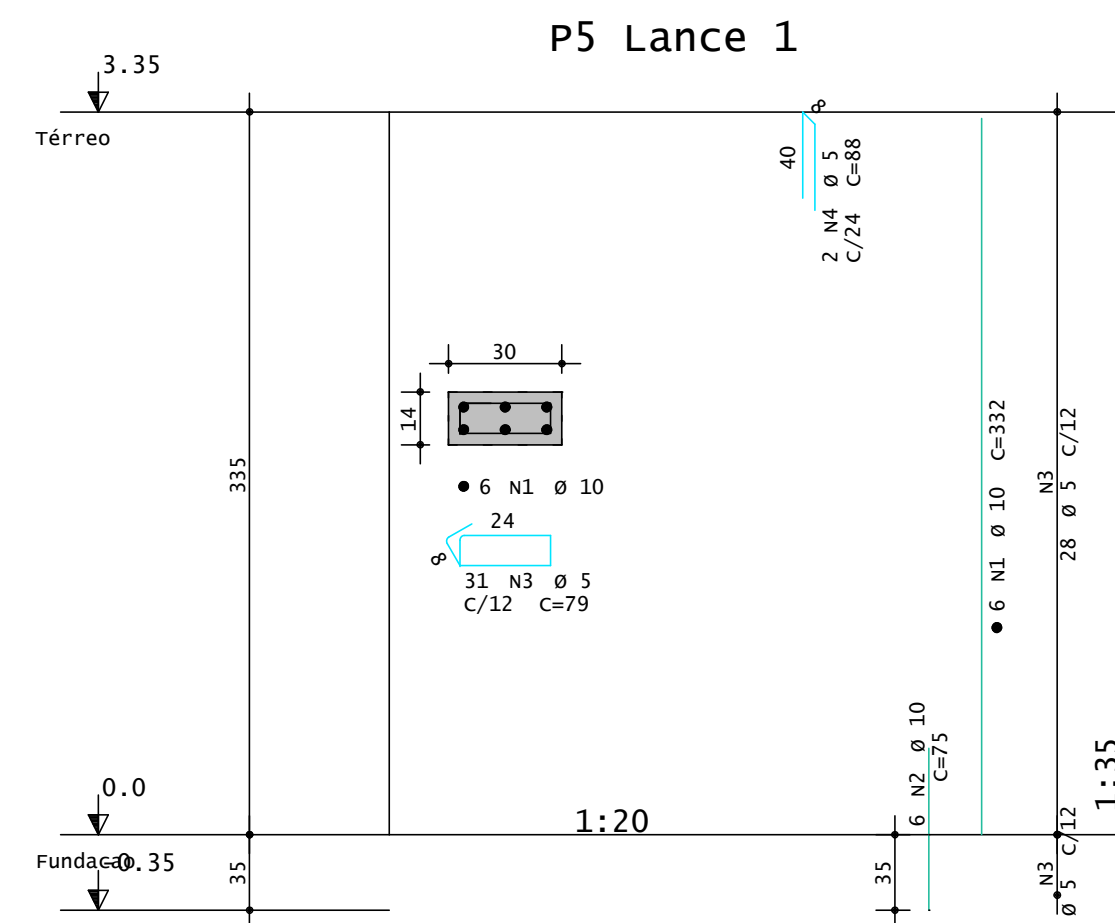
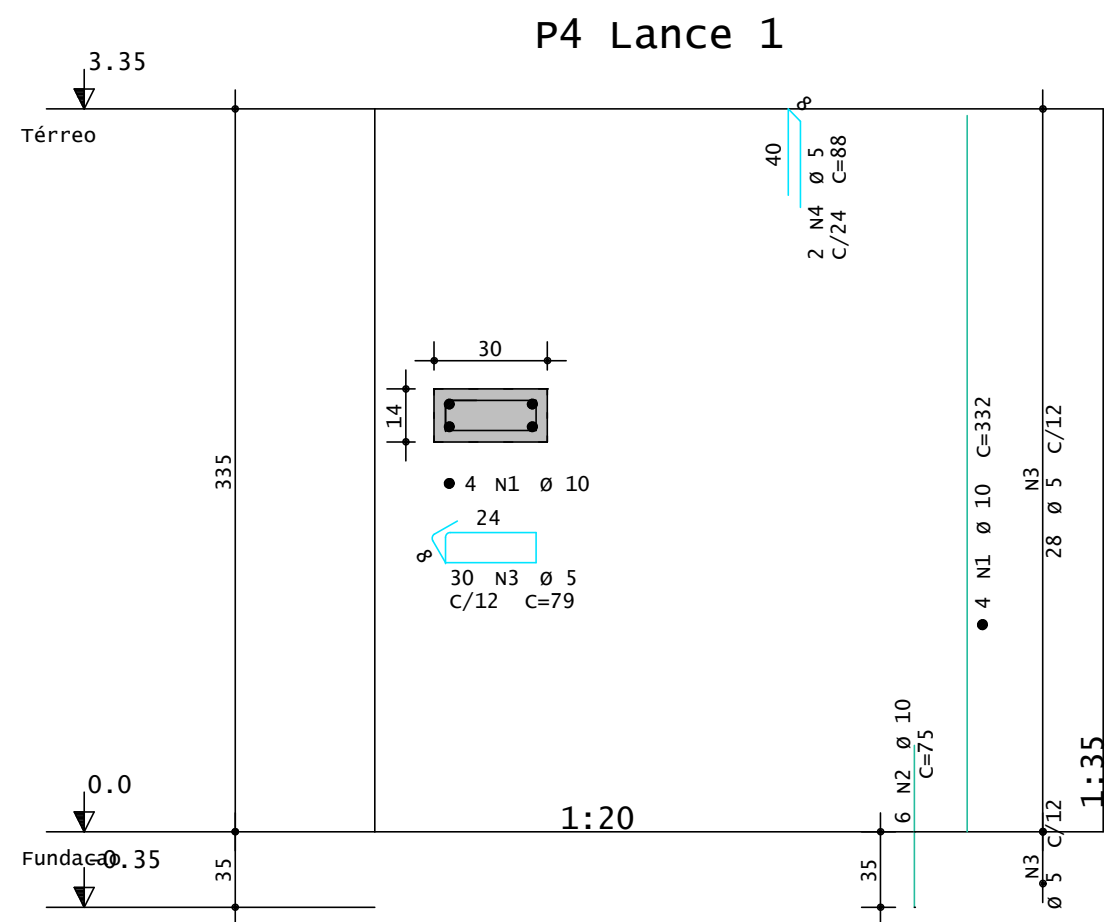
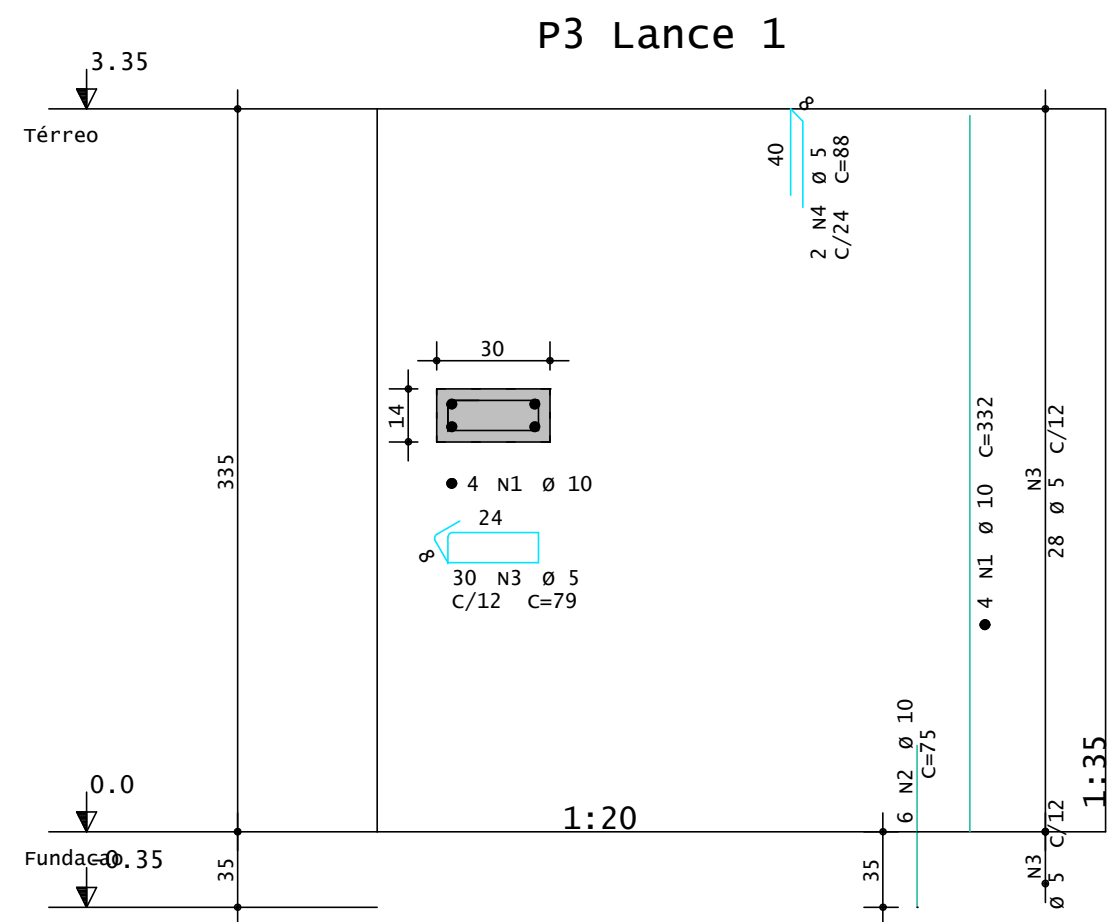
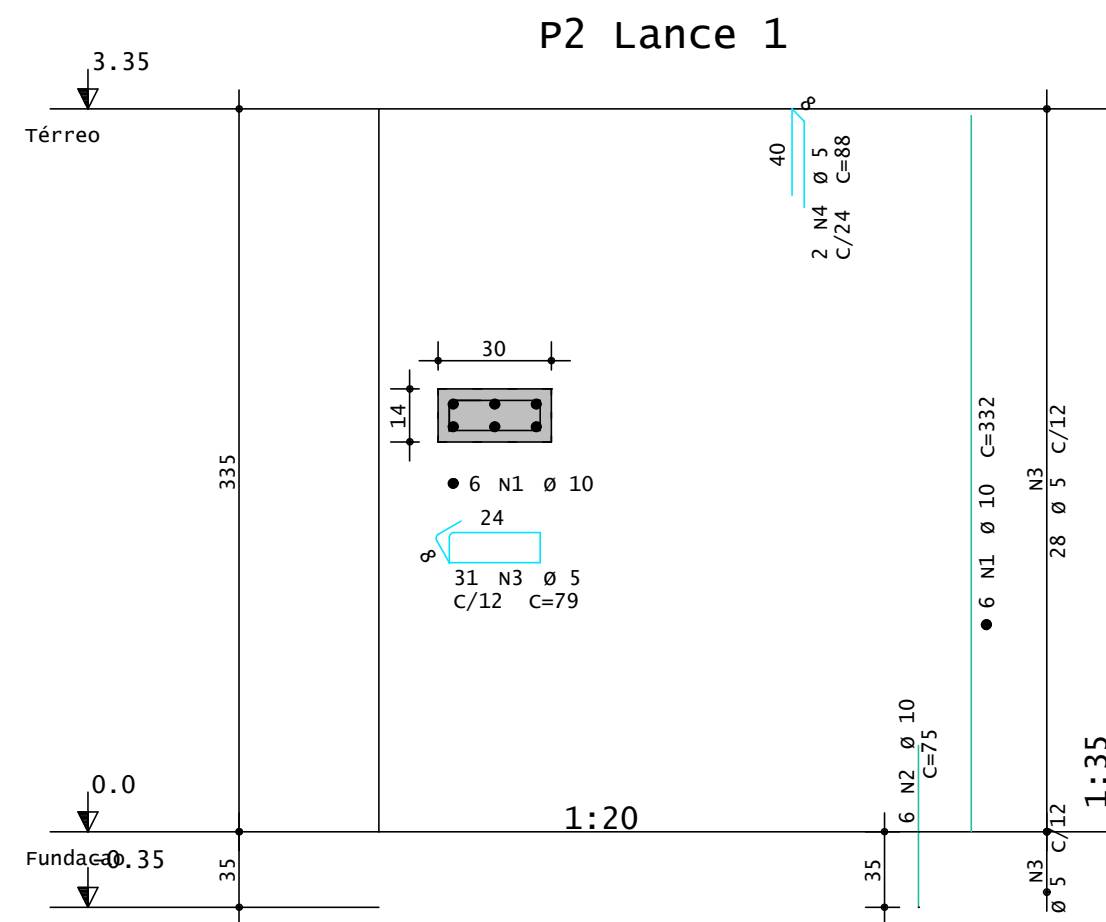
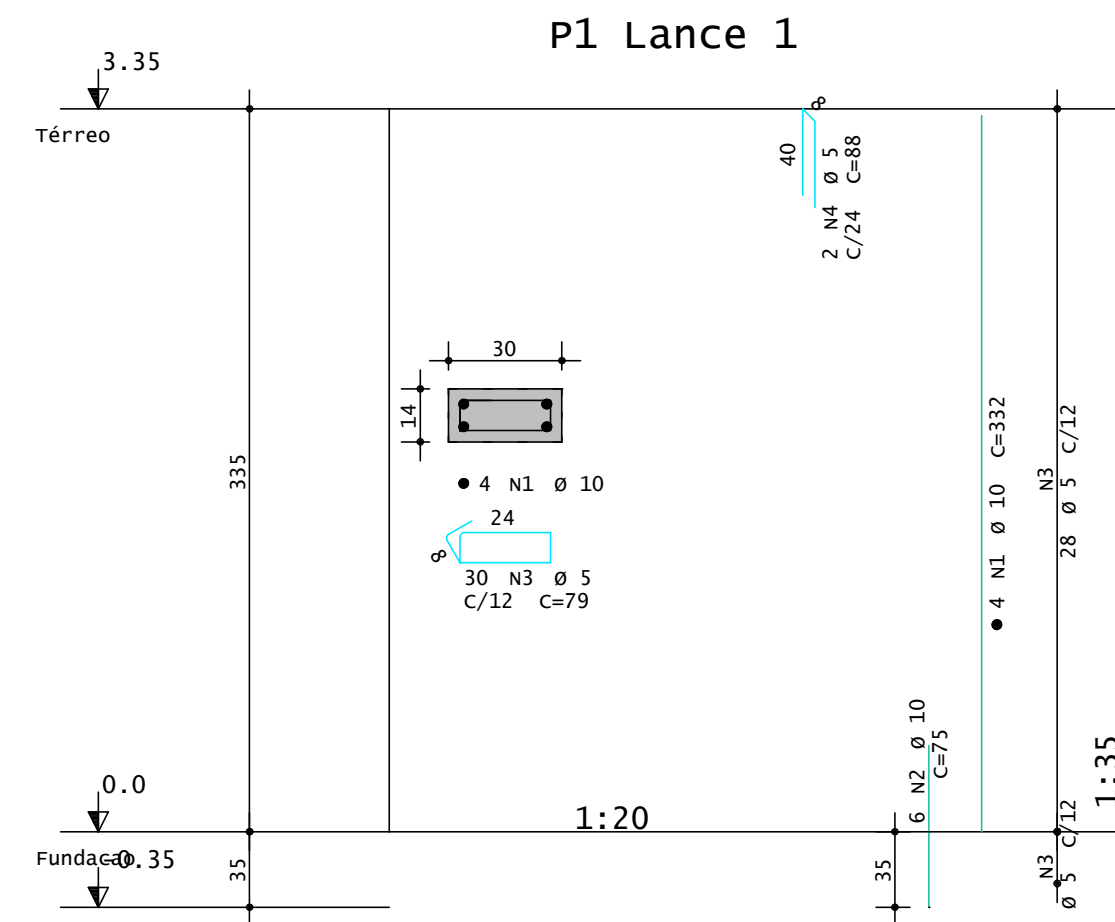
VICENTE PATRÍCIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):

MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D


CONCRETO		OBRA: N.º	
fck = 25 MPa		0001	
ECS = 24150 MPa		DES. N.º	
CLIENTE		010	
OBRA		REV. N.º	
Salas Cemei		00	
TÍTULO		ENG. N.º	
Viga			
Baldrame			
v7 / v8 / v9 / v10 / v11 / v12			
DATA	ESCALA	DESENHO	COORD.
30/07/2025	1:50	SAL-FUN-VIG-010-R00	

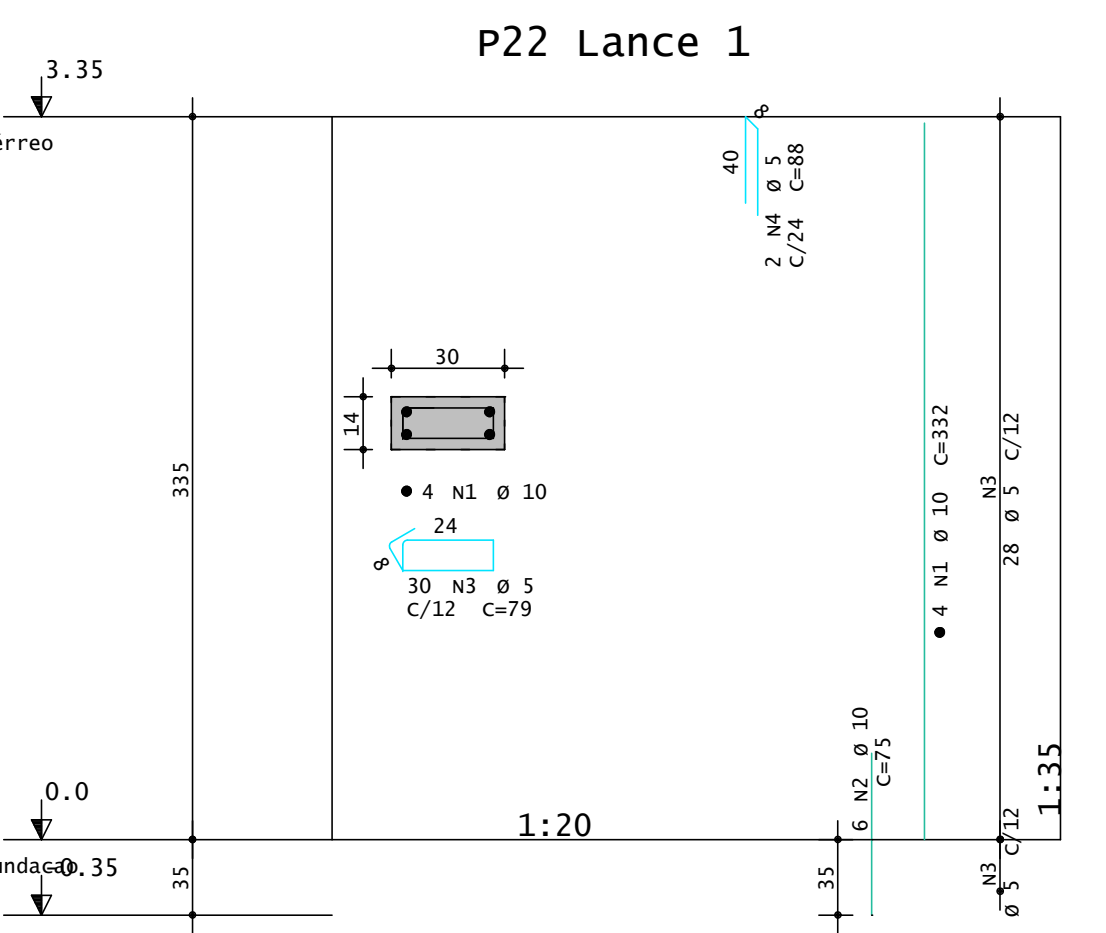
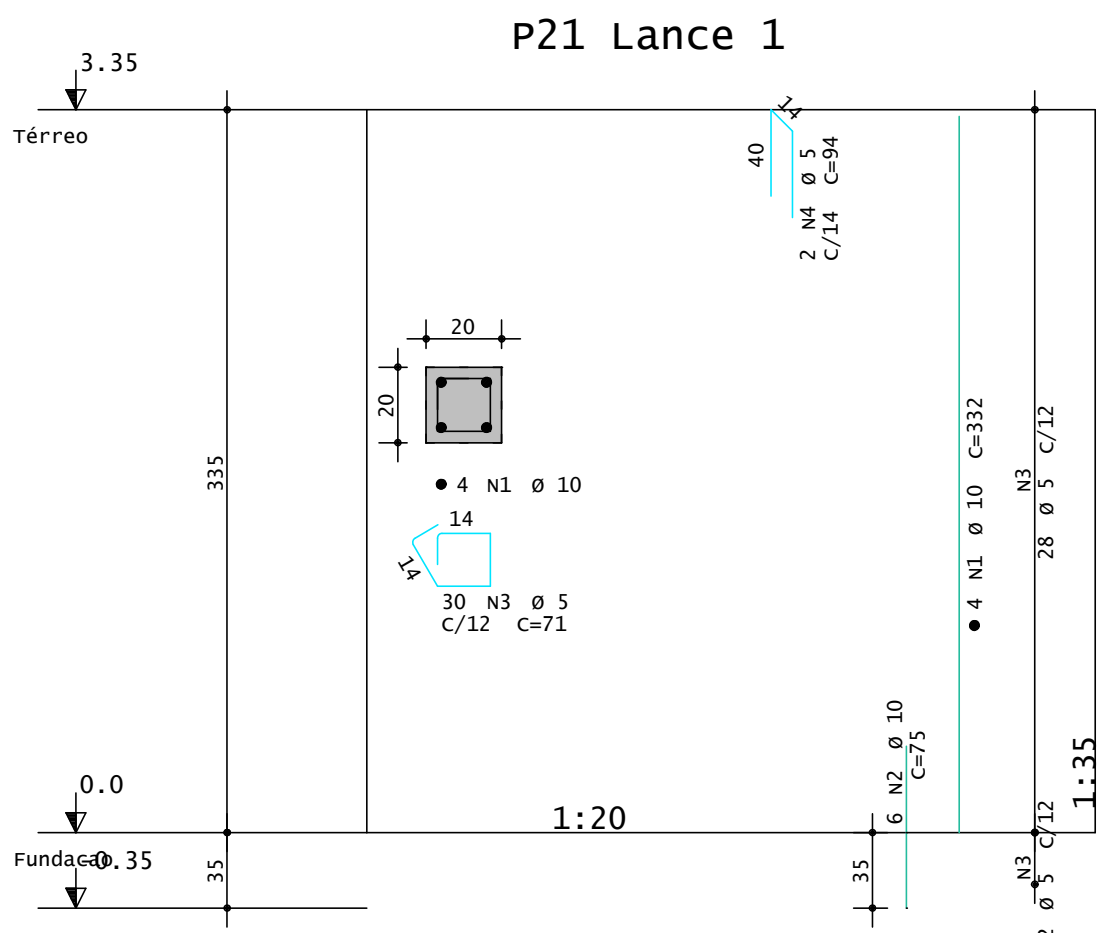
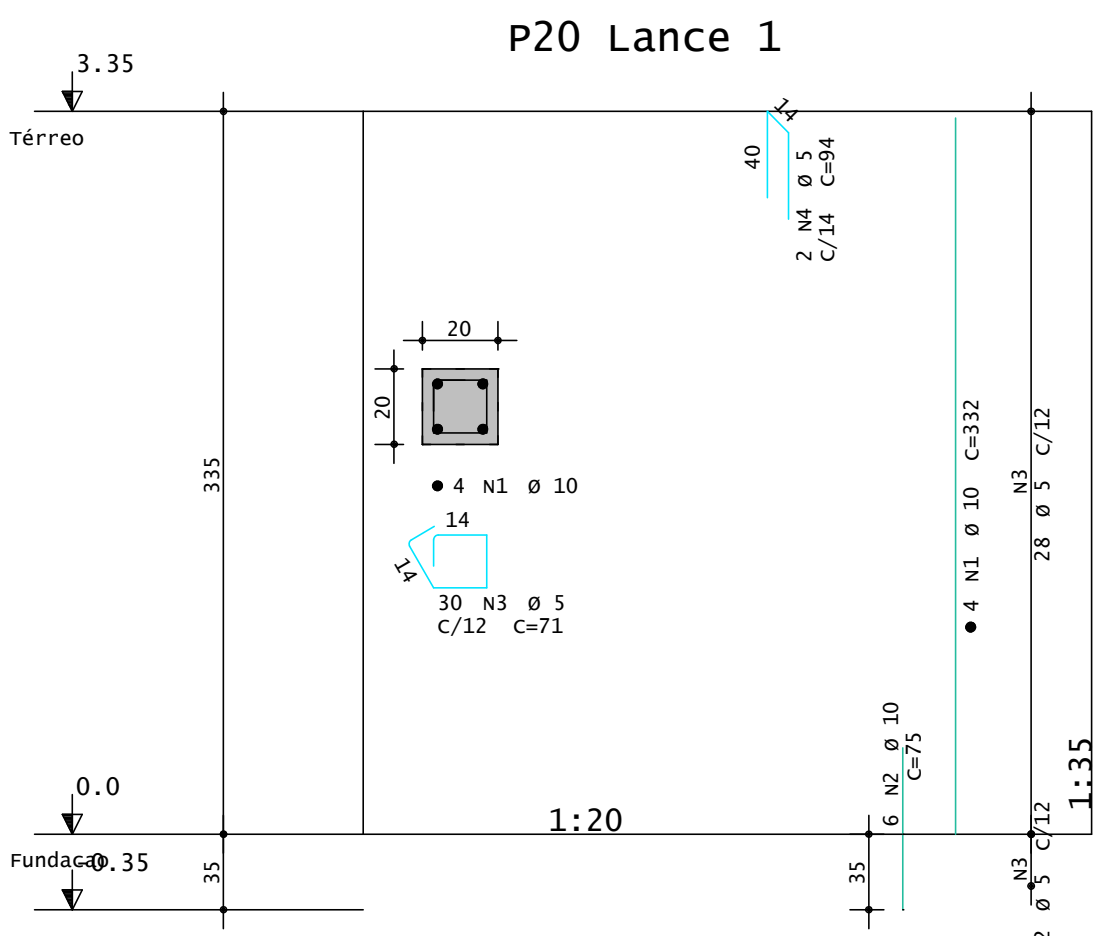
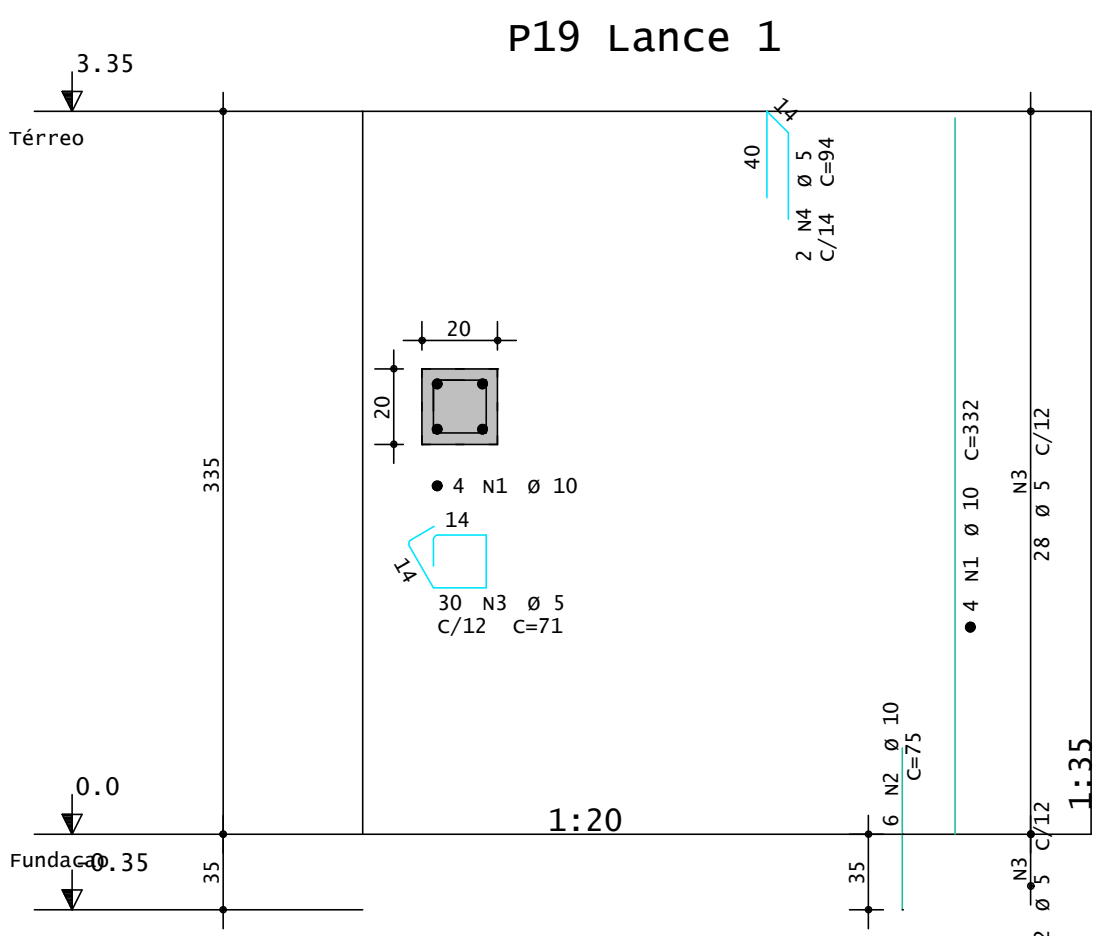
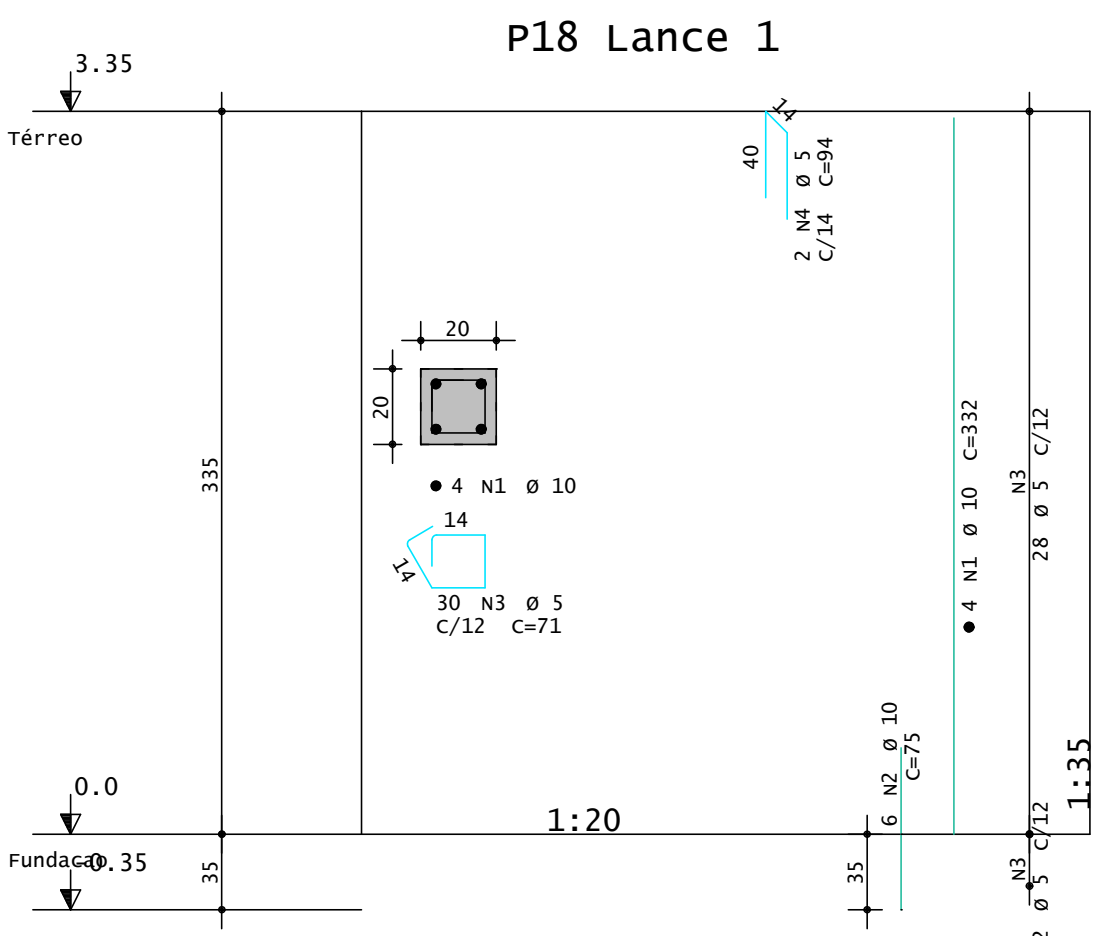
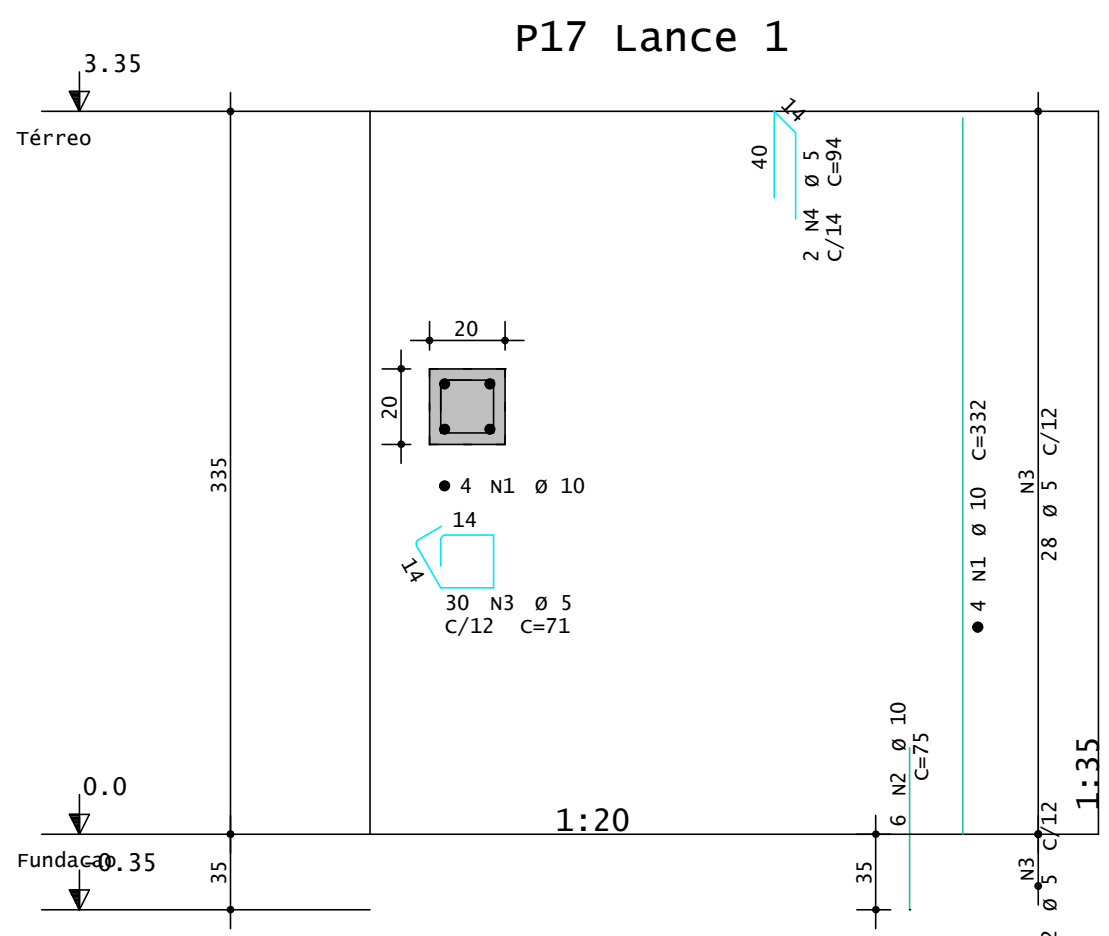
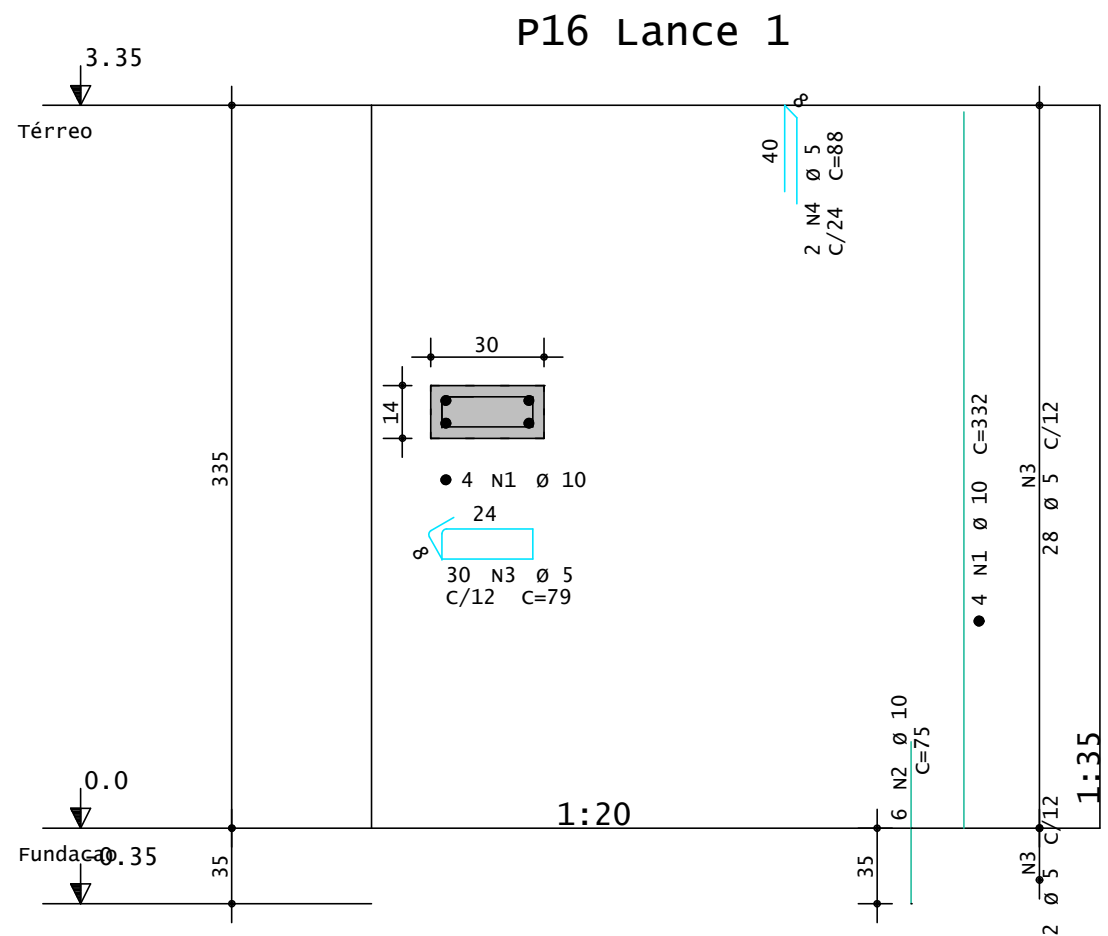
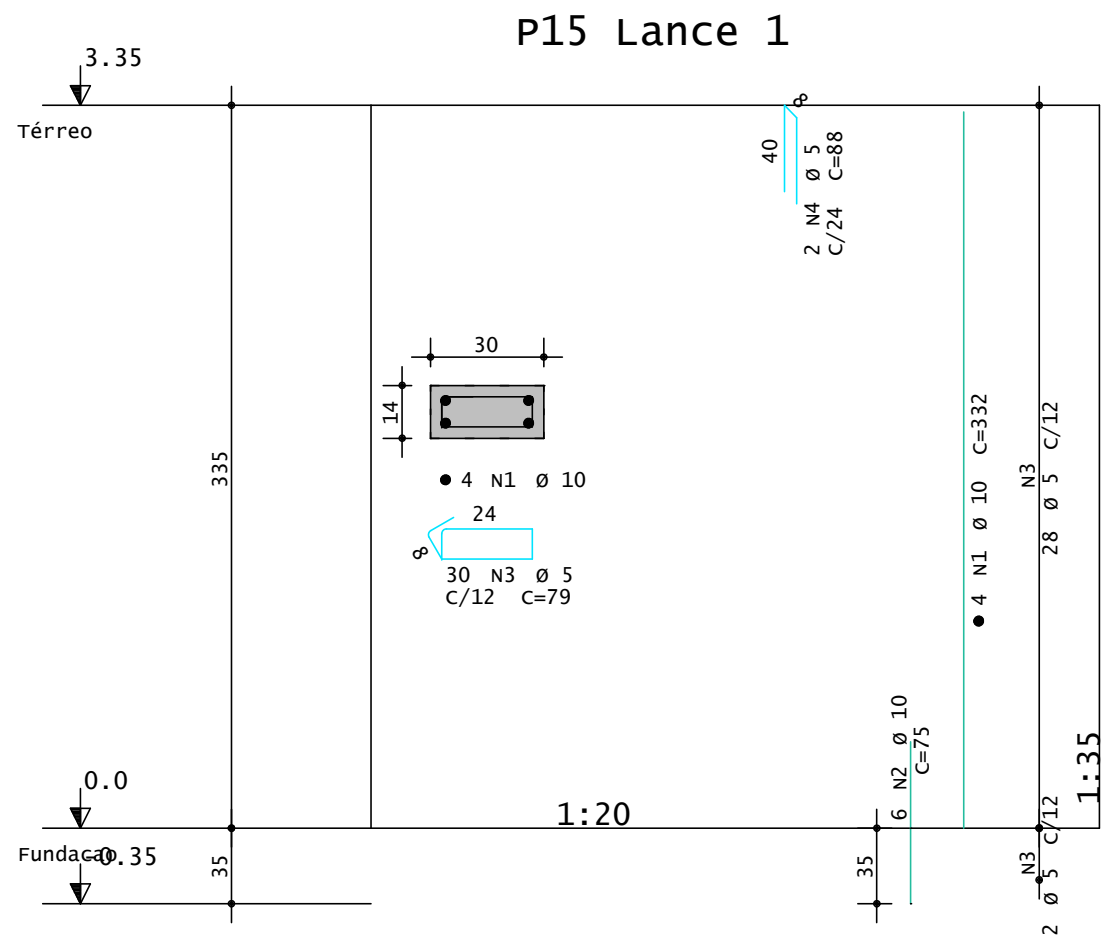
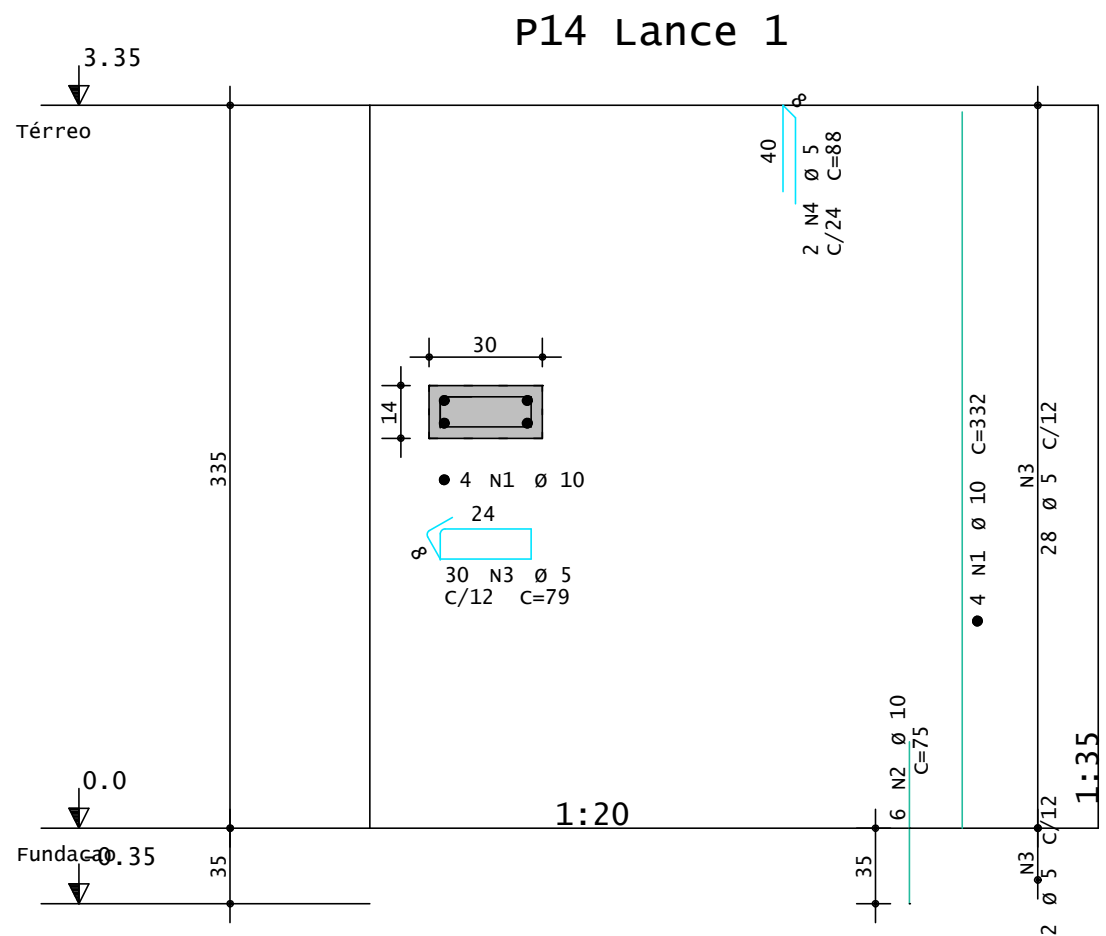
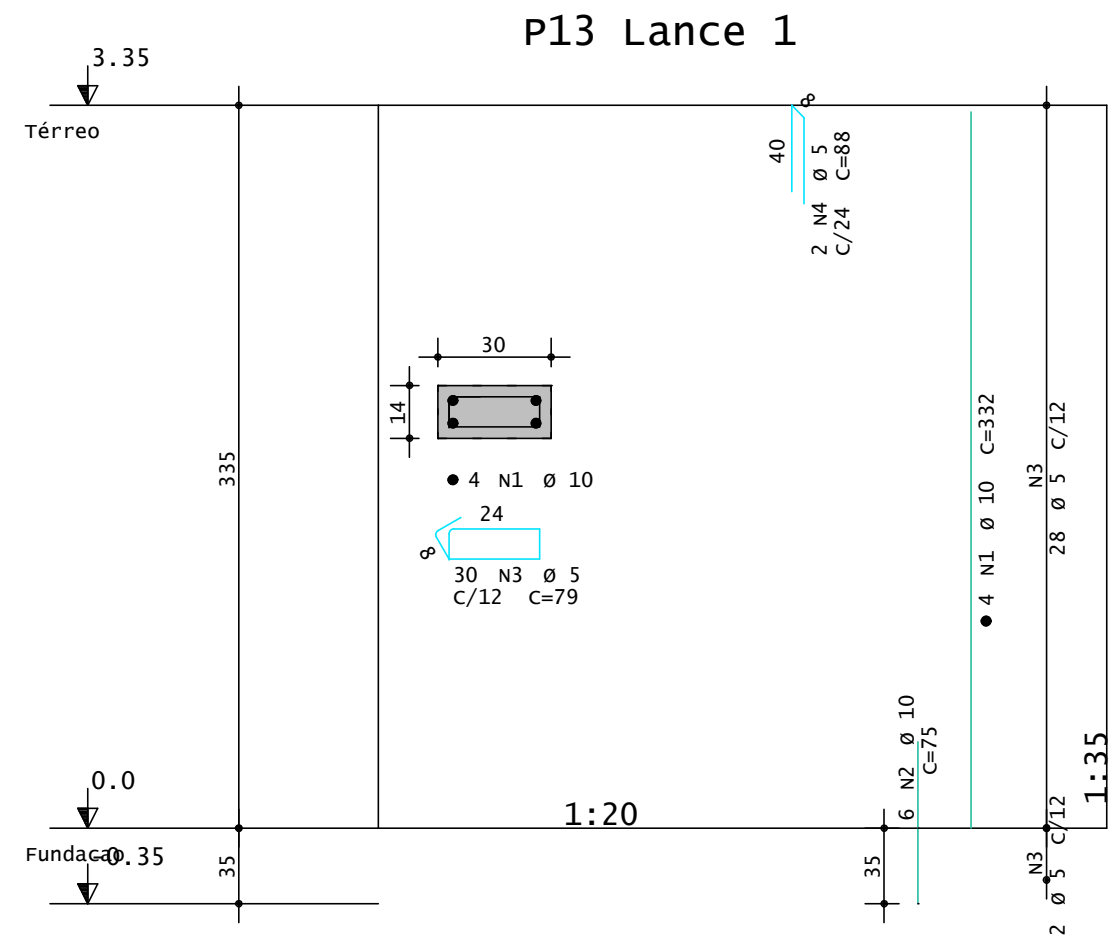




AÇO	POS	BIT	QUANT	COMPROMITO		
				UNIT	TOTAL	
		mm		cm	cm	
P1 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P2 Lance 1	50A	1	10	6	332	1992
	50A	2	10	6	75	450
	60A	3	5	31	79	2449
	60A	4	5	2	88	176
P3 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P4 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P5 Lance 1	50A	1	10	6	332	1992
	50A	2	10	6	75	450
	60A	3	5	31	79	2449
	60A	4	5	2	88	176
P6 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P7 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P8 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P9 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P10 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P11 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P12 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176


RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	307	47
50A	10	227	140
<b>Peso Total</b>	<b>60A =</b>		<b>47 kgf</b>
<b>Peso Total</b>	<b>50A =</b>		<b>140 kaf</b>

		PROPRIETÁRIO(A)  <u>VICENTE PATRICIO DE SOUZA JUNIOR</u> Prefeito Municipal Município de São Miguel do Anta/MG	
TÍTULO PROJETO ESTRUTURAL CONSTRUÇÃO DE SALAS DE RECURSOS NO CMEI AUXILIADORA DE FATIMA FIALHO LIMA		RESPONSÁVEL TÉCNICO(A)  <u>MARCO AURÉLIO FERRAREZI AVELAR</u> Engenheiro Civil - CREA-MG 213.217/D	
<div></div>			
CONCRETO fck = 25 MPa ECS = ver na <b>Planta</b>		OBRA: N.º <b>0001</b> DES.: N.º	
CLIEENTE <i>Prefeitura Municipal de São Miguel do Anta/MG</i>		OBRA <i>Salas Cemei</i>	
TÍTULO <i>Pilar</i>		007	
P1 Lance 1 / P2 Lance 1 / P3 Lance 1 / P4 Lance 1 / P5 Lance 1 / P6 Lance 1 / P7 Lance 1 / P8 Lance 1 / P9 Lance 1 / P10 Lance 1 / P11 Lance 1 / P12 Lance 1		REV.: N.º <b>00</b>	
DATA 30/07/2025	ESCALA 1:20	DESENHO SAL-PIL-PIL-007-R00	COORD.
		ENG.º	



AÇO	POS	BIT	QUANT	COMPRIMENTO		
				UNIT	TOTAL	
		mm		cm	cm	
P13 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P14 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P15 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P16 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176
P17 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	71	2130
	60A	4	5	2	88	176
P18 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	71	2130
	60A	4	5	2	94	188
P19 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	71	2130
	60A	4	5	2	94	188
P20 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	71	2130
	60A	4	5	2	94	188
P21 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	71	2130
	60A	4	5	2	94	188
P22 Lance 1	50A	1	10	4	332	1328
	50A	2	10	6	75	450
	60A	3	5	30	79	2370
	60A	4	5	2	88	176

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	243	37
50A	10	178	110
Peso Total			60A = 37 kgf
Peso Total			50A = 110 kgf



TÍTULO PROJETO ESTRUTURAL  
CONSTRUÇÃO DE SALAS DE RECURSOS NO CMEI  
AUXILIADORA DE FATIMA FIALHO LIMA

PROPRIETÁRIO(A):  
  
VICENTE PATRICIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):  
  
MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO  
fck = 25 MPa  
ECS = Ver na Planta

CLIENTE  
Prefeitura Municipal de São Miguel do Anta/MG

OBRA  
Salas Cemei

TÍTULO  
Pilar

p13 Lance 1 / p14 Lance 1 / p15 Lance 1 /  
p16 Lance 1 / p17 Lance 1 / p18 Lance 1 /  
p19 Lance 1 / p20 Lance 1 / p21 Lance 1 /  
p22 Lance 1

DATA 30/07/2025 ESCALA 1:20 DESENHO SAL-PTL-PIL-008-R00 COORD. ENG. °

OBRA N. °  
0001

DES. N. °  
008

REV. N. °  
00

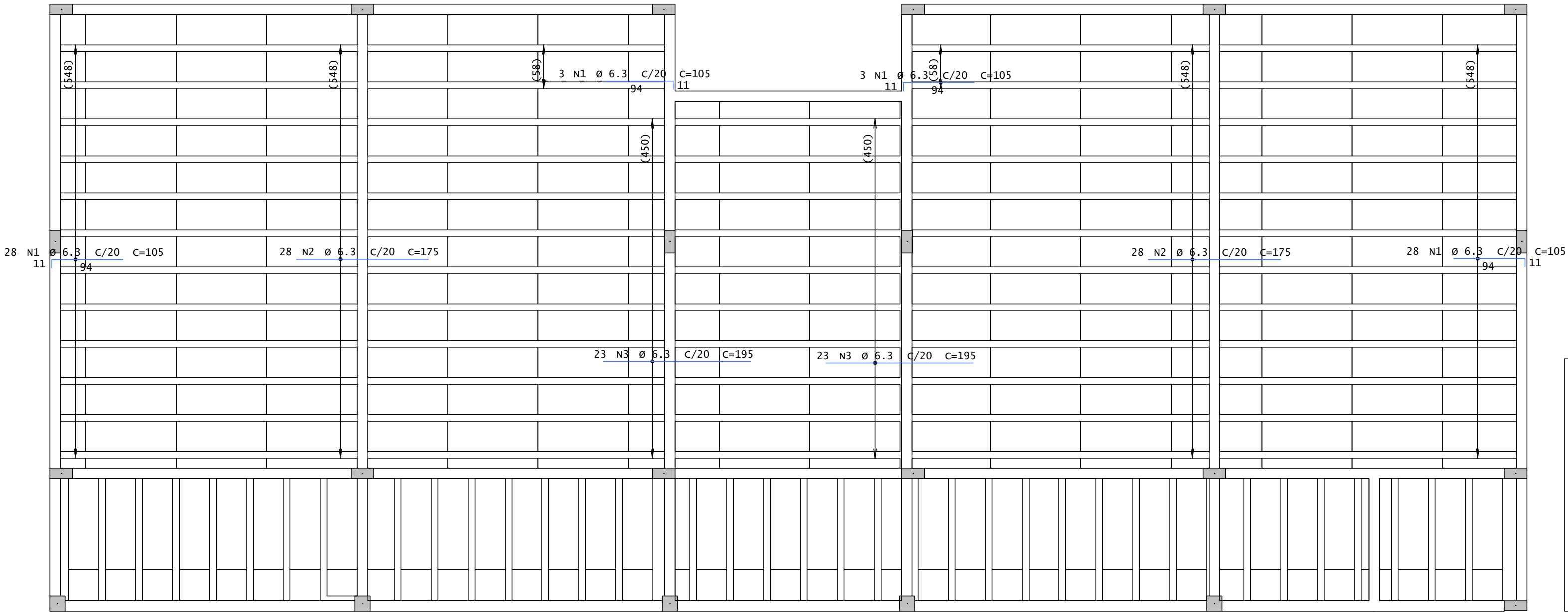


AÇO	POS	BIT mm	QUANT	COMPRIMENTO	
				UNIT cm	TOTAL cm
Térreo - Armadura negativa principal					
50A	1	6.3	62	105	6510
50A	2	6.3	56	175	9800
50A	3	6.3	46	195	8970

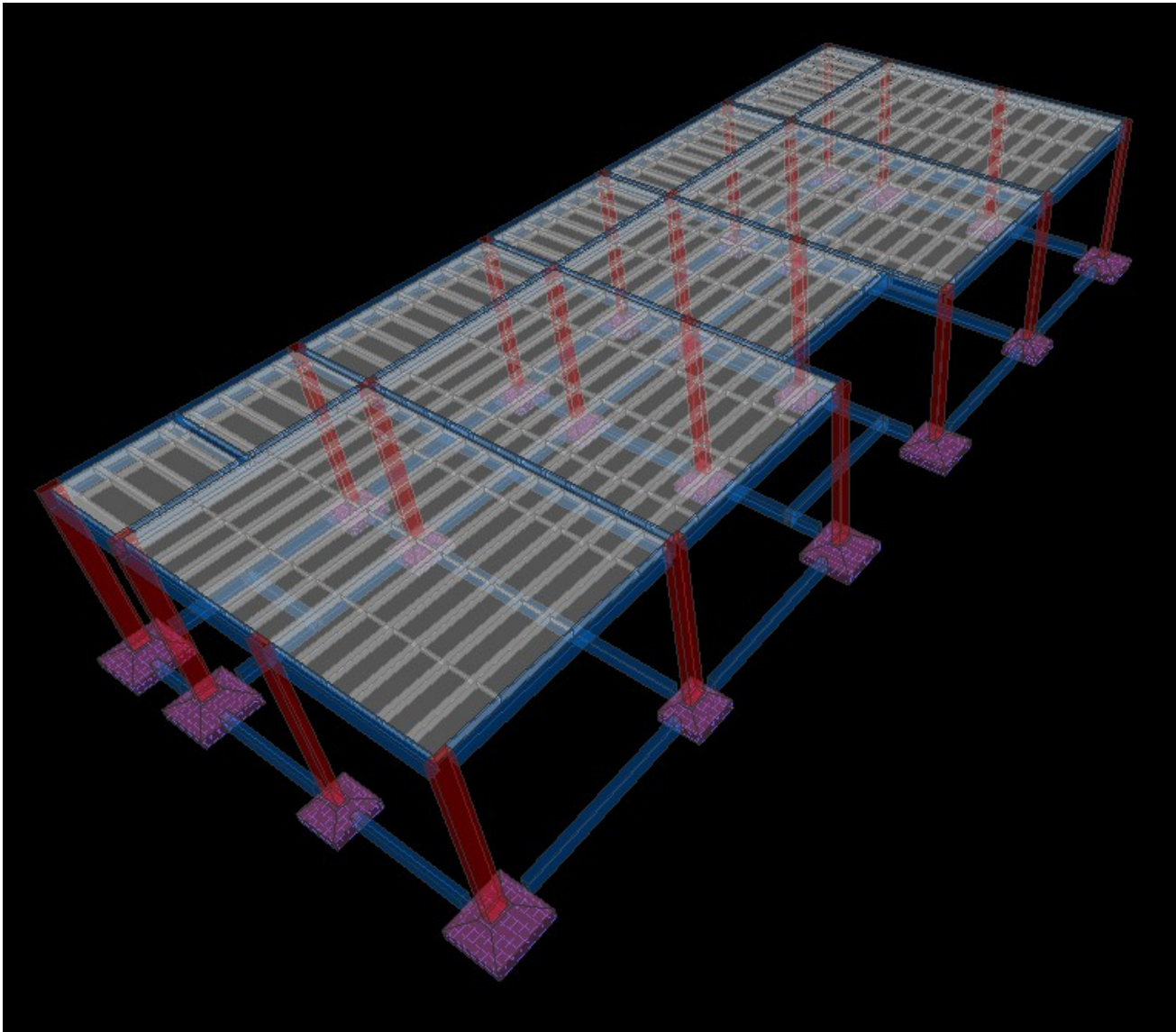
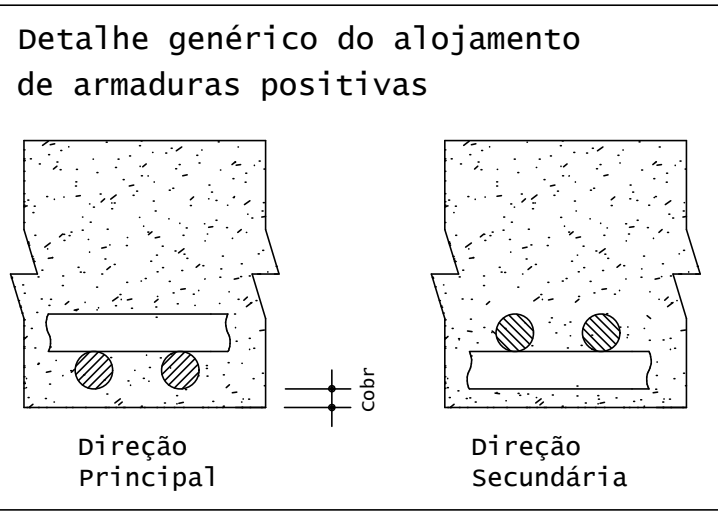
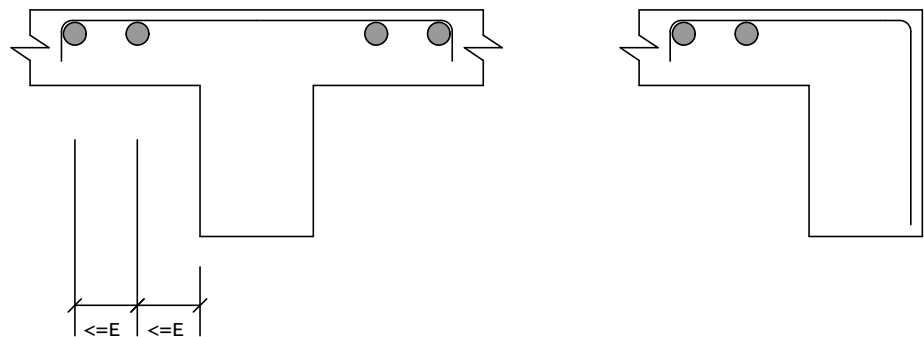
RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
50A	mm	m	kgf
50A	6.3	253	62
Peso Total	50A =		62 kgf


## Térreo - Armadura negativa principal

1x



DETALHE TÍPICO DE FERROS DE DISTRIBUIÇÃO DE ARMADURA NEGATIVA



	PROPRIETÁRIO(A):  VICENTE PATRÍCIO DE SOUZA JUNIOR Prefeito Municipal Município de São Miguel do Anta/MG  RESPONSÁVEL TÉCNICO(A):  MARCO AURÉLIO FERRAREZI AVELAR Engenheiro Civil - CREA/MG 213.217/D
TÍTULO: PROJETO ESTRUTURAL CONSTRUÇÃO DE SALAS DE RECURSOS COM CMEI AUXILIADORA DE FATIMA FIALHO LIMA	

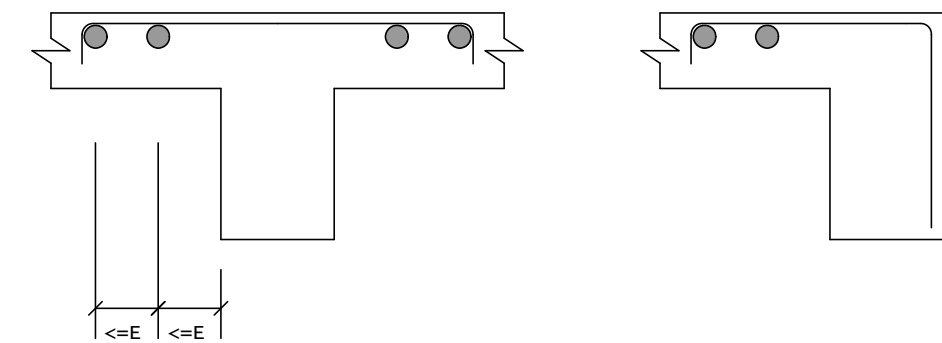
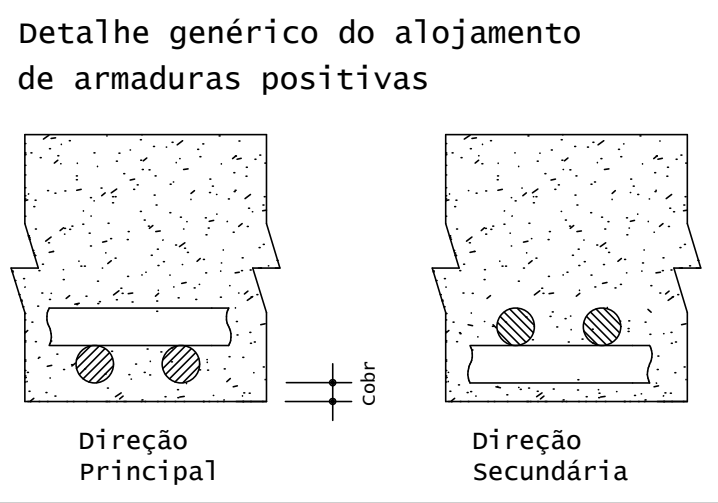
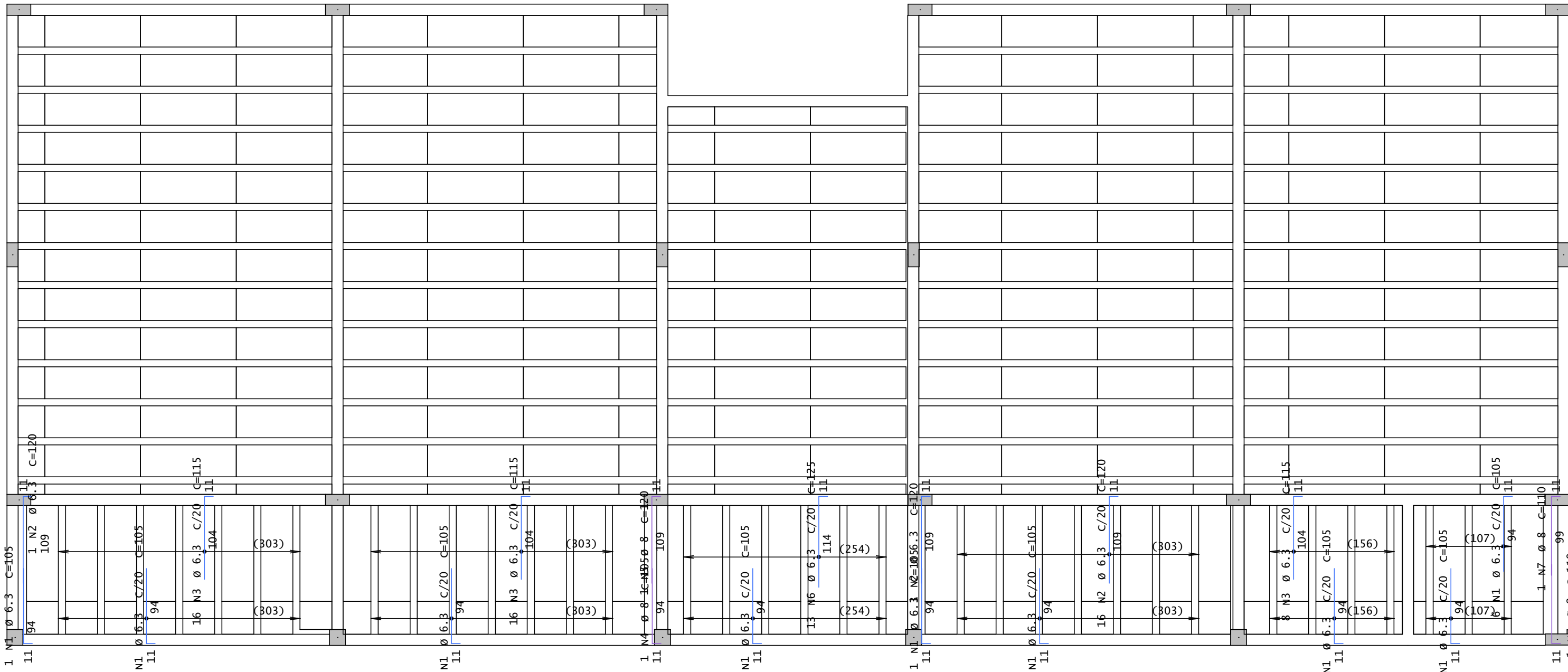
CONCRETO				OBRA: N.º
fck = 25 MPa				0001
ECS = 24150 MPa				DES. N.º
CLIENTE				003
OBRA				REV. N.º
Salas Cemei				00
TÍTULO				ENG. N.º
Laje Trelaçada				
Térreo - Armadura negativa principal				
DATA	ESCALA	DESENHO	COORD.	ENG. N.º
30/07/2025	1:50	SAL-TER-LAJ-003-R00		


AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
mm					
cm					
cm					
Térreo - Armadura negativa secundaria					
50A	1	6.3	83	105	8715
50A	2	6.3	18	120	2160
50A	3	6.3	40	115	4600
50A	4	8	1	105	105
50A	5	8	1	120	120
50A	6	6.3	13	125	1625
50A	7	8	2	110	220

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
50A	6.3	171	42
50A	8	4	2
Peso Total		50A =	44 kgf

Térreo - Armadura negativa secundaria

1X





PROPRIETÁRIO(A):  
  
VICENTE PATRÍCIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):  
  
MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO  
fck = 25 MPa  
ECS = 24150 MPa

CLIENTE  
Prefeitura Municipal de São Miguel do Anta

OBRA  
Salas Cemei

TÍTULO  
Laje Trelaçada

Térreo - Armadura negativa secundaria

DATA  
30/07/2025

ESCALA  
1:50

DESENHO  
SAL-TER-LAJ-004-R00

COORD.

OBRA N.º  
0001

DES. N.º  
004

REV. N.º  
00

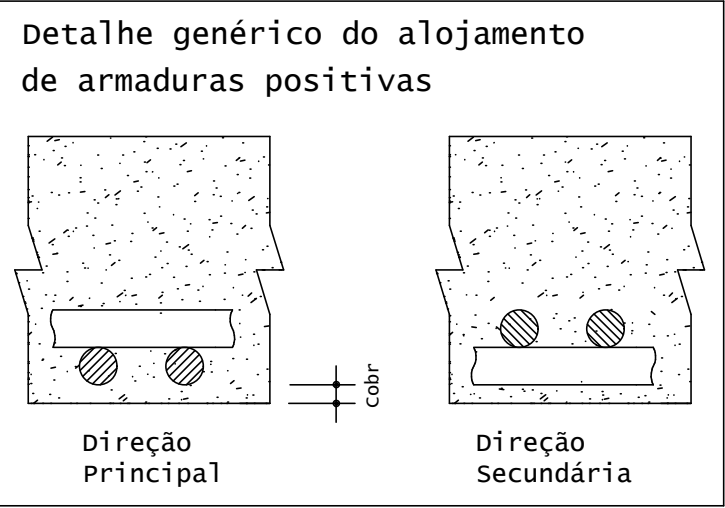
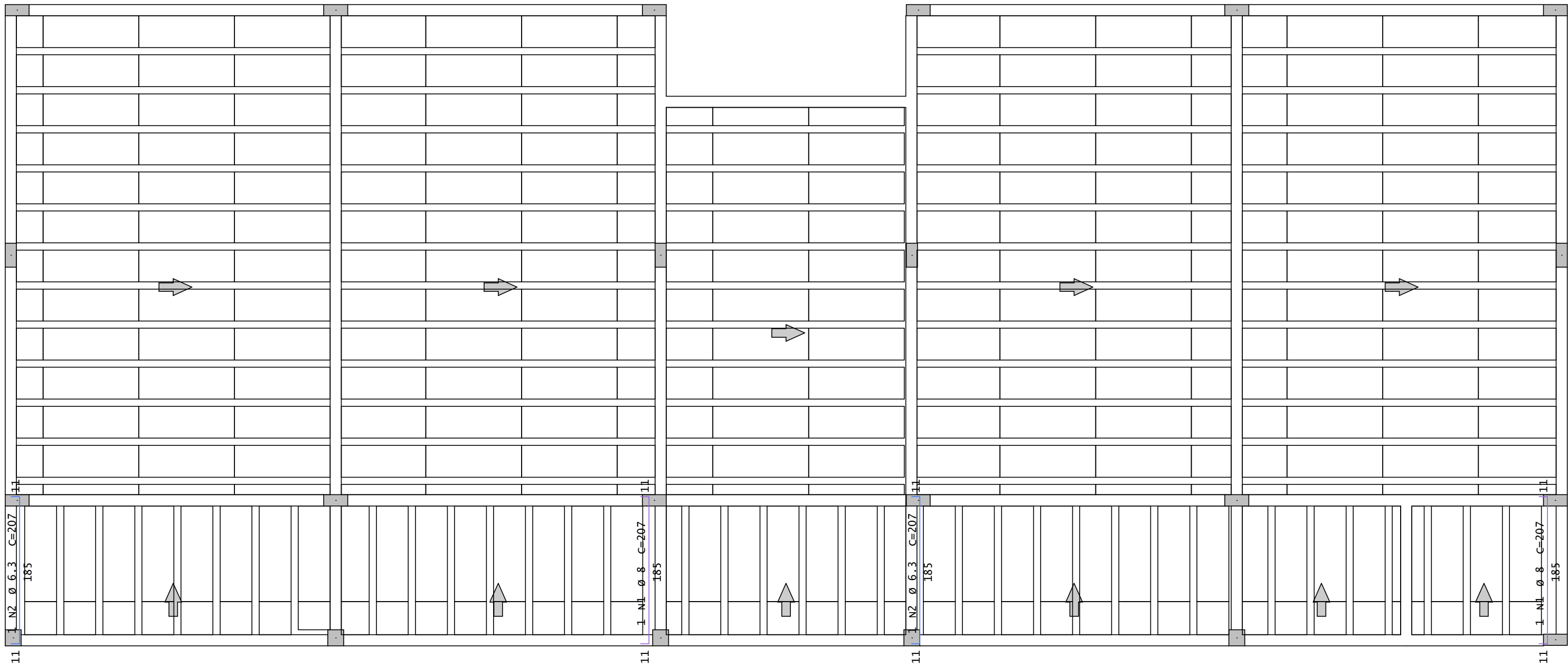
ENG. N.º

AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
				cm	cm
Térreo - Armadura positiva principal					
50A	1	8	2	207	414
50A	2	6.3	2	207	414

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
50A	6.3	4	1
50A	8	4	2
Peso Total		50A =	3 kgf

Térreo - Armadura positiva principal

1x



PROPRIETÁRIO(A):

VICENTE PATRÍCIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):

MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO		OBRA: N.º	
fck = 25 MPa		0001	
ECS = 24150 MPa		DES. N.º	
CLIENTE		005	
OBRA		REV. N.º	
Salas Cemei		00	
TÍTULO		ENG. N.º	
Laje Trelaçada			
Térreo - Armadura positiva principal			
DATA	ESCALA	DESENHO	COORD.
30/07/2025	1:50	SAL-TER-LAJ-005-R00	

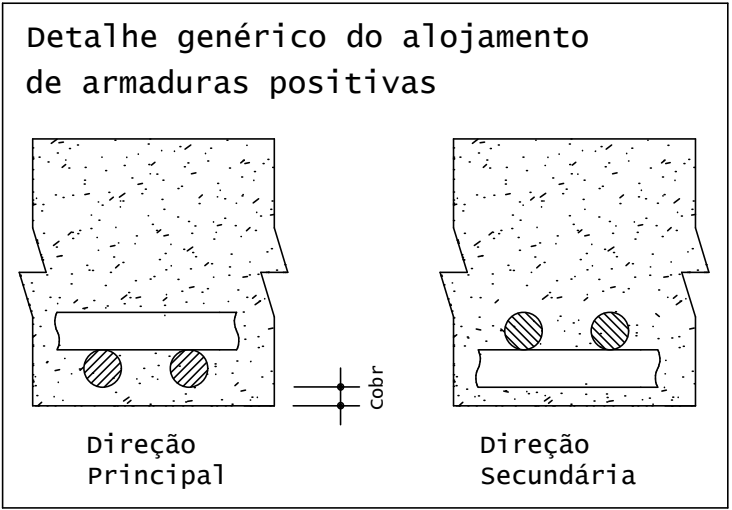
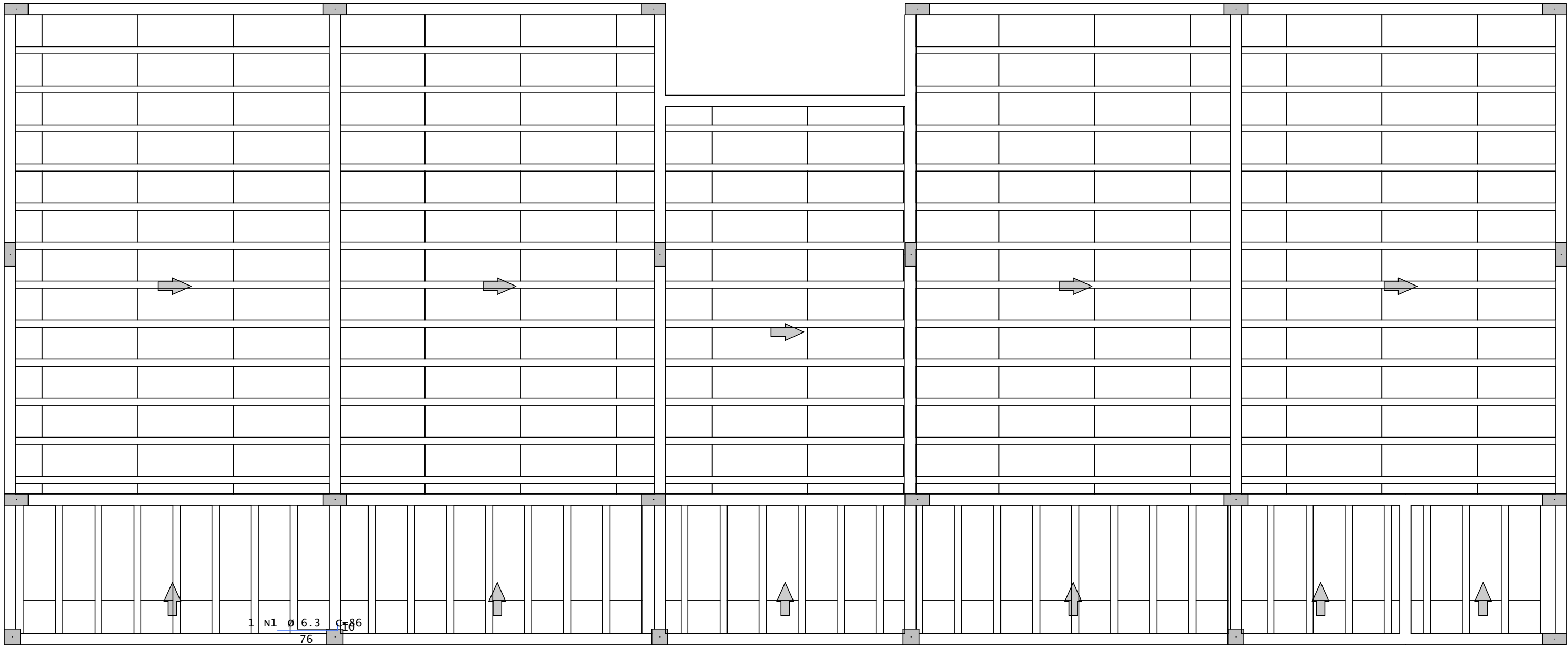



AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
mm				cm	cm
Térreo - Armadura positiva secundaria					
50A	1	6.3	1	86	86

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
50A	6.3	1	kgf
Peso Total		50A =	0 kgf

## Térreo - Armadura positiva secundaria

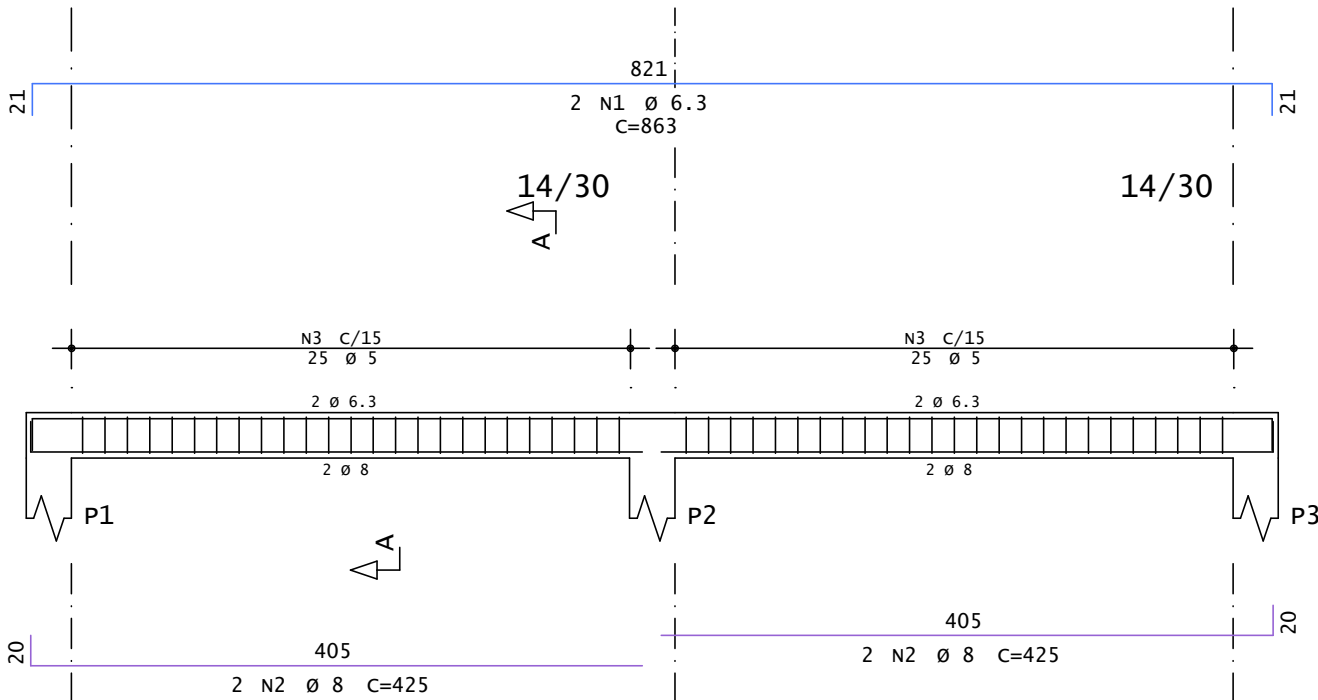
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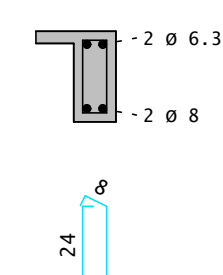
	PROPRIETÁRIO(A):
	VICENTE PATRÍCIO DE SOUZA JÚNIOR Prefeito Municipal Município de São Miguel do Anta/MG
	RESPONSÁVEL TÉCNICO(A):
TÍTULO:	PROJETO ESTRUTURAL CONSTRUÇÃO DE SALAS DE RECURSOS NO CMEI AUXILIADORA DE FÁTIMA FIALHO LIMA
	MARCO AURÉLIO FERRAREZI AVELAR Engenheiro Civil - CREA/MG 213.217/D

CONCRETO				OBRA: N.º
fck = 25 MPa				0001
ECS = 24150 MPa				DES. N.º
CLIENTE				006
OBRA				REV. N.º
Salas Cemei				00
TÍTULO				
Laje Trelaçada				
Térreo - Armadura positiva secundaria				
DATA	ESCALA	DESENHO	COORD.	ENG. N.º
30/07/2025	1:50	SAL-TER-LAJ-006-R00		

v1

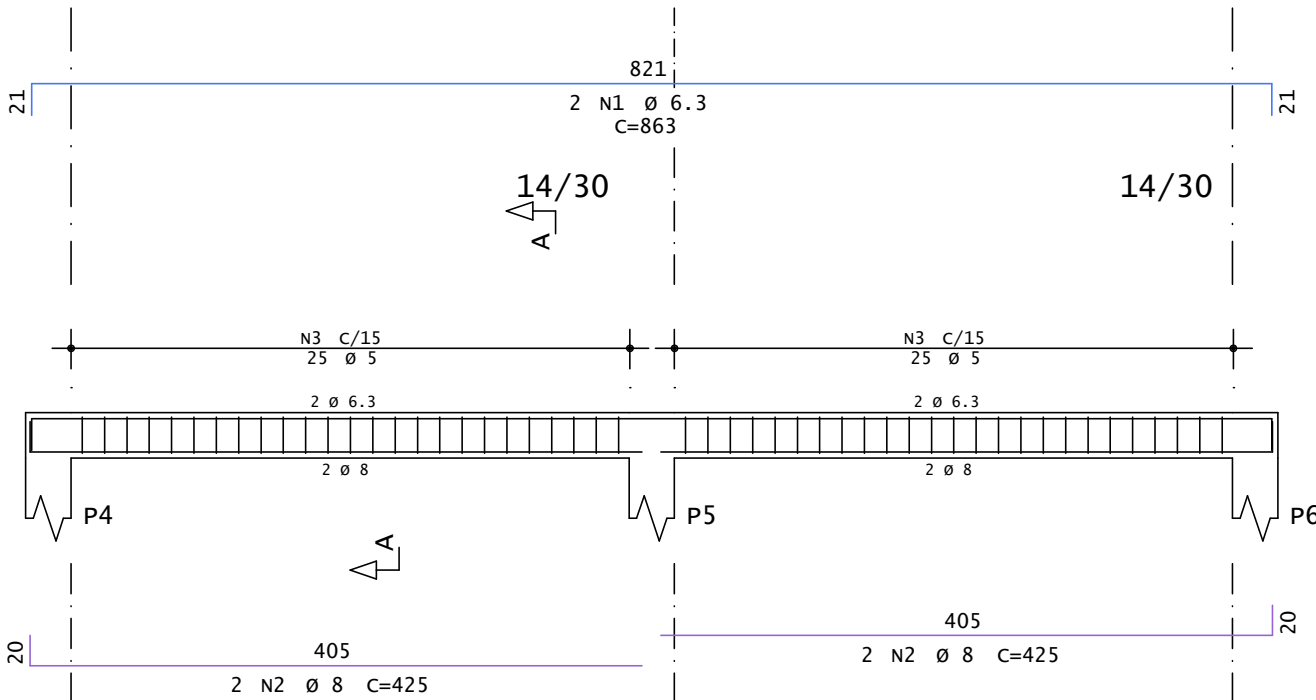


Corte A

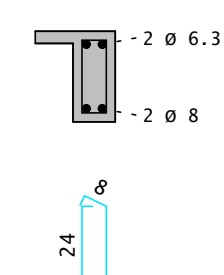


50 N3 Ø 5 C=79

v2

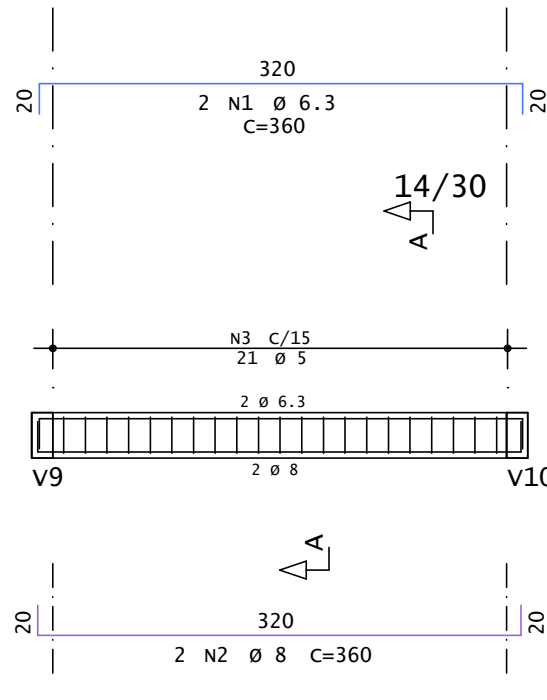


Corte A

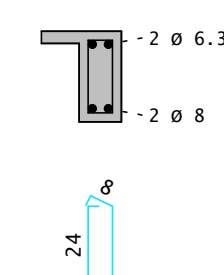


50 N3 Ø 5 C=79

v3

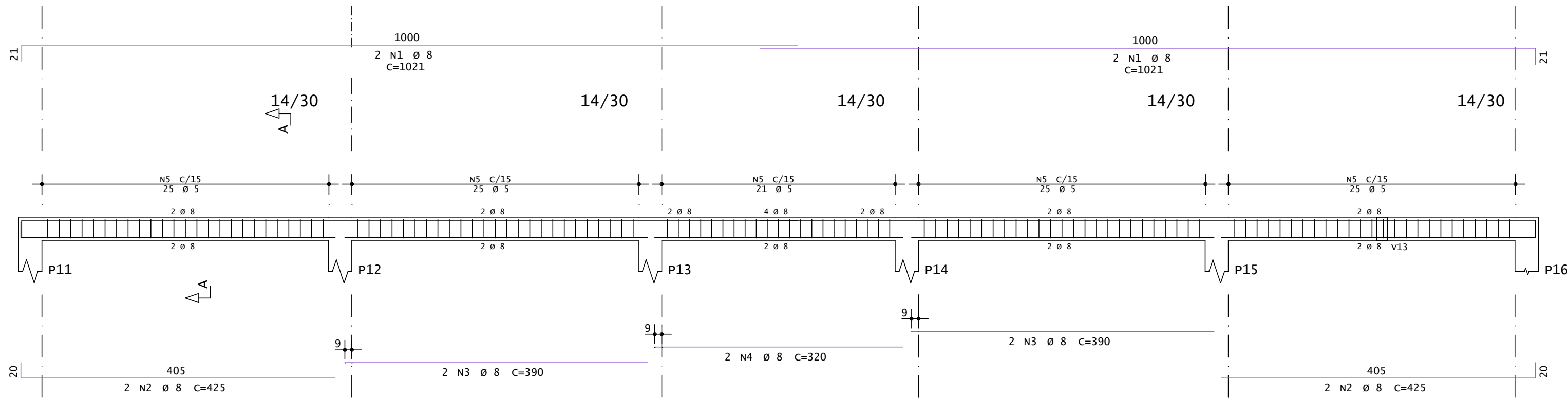


Corte A

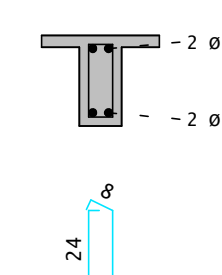


21 N3 Ø 5 C=79

v4

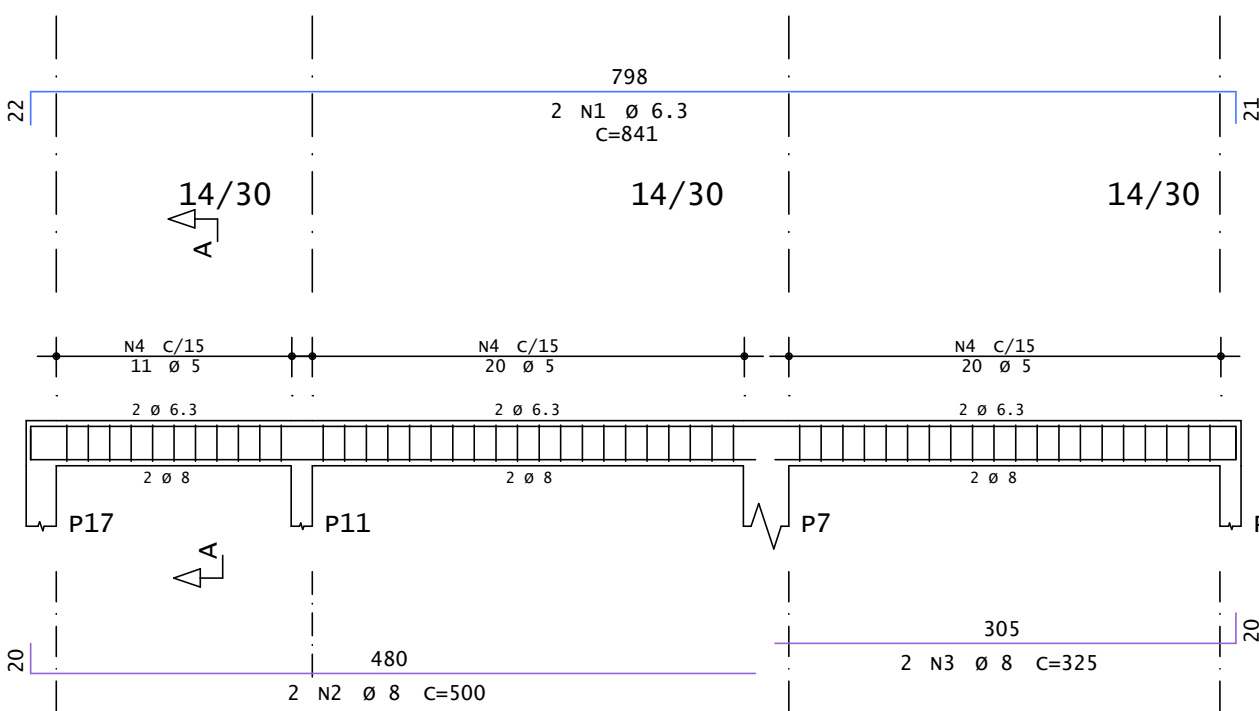


Corte A

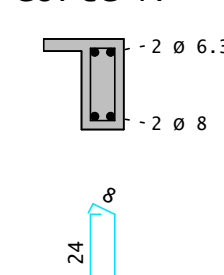


121 N5 Ø 5 C=79

v6

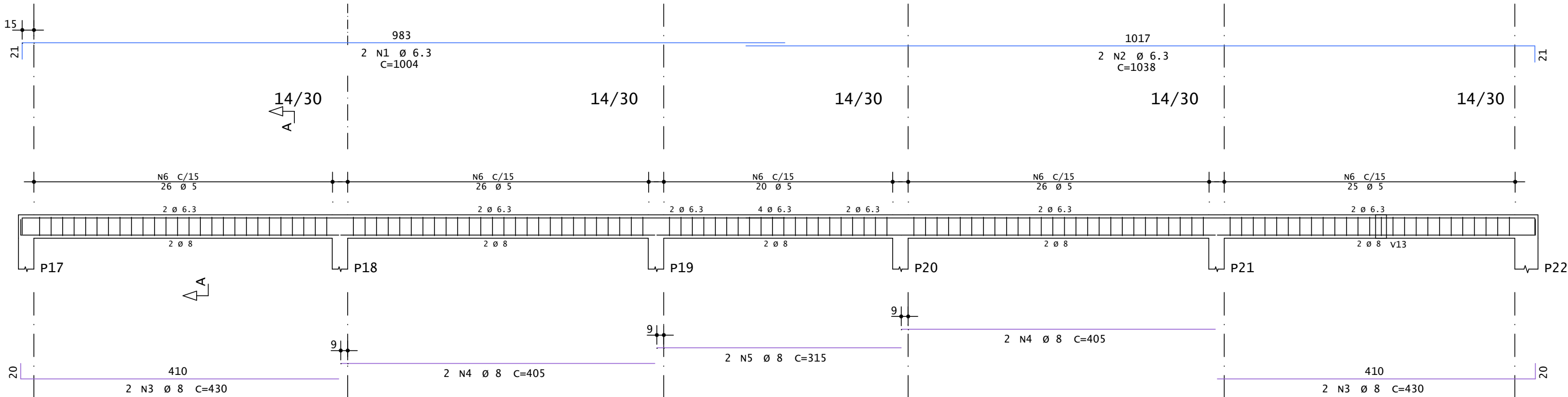


Corte A

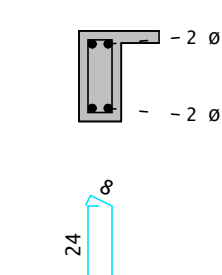


51 N4 Ø 5 C=79

v5



Corte A



123 N6 Ø 5 C=79

	AÇO	POS	BIT	QUANT	COMPRIMENTO	
					UNIT	TOTAL
			mm		cm	cm
V1	50A	1	6.3	2	863	1726
	50A	2	8	4	425	1700
	60A	3	5	50	79	3950
V2	50A	1	6.3	2	863	1726
	50A	2	8	4	425	1700
	60A	3	5	50	79	3950
V3	50A	1	6.3	2	360	720
	50A	2	8	2	360	720
	60A	3	5	21	79	1659
V4	50A	1	8	4	1021	4084
	50A	2	8	4	425	1700
	50A	3	8	4	390	1560
	50A	4	8	2	320	640
	60A	5	5	121	79	9559
V5	50A	1	6.3	2	1004	2008
	50A	2	6.3	2	1038	2076
	50A	3	8	4	430	1720
	50A	4	8	4	405	1620
	50A	5	8	2	315	630
	60A	6	5	123	79	9717
V6	50A	1	6.3	2	841	1682
	50A	2	8	2	500	1000
	50A	3	8	2	325	650
	60A	4	5	51	79	4029

RESUMO DE AÇO				
AÇO	BIT	COMPR	PESO	
	mm	m	m	kgf
60A	5	329		51
50A	6.3	99		24
50A	8	177		70
Peso Total			60A =	51 kgf
Peso Total			50A =	94 kgf



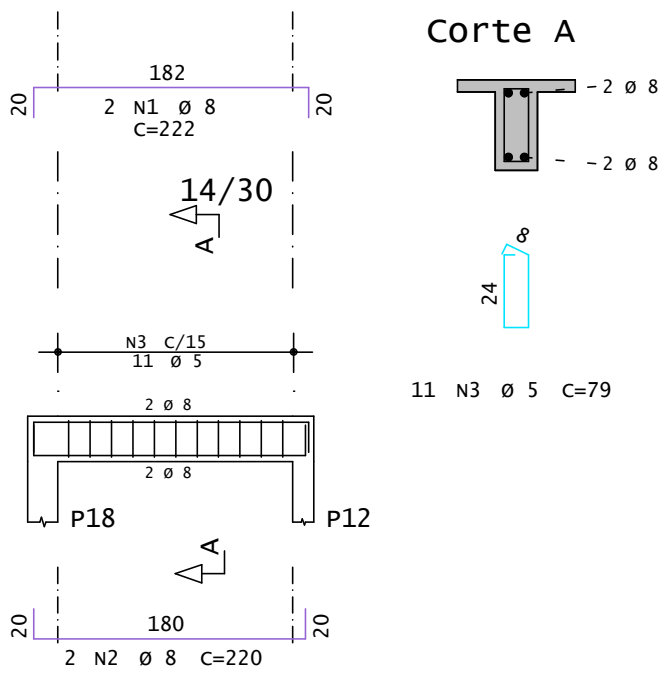
TÍTULO: PROJETO ESTRUTURAL  
CONSTRUÇÃO DE SALAS DE RECURSOS NO CMEI  
AUXILIADORA DE FATIMA FIALHO LIMA

PROPRIETÁRIO(A):  
  
VICENTE PATRÍCIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

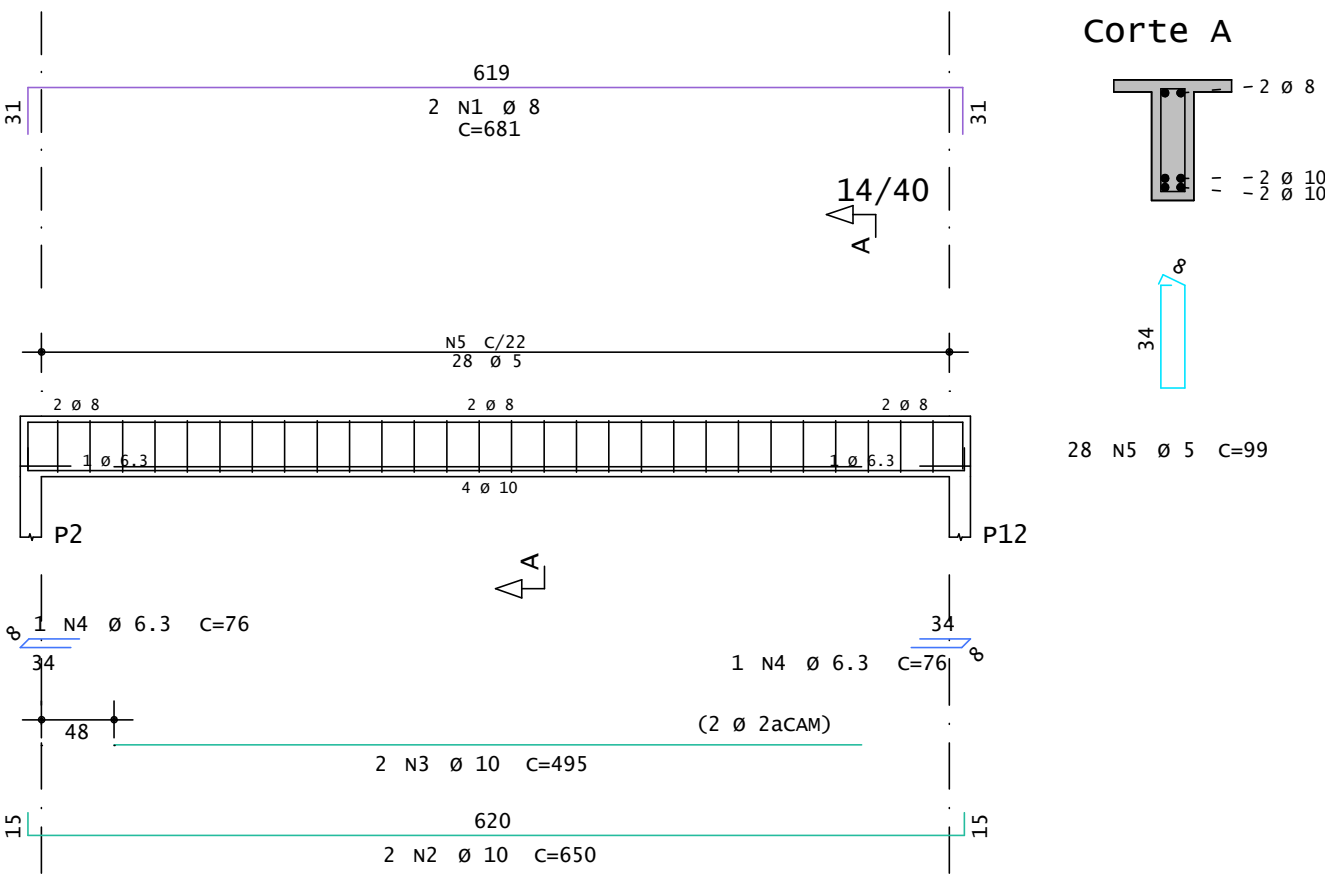
RESPONSÁVEL TÉCNICO(A):  
  
MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO fck = 25    MPa ECS = 24150   MPa			OBRA N. ° <b>0001</b>	
CLIENTE <i>Prefeitura Municipal de São Miguel do Anta/MG</i>			DES. N. ° <b>011</b>	
OBRA <i>Salas Cemei</i>			REV. N. ° <b>00</b>	
TÍTULO <i>Viga Pavimento Térreo</i>				
<b>v1 / v2 / v3 / v4 / v5 / v6</b>				
DATA 30/07/2025	ESCALA 1:50	DESENHO SAL-TER-VIG-011-R00	COORD.	ENG. °

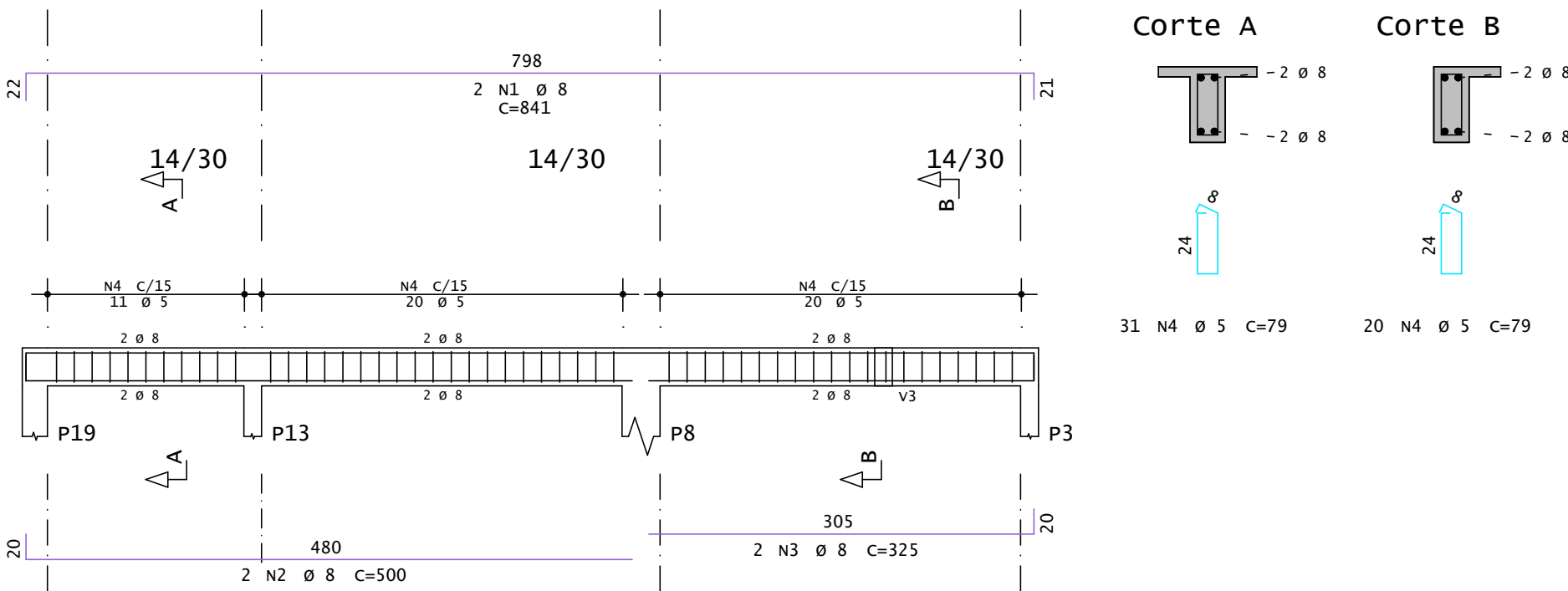
v7



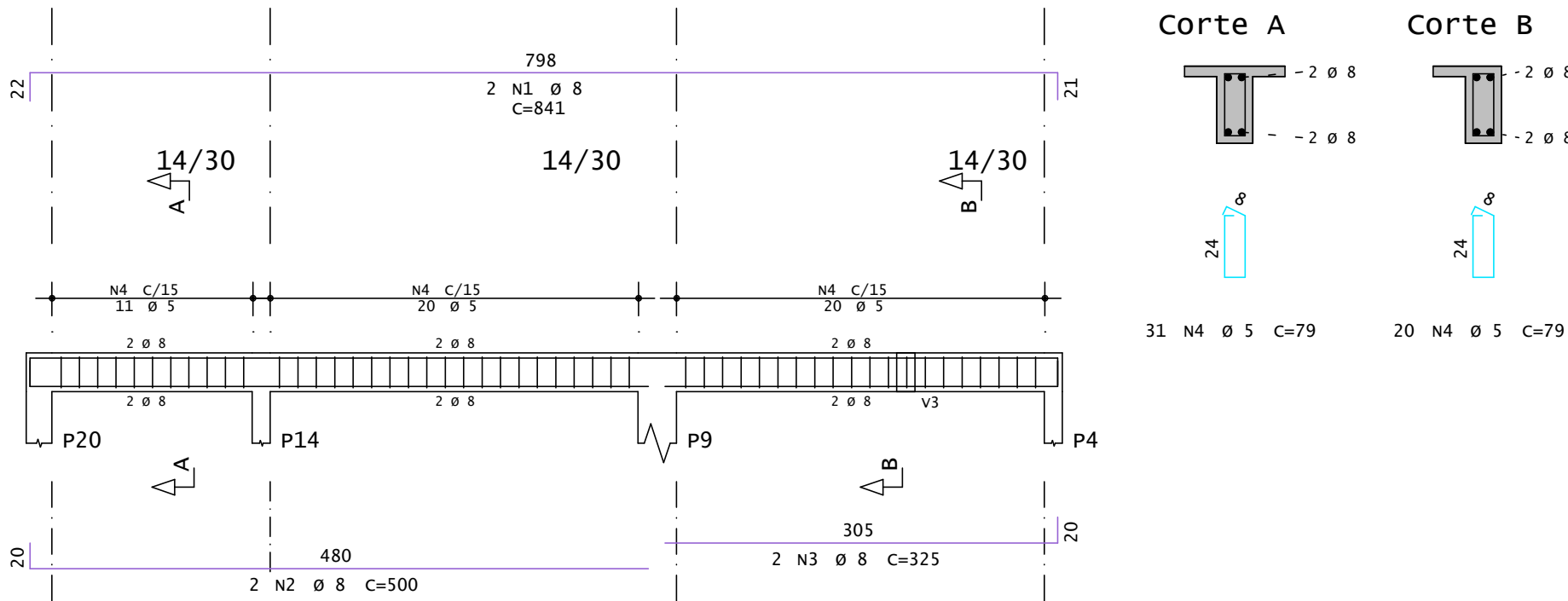
v8



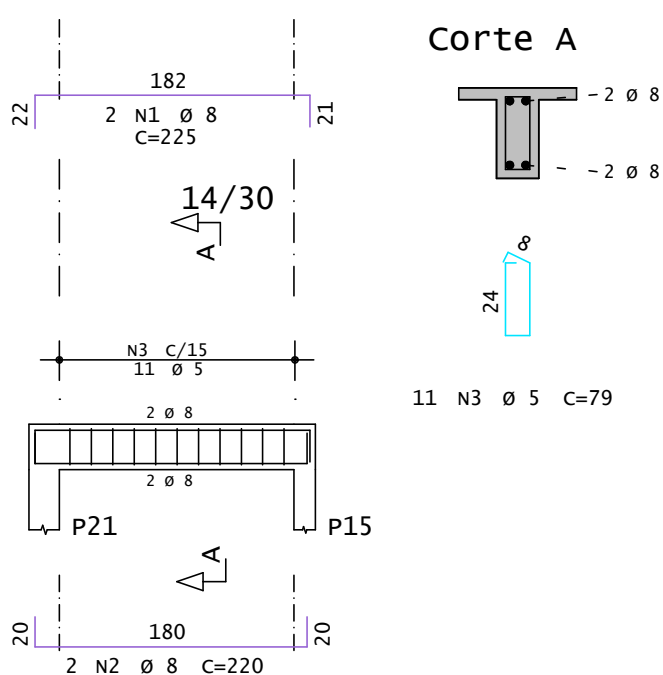
v9



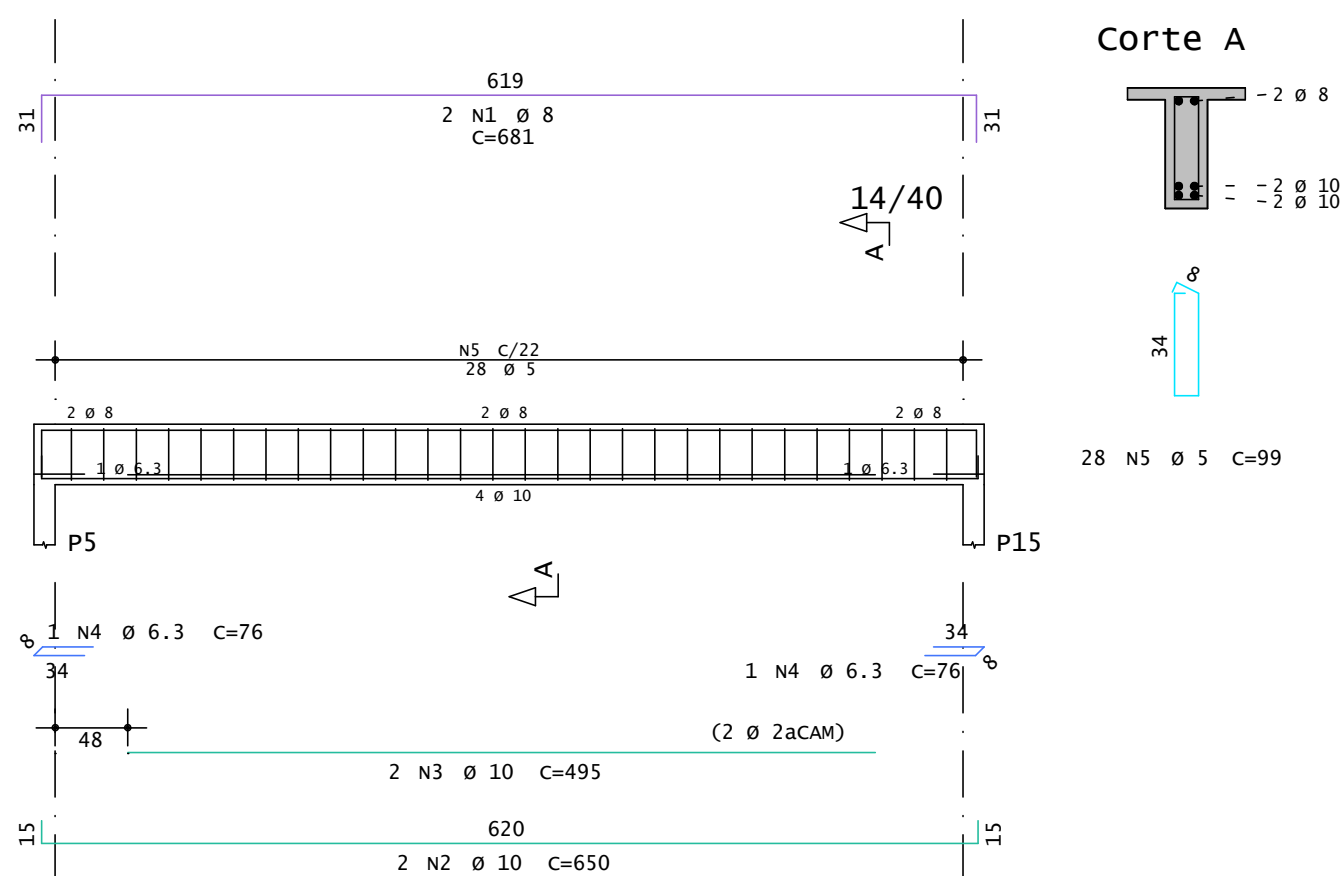
v10



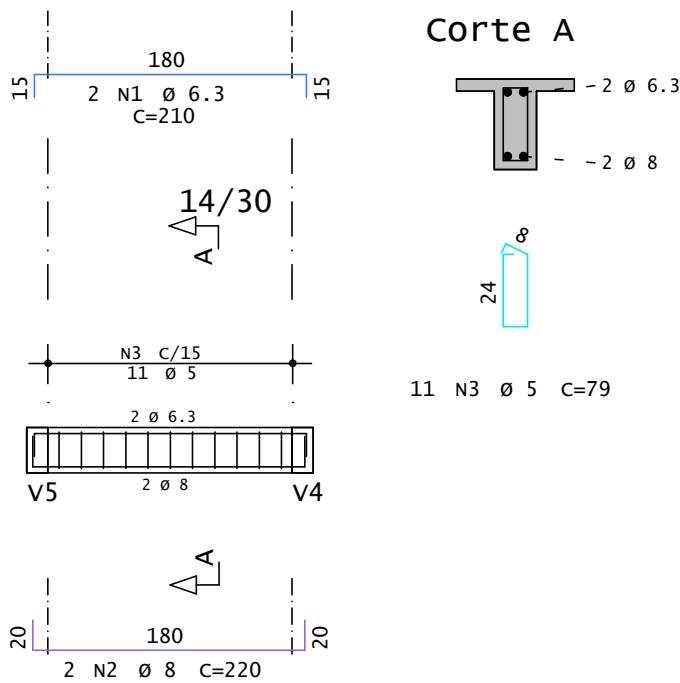
v11



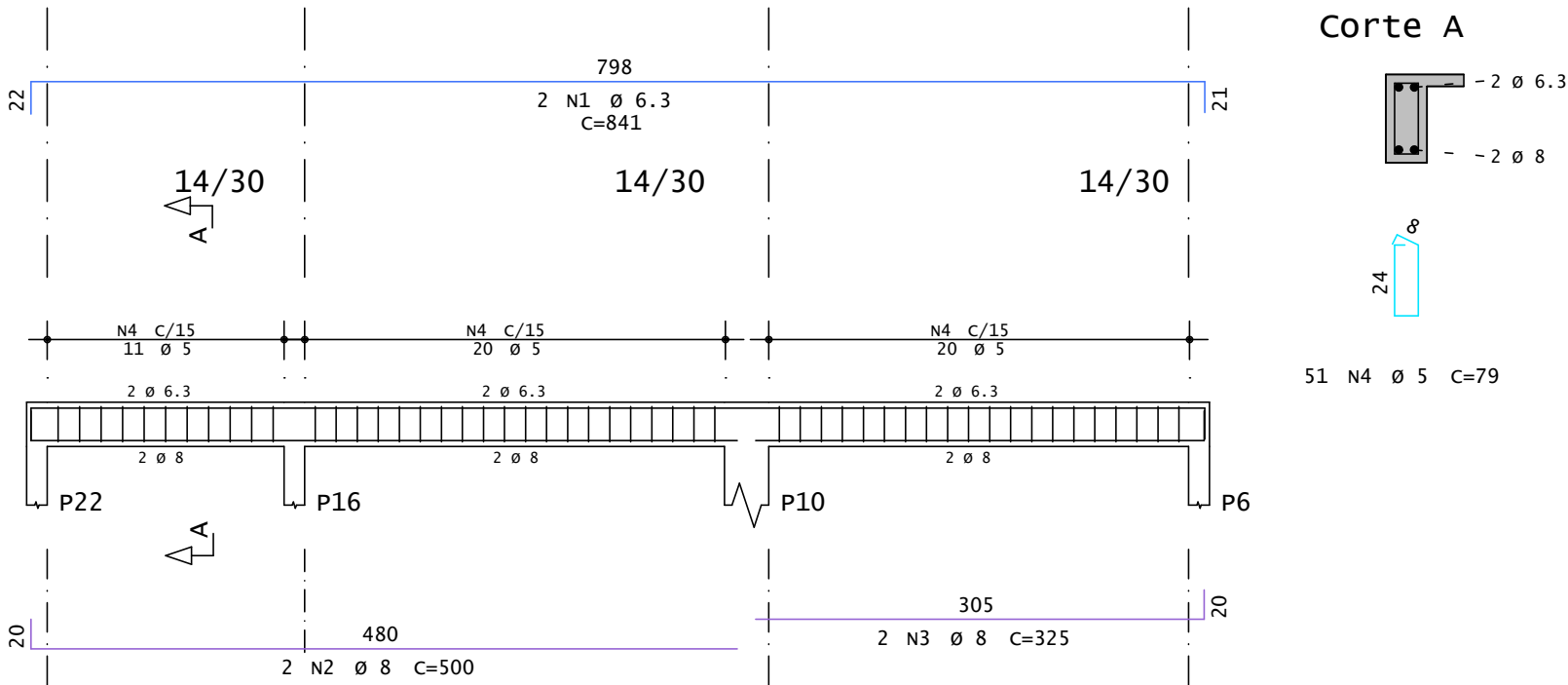
v12



v13



v14



	AÇO	POS	BIT	QUANT	COMPRIMENTO	
					UNIT	TOTAL
			mm		cm	cm
V7	50A	1	8	2	222	444
	50A	2	8	2	220	440
	60A	3	5	11	79	869
V8	50A	1	8	2	681	1362
	50A	2	10	2	650	1300
	50A	3	10	2	495	990
	50A	4	6.3	2	76	152
	60A	5	5	28	99	2772
V9	50A	1	8	2	841	1682
	50A	2	8	2	500	1000
	50A	3	8	2	325	650
	60A	4	5	51	79	4029
V10	50A	1	8	2	841	1682
	50A	2	8	2	500	1000
	50A	3	8	2	325	650
	60A	4	5	51	79	4029
V11	50A	1	8	2	225	450
	50A	2	8	2	220	440
	60A	3	5	11	79	869
V12	50A	1	8	2	681	1362
	50A	2	10	2	650	1300
	50A	3	10	2	495	990
	50A	4	6.3	2	76	152
	60A	5	5	28	99	2772
V13	50A	1	6.3	2	210	420
	50A	2	8	2	220	440
	60A	3	5	11	79	869
V14	50A	1	6.3	2	841	1682
	50A	2	8	2	500	1000
	50A	3	8	2	325	650
	60A	4	5	51	79	4029

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	202	31
50A	6.3	24	6
50A	8	133	52
50A	10	46	28
Peso Total		60A =	31 kgf
Peso Total		50A =	86 kgf



TÍTULO PROJETO ESTRUTURAL  
CONSTRUÇÃO DE SALAS DE RECURSOS NO CMEI  
AUXILIADORA DE FATIMA FIALHO LIMA

PROPRIETÁRIO(A):  
  
VICENTE PATRICIO DE SOUZA JUNIOR  
Prefeito Municipal  
Município de São Miguel do Anta/MG

RESPONSÁVEL TÉCNICO(A):  
  
MARCO AURÉLIO FERRAREZI AVELAR  
Engenheiro Civil - CREA/MG 213.217/D

CONCRETO  
fck = 25 MPa  
ECS = 24150 MPa

CLIENTE  
Prefeitura Municipal de São Miguel do Anta

OBRA  
Salas Cemei

TÍTULO  
Viga Pavimento Térreo

v7 / v8 / v9 / v10 / v11 / v12 / v13 / v14

OBRA: N.º  
0001

DES. N.º  
012

REV. N.º  
00

DATA  
30/07/2025

ESCALA  
1:50

DESENHO  
SAL-TER-VIG-012-R00

COORD.

ENG. N.º