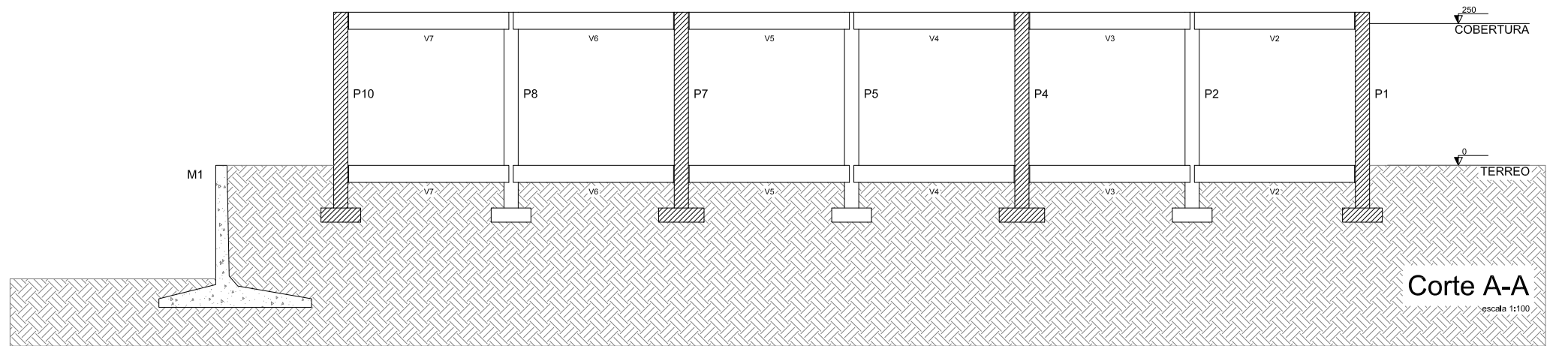


Planta de localização

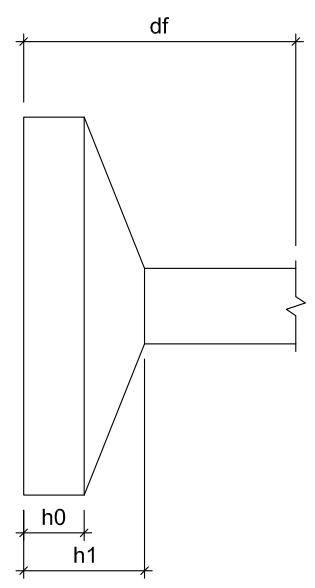
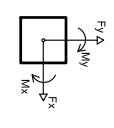
escala 1:100



Corte A-A

escala 1:100

Nome	Seção (cm)	X (cm)	Y (cm)	Pilar	
				Carga Máx. (tf)	Carga Min. (tf)
P1	C25	400.00	1900.00	5.9	4.7
P2	C25	100.00	1600.00	5.9	4.2
P3	C25	700.00	1600.00	5.9	4.2
P4	C25	400.00	1300.00	10.5	8.2
P5	C25	100.00	1000.00	5.6	4.0
P6	C25	700.00	1000.00	5.6	4.0
P7	C25	400.00	700.00	10.5	8.2
P8	C25	100.00	400.00	5.9	4.2
P9	C25	700.00	400.00	5.9	4.2
P10	C25	400.00	100.00	5.9	4.7



ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES				
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	PLANTA DE LOCAÇÃO - MONUMENTO CENTRAL						

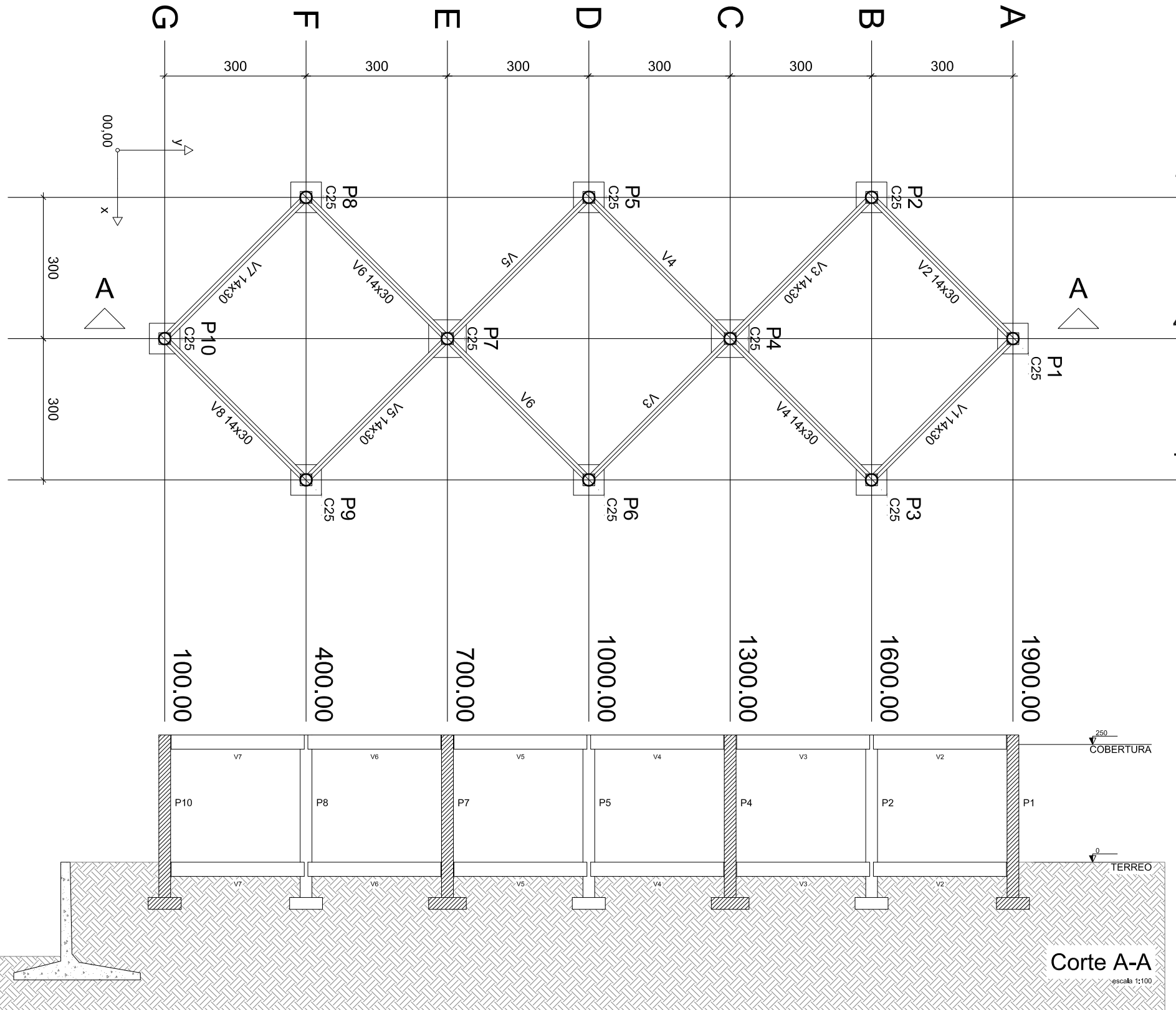


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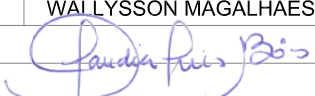
01-13

Forma do pavimento 1 2 3 TERRÇO

escala 1:100



ESTRUTURA

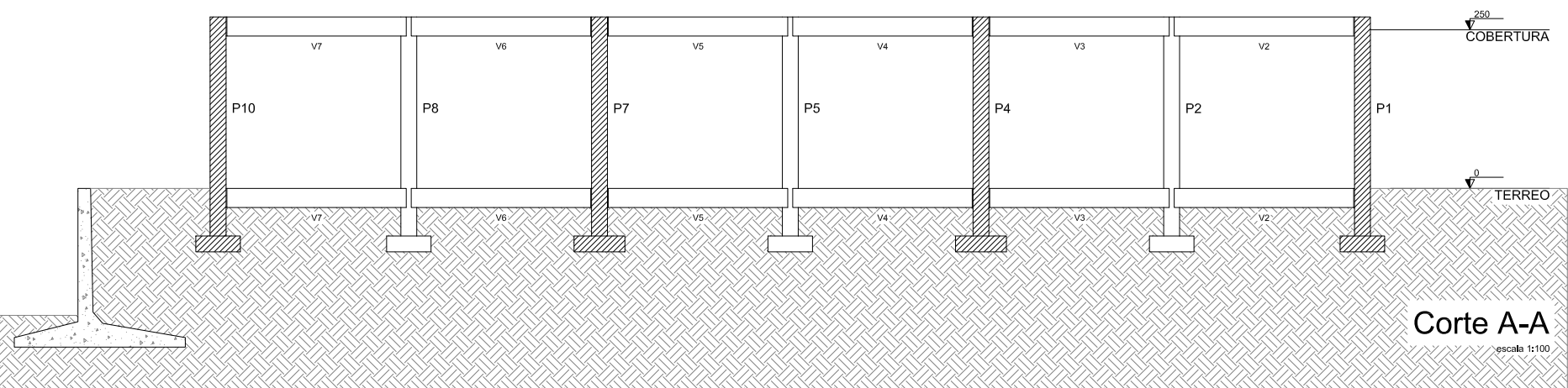
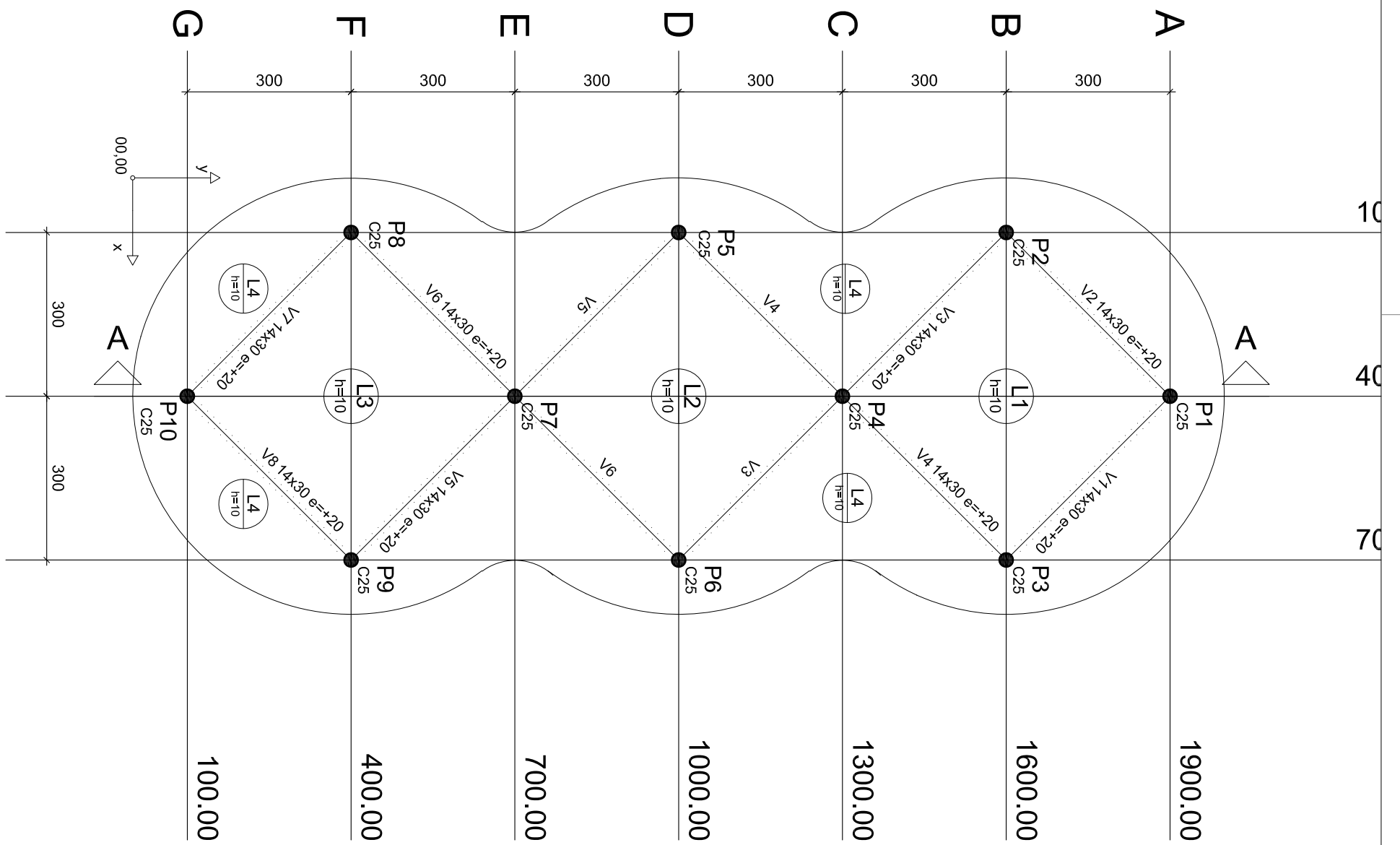
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 Cláudia Villas Boas Eng.º Civil CREA-CE 14365-D			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	FORMA DO TÉRREO - MONUMENTO CENTRAL						

02-13



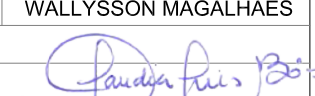
Forma do pavimento 1 COBERTURA 3

escala 1:100



Corte A-A
escala 1:100

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 03-13			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	FORMA DA COBERTURA - MONUMENTO CENTRAL						



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S1=S2=S3=S5=S6=S8=S9=S10
 PLANTA
 ESC 1:25

CORTE
 ESC 1:25

8xS1

2xS4

Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	130	69	8970
CA50	2	6.3	112	94	10528
	3	6.3	36	109	3924
	4	10.0	68	206	14008

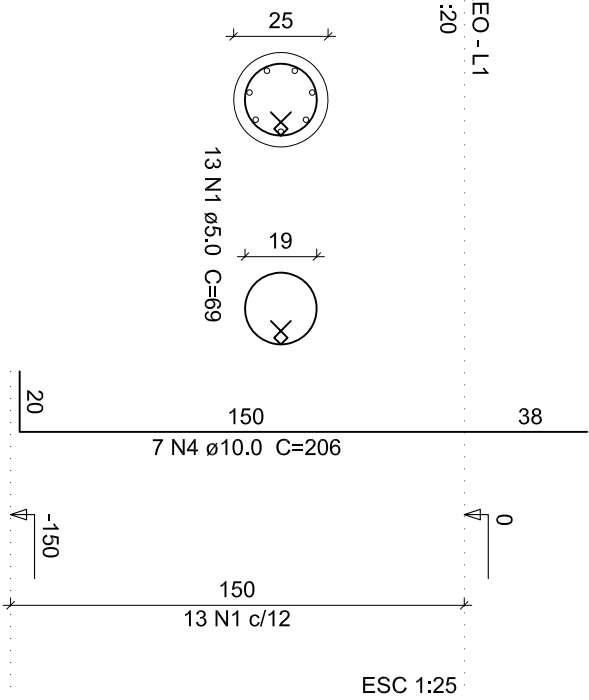
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	144.6	38.9
CA60	10.0	140.1	95
PESO TOTAL (kg)	5.0	89.7	15.2
CA50		133.9	
CA60		15.2	

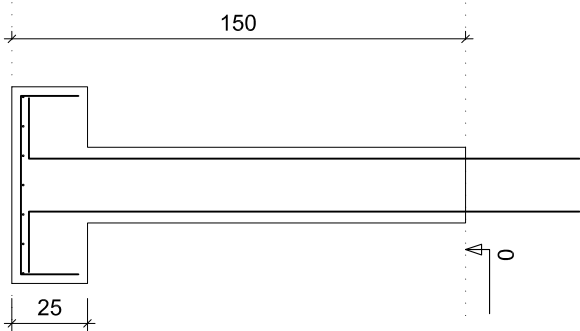
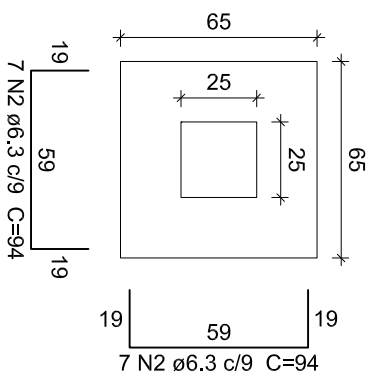
Volume de concreto (C-25) = 1.9 m³
 Área de forma = 18.58 m²

P1=P2=P3=P5=P6=P8=P9=P10

TERREO - L1
 ESC 1:20



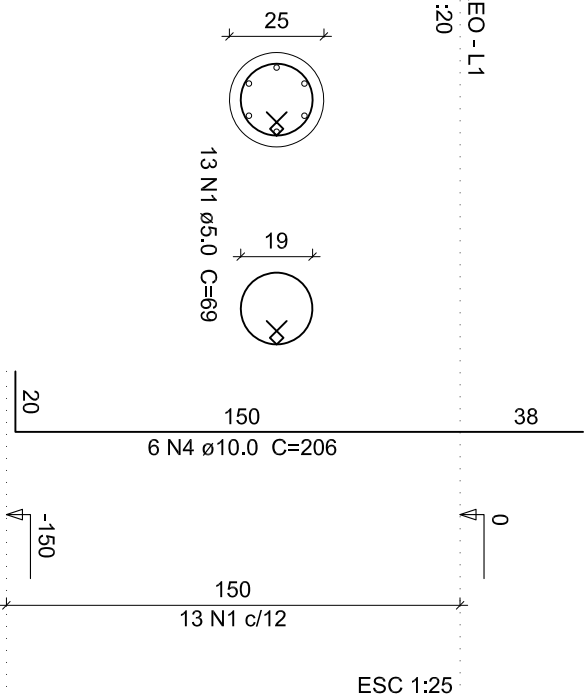
ESC 1:25



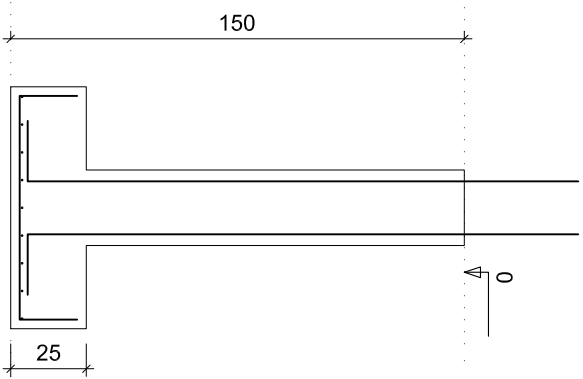
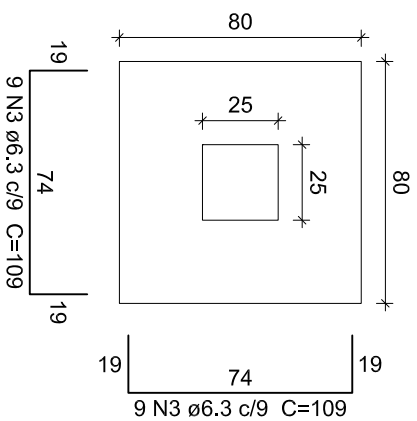
8xS1
 2xS4

P4=P7

TERREO - L1
 ESC 1:20



ESC 1:25



S4=S7
 PLANTA
 ESC 1:25

CORTE
 ESC 1:25

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ		
CONTEÚDO	FUNDAÇÕES - MONUMENTO CENTRAL		

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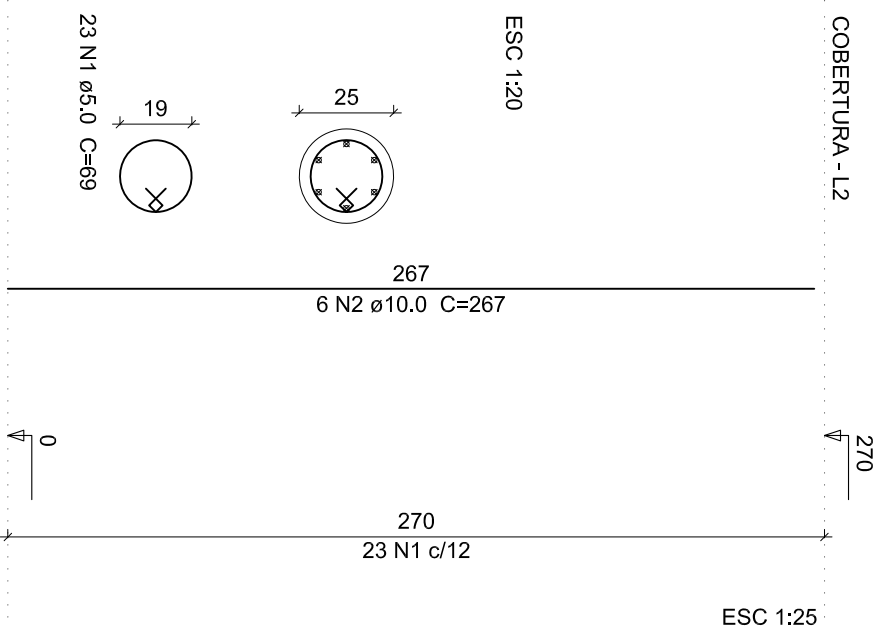
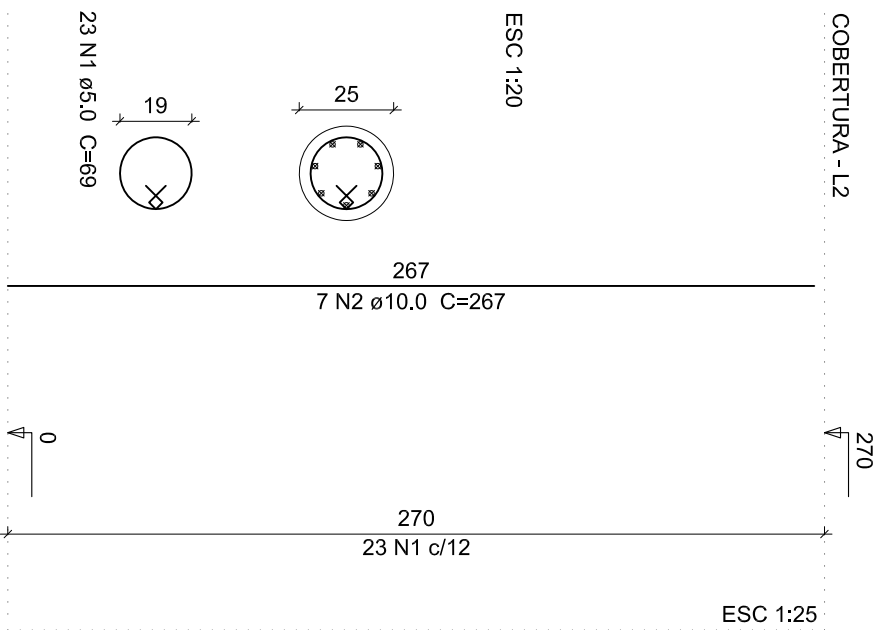
DATA MAIO/18 ESCALA INDICADA

04-13



P1=P2=P3=P5=P6=P8=P9=P10

P4=P7



Relação do aço

8xP1

2xP4

AÇO	N	DIAM (mm)	C.TOTAL (m)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	181.6	230	69	15870
CA50	2	10.0	158.7	68	267	18156

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	181.6	123.1
CA60	5.0	158.7	26.9
PESO TOTAL (kg)			123.1
CA50	123.1		
CA60	26.9		

Volume de concreto (C-25) = 1.33 m³
 Área de forma = 21.21 m²

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ		
CONTEÚDO	ARMAÇÃO DOS PILARES - MONUMENTO CENTRAL		

DATA MAIO/18 ESCALA INDICADA

05-13

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Relação do aço

ÁÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	216	80	17280
CA50	2	8.0	4	444	1776
CA50	3	8.0	12	869	10428
CA60	4	10.0	4	444	1776

Resumo do aço

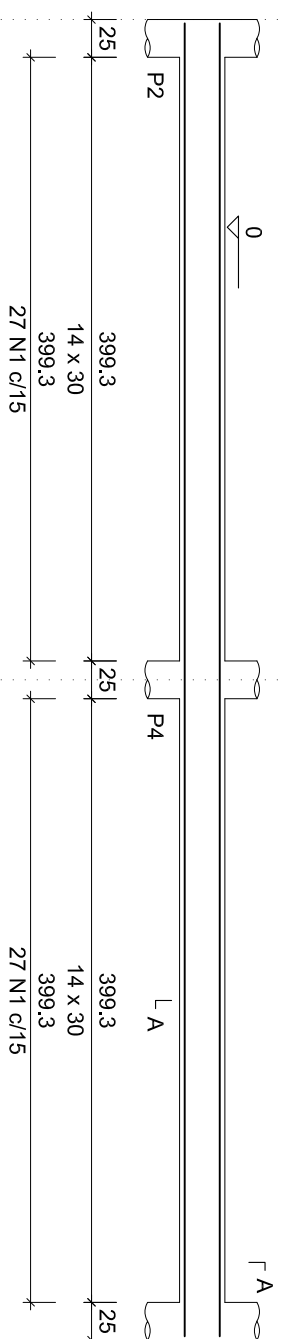
ÁÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	122.1	53
CA50	10.0	17.8	12
CA60	5.0	172.8	29.3
PESO TOTAL (kg)			94
CA50			65
CA60			29.3

Volume de concreto (C-25) = 1,48 m³
Área de forma = 26,04 m²

V3

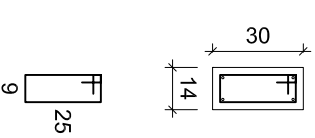
ESC 1:50

2 N3 ø8.0 C=869 (1c)



SEÇÃO A-A

ESC 1:25

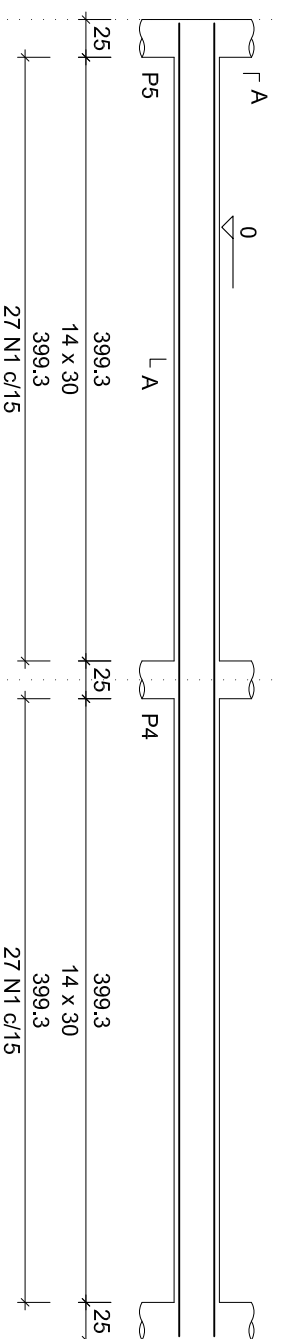


54 N1 ø5.0 C=80

V4

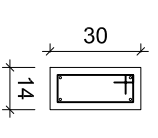
ESC 1:50

2 N3 ø8.0 C=869 (1c)



SEÇÃO A-A

ESC 1:25

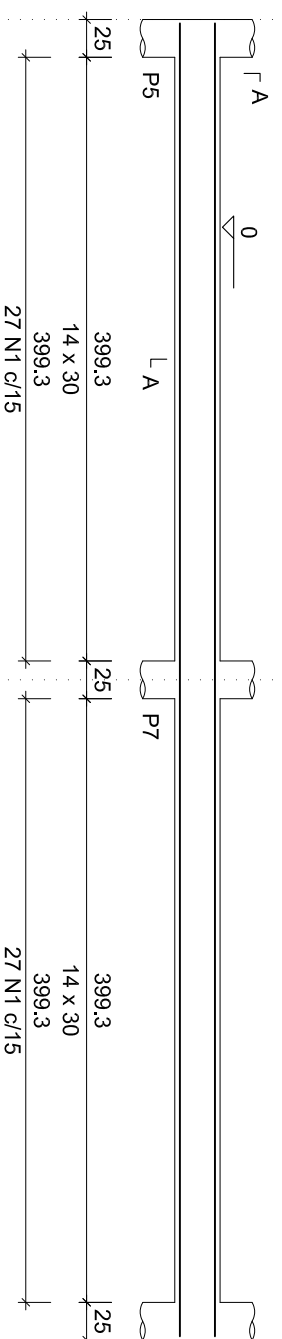


54 N1 ø5.0 C=80

V5

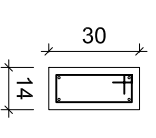
ESC 1:50

2 N3 ø8.0 C=869 (1c)



SEÇÃO A-A

ESC 1:25



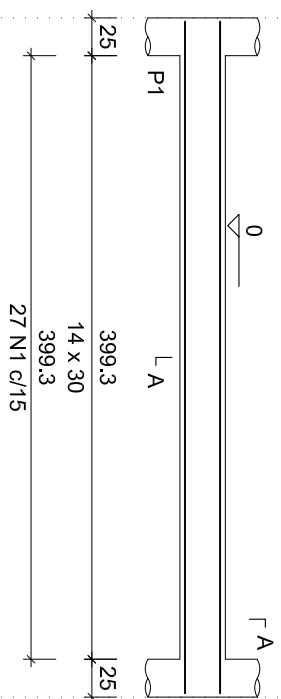
54 N1 ø5.0 C=80

V1 V2 V3
V4 V5

V1

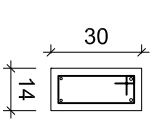
ESC 1:50

2 N4 ø10.0 C=444 (1c)



SEÇÃO A-A

ESC 1:25

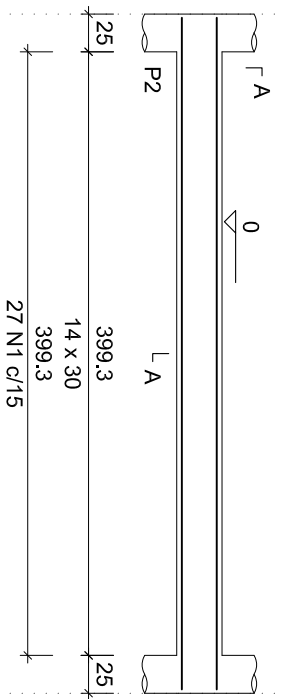


27 N1 ø5.0 C=80

V2

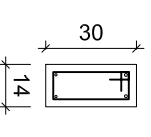
ESC 1:50

2 N4 ø10.0 C=444 (1c)



SEÇÃO A-A

ESC 1:25



27 N1 ø5.0 C=80

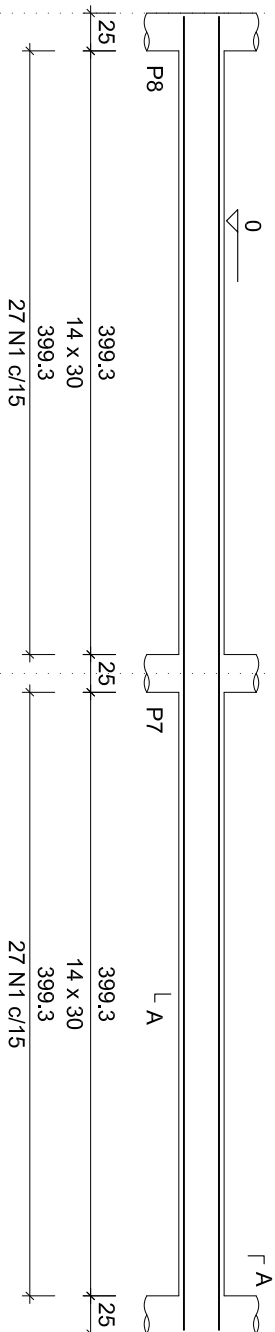
ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	<p style="margin: 0;">06-13</p>			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS DO TÉRREO 01 - MONUMENTO CENTRAL						

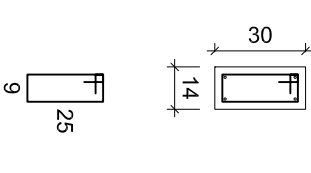
V6

ESC 1:50

2 N2 ø8,0 C=869 (1c)



SEÇÃO A-A
ESC 1:25



54 N1 ø5,0 C=80

Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	108	80	8640
CA50	2	8,0	4	869	3476
CA50	3	8,0	4	444	1776
CA60	4	10,0	4	444	1776

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8,0	52,6	22,8
CA50	10,0	17,8	12
CA60	5,0	86,4	14,6
PESO TOTAL (kg)			
CA50			34,8
CA60			14,6

Volume de concreto (C-25) = 0,74 m³
Área de forma = 13,11 m²

V6

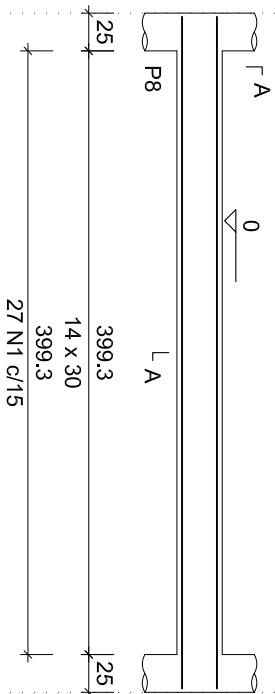
V7

V8

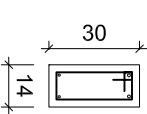
V7

ESC 1:50

2 N4 ø10,0 C=444 (1c)



SEÇÃO A-A
ESC 1:25



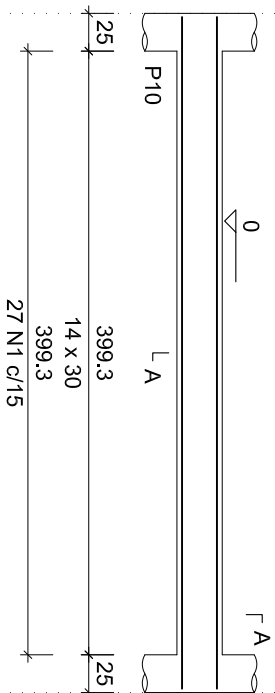
2 N3 ø8,0 C=444 (1c)

27 N1 ø5,0 C=80

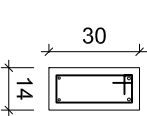
V8

ESC 1:50

2 N4 ø10,0 C=444 (1c)



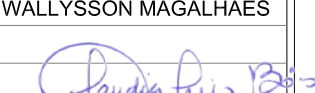
SEÇÃO A-A
ESC 1:25



2 N3 ø8,0 C=444 (1c)

27 N1 ø5,0 C=80

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 07-13			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS DO TÉRREO 02 - MONUMENTO CENTRAL						



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Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	216	80	17280
CA50	2	8,0	2	264	528
CA50	3	8,0	4	460	1840
	4	8,0	6	869	5214
	5	10,0	4	510	2040
	6	10,0	3	250	750
	7	10,0	6	922	5532

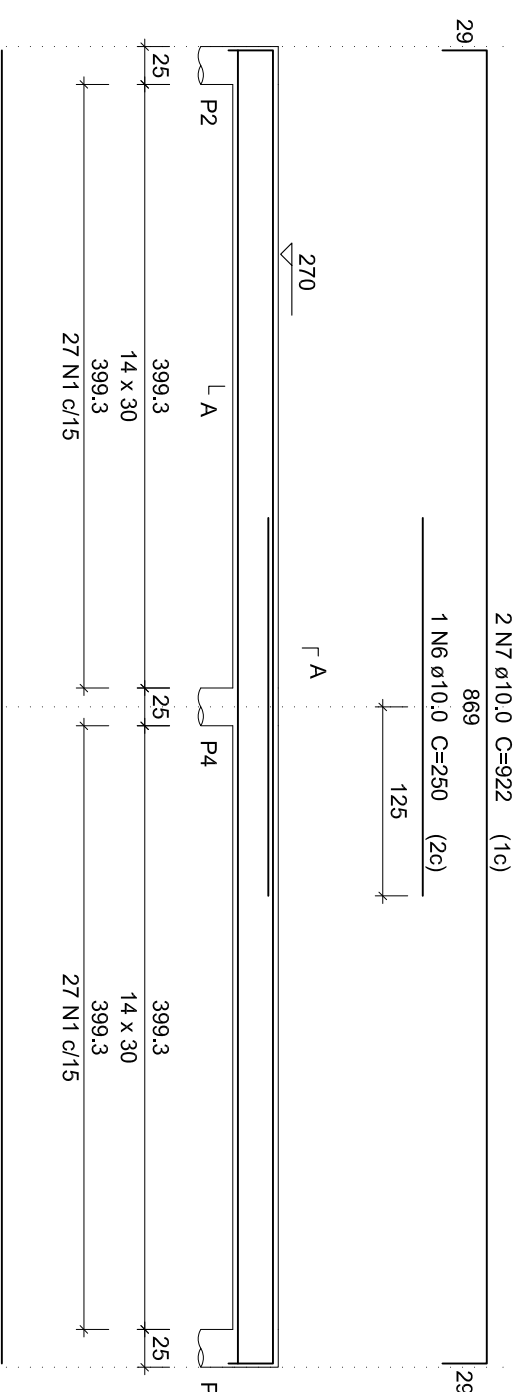
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8,0	75,9	32,9
CA50	10,0	83,3	56,4
CA60	5,0	172,8	29,3
PESO TOTAL (kg)			
CA50	89,3		
CA60	29,3		

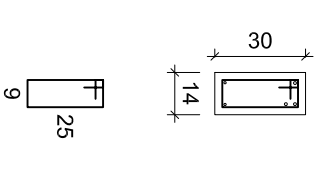
Volume de concreto (C-25) = 1,48 m³
 Área de forma = 26,04 m²

V3

ESC 1:50



SEÇÃO A-A
ESC 1:25



54 N1 ø5,0 C=80

V1 V2 V3
V4 V5

CA50	89,3
CA60	29,3

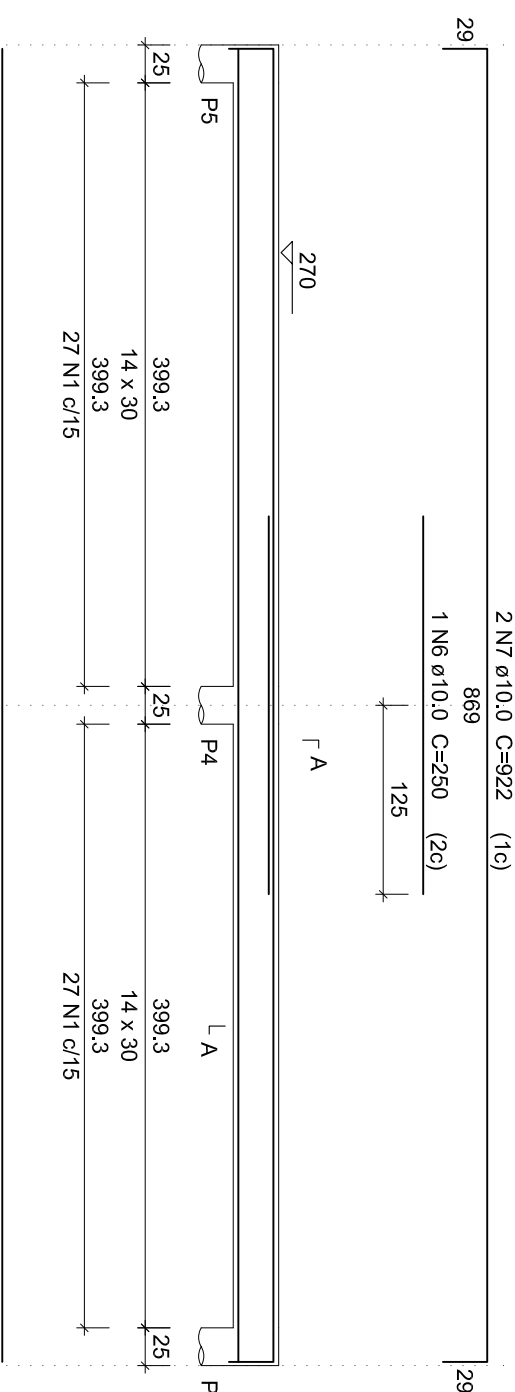
CA50	32,9
CA60	29,3

CA50	56,4
CA60	29,3

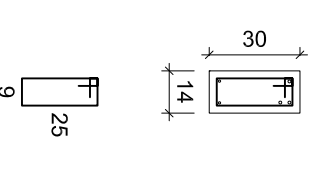
CA50	56,4
CA60	29,3

V4

ESC 1:50



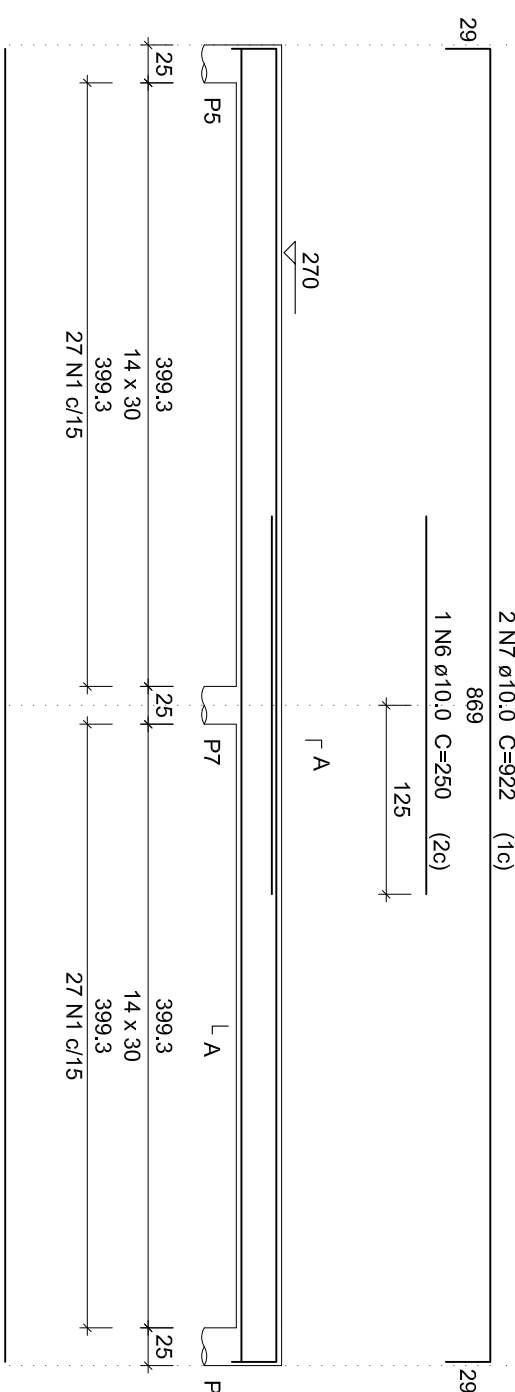
SEÇÃO A-A
ESC 1:25



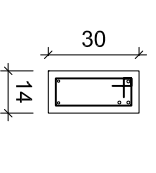
54 N1 ø5,0 C=80

V5

ESC 1:50



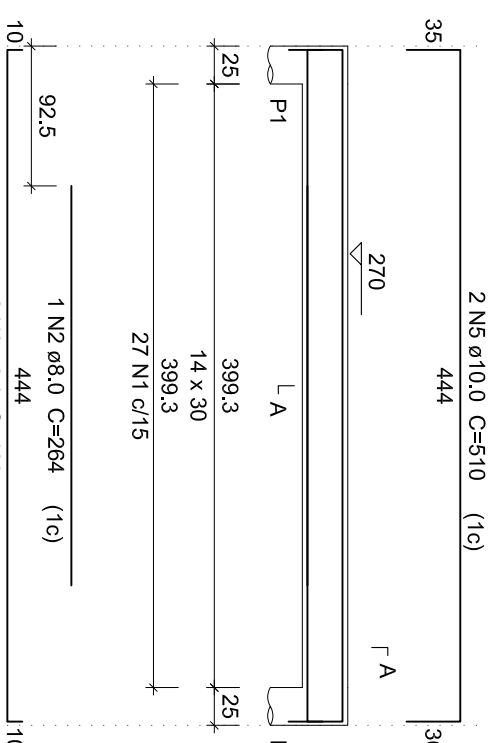
SEÇÃO A-A
ESC 1:25



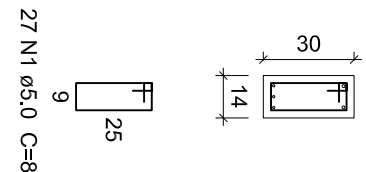
54 N1 ø5,0 C=80

V1

ESC 1:50



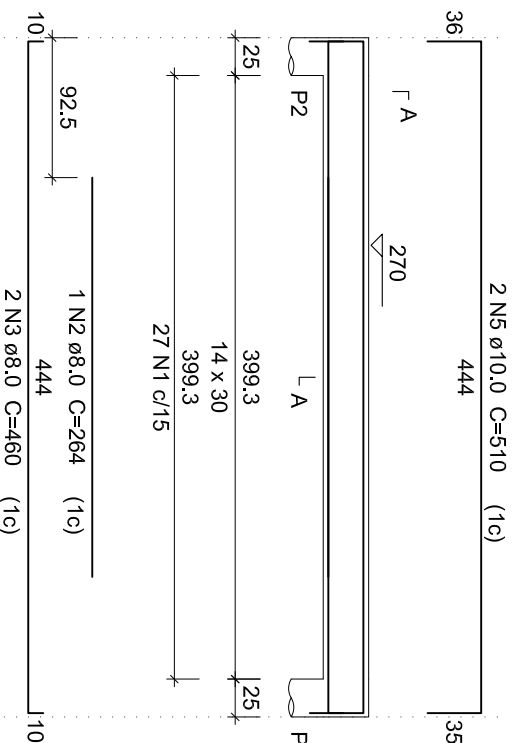
SEÇÃO A-A
ESC 1:25



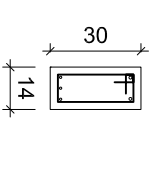
27 N1 ø5,0 C=80

V2

ESC 1:50

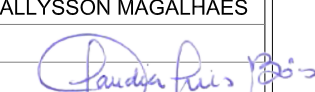


SEÇÃO A-A
ESC 1:25



27 N1 ø5,0 C=80

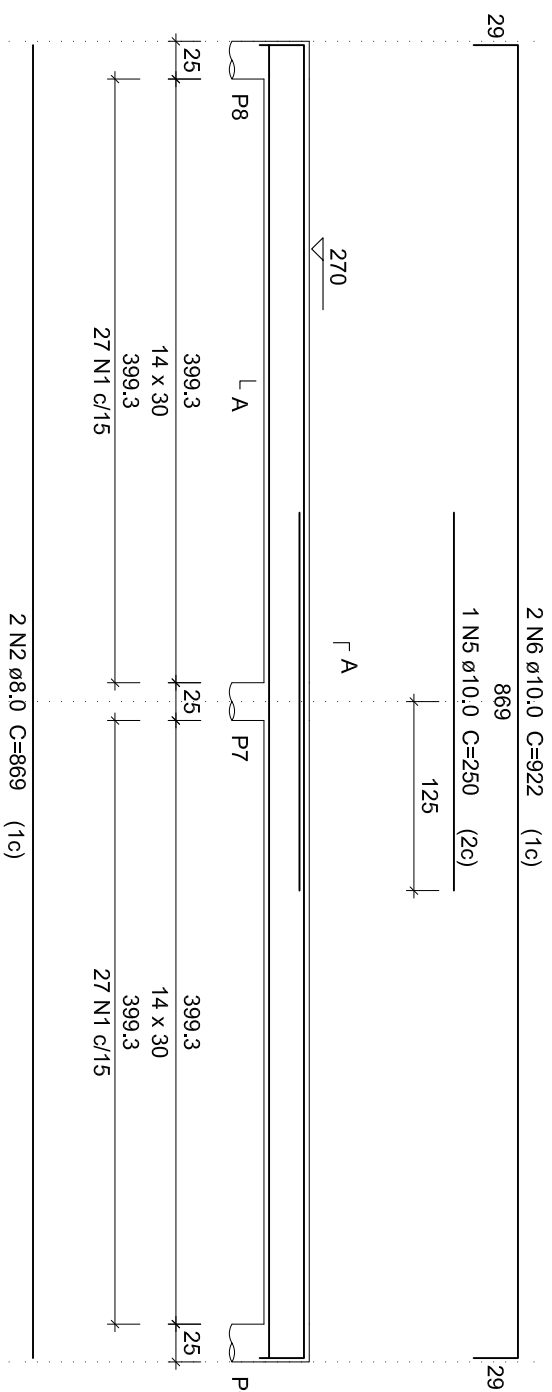
ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 <h1 style="font-size: 48px; margin: 0;">08-13</h1>			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS DA COBERTURA 01 - MONUMENTO CENTRAL						



V6

ESC 1:50



2 N6 Ø10.0 C=922 (1c)

869

1 N5 Ø10.0 C=250 (2c)

125

270

Γ A

P8

L A

25

399.3

14 x 30

399.3

27 N1 c/15

P7

399.3

25

14 x 30

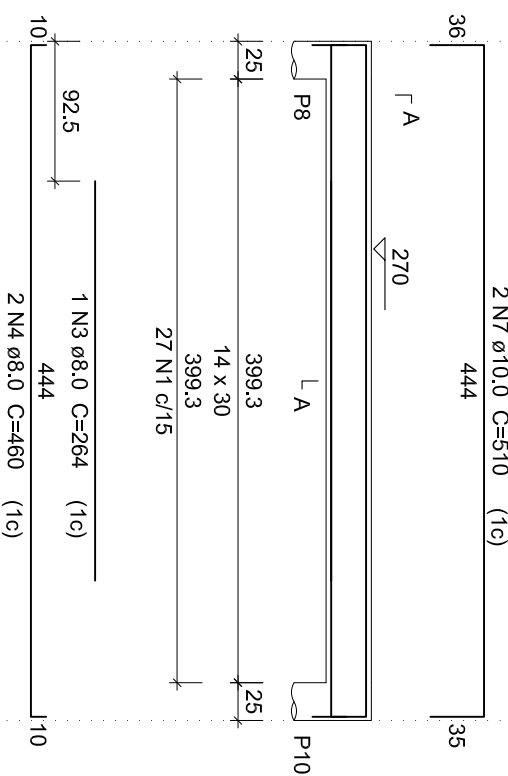
399.3

27 N1 c/15

2 N2 Ø8.0 C=869 (1c)

V7

ESC 1:50



2 N7 Ø10.0 C=510 (1c)

444

270

Γ A

P8

L A

25

399.3

14 x 30

399.3

27 N1 c/15

P10

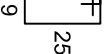
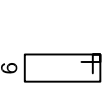
35

25

14 x 30

399.3

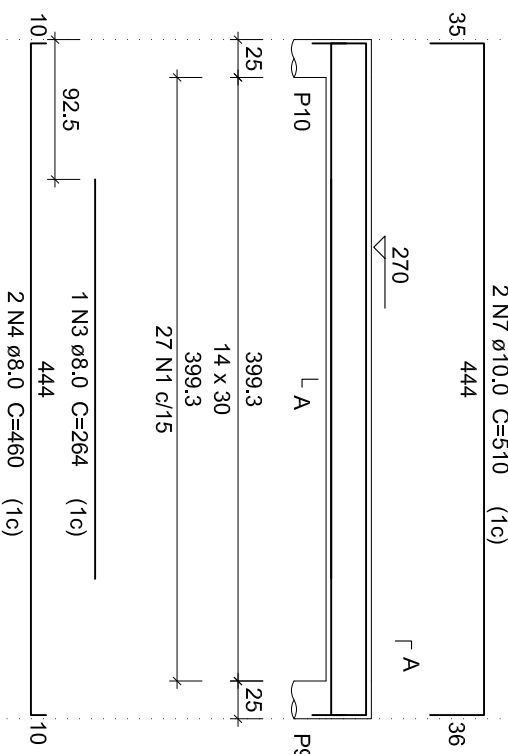
27 N1 Ø5.0 C=80



SEÇÃO A-A
ESC 1:25

V8

ESC 1:50



2 N7 Ø10.0 C=510 (1c)

444

270

Γ A

P10

L A

25

399.3

14 x 30

399.3

27 N1 c/15

P9

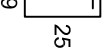
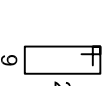
36

25

14 x 30

399.3

27 N1 Ø5.0 C=80



SEÇÃO A-A
ESC 1:25

Relação do aço

V6

V7

V8

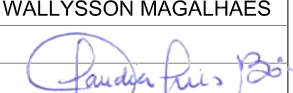
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	108	80	8640
CA50	2	8.0	2	869	1738
	3	8.0	2	264	528
	4	8.0	4	460	1840
	5	10.0	1	250	250
	6	10.0	2	922	1844
	7	10.0	4	510	2040

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	41.1	17.8
CA60	10.0	41.4	28
PESO TOTAL (kg)	5.0	86.4	14.6
CA50	45.9		
CA60	14.6		

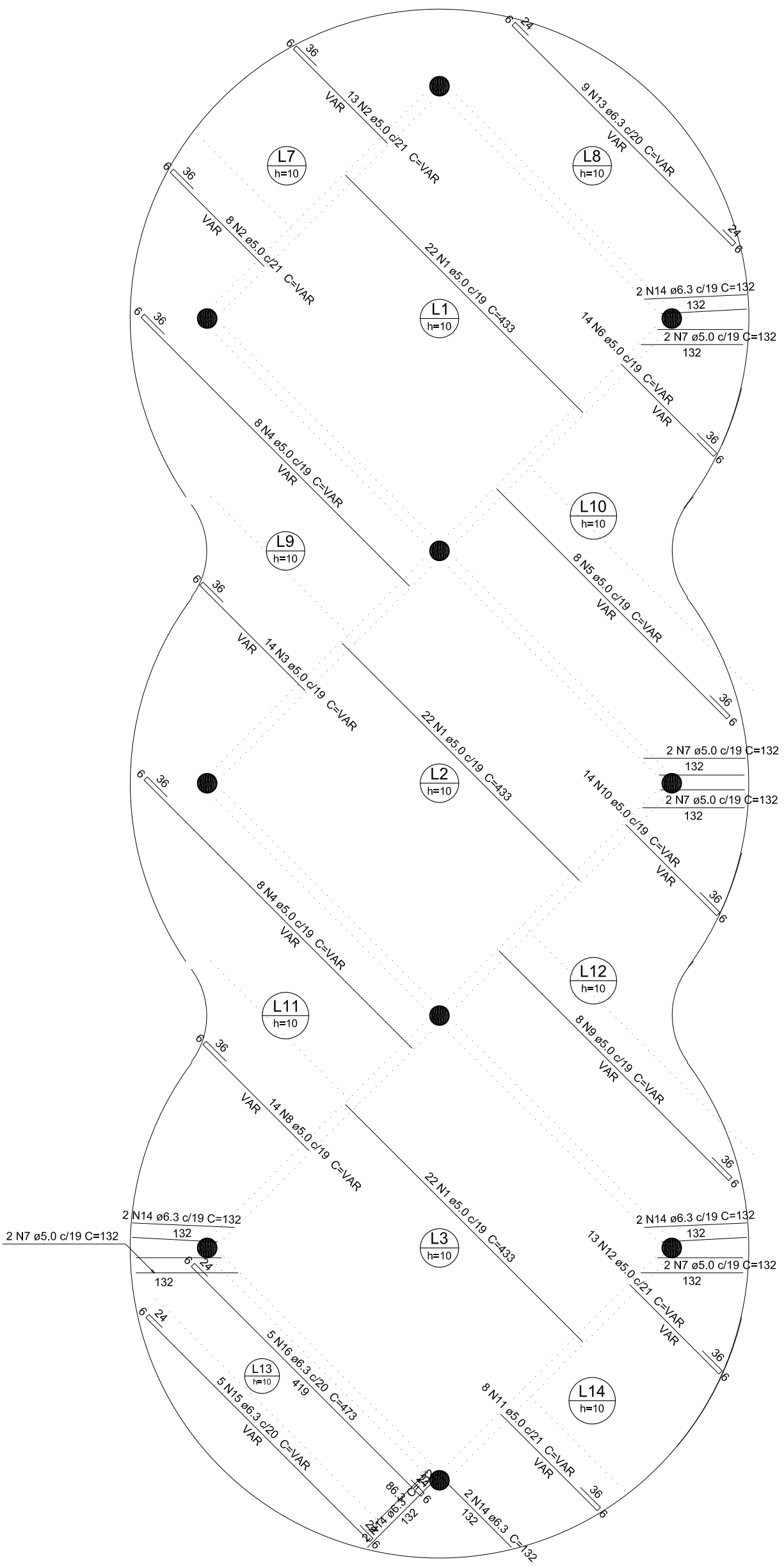
Volume de concreto (C-25) = 0,74 m³
Área de forma = 13,11 m²

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 <h1 style="font-size: 2em;">09-13</h1>			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS DA COBERTURA 01 - MONUMENTO CENTRAL						

Cláudia Villas Boas
Engª Civil
CREA-CE 14365-D





Armação positiva das lajes do pavimento COBERTURA (Eixo X)

escala 1:62,5

Relação do aço

Positivos X

ACO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	66	4,33	28578
	2	5,0	21	VAR	VAR
	3	5,0	14	VAR	VAR
	4	5,0	16	VAR	VAR
	5	5,0	8	VAR	VAR
	6	5,0	14	VAR	VAR
	7	5,0	10	VAR	VAR
	8	5,0	14	VAR	VAR
	9	5,0	8	VAR	VAR
	10	5,0	14	VAR	VAR
	11	5,0	8	VAR	VAR
	12	5,0	13	VAR	VAR
	13	6,3	9	VAR	VAR
	14	6,3	10	VAR	VAR
	15	6,3	5	VAR	VAR
	16	6,3	5	VAR	2365

Resumo do aço			
ACO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6,3	101,1	27,2
CA60	5,0	658,6	111,7
PESO TOTAL (kg)			
CA50		27,2	
CA60		111,7	

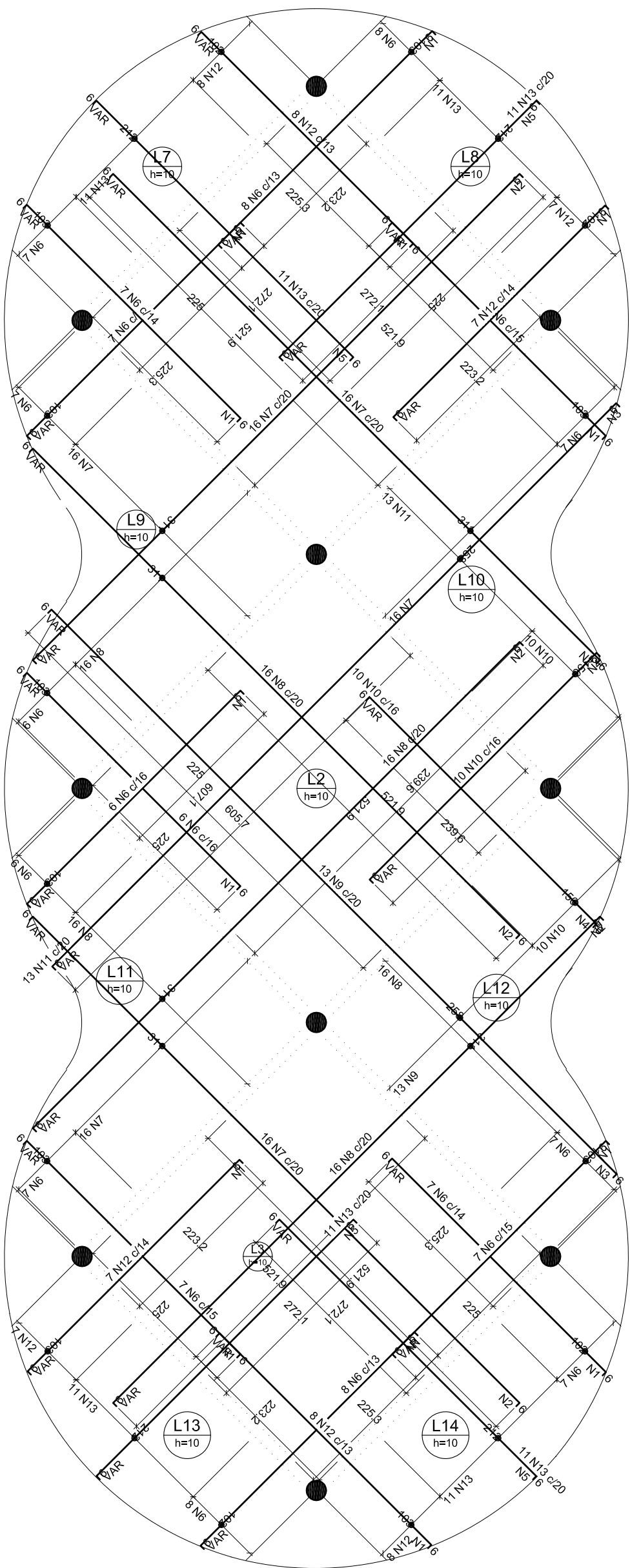
Volume de concreto (C-25) = 12,23 m³
 Área de forma = 127,96 m²

ESTRUTURA

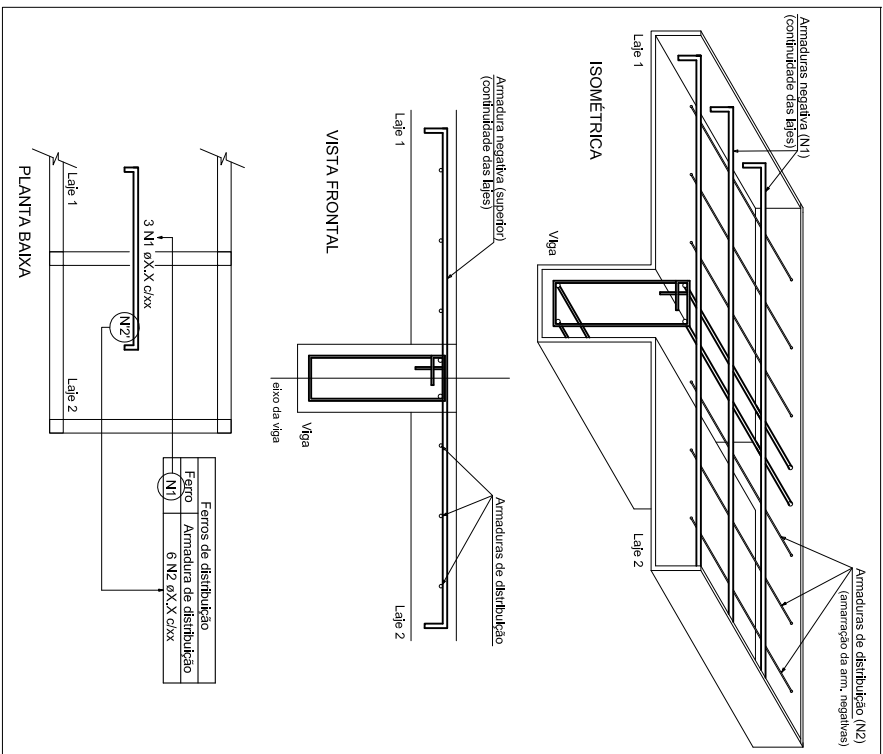
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	<h1 style="font-size: 2em; margin: 0;">10-13</h1>			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMADURA POSITIVA X - MONUMENTO CENTRAL						



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



Armação negativa das lajes do pavimento COBERTURA

escala 1:50

Ferro	Armadura de distribuição
N6	20 N1 ø6.3 c/20 C=VAR
N7	44 N2 ø6.3 c/20 C=VAR
N7	44 N2 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR
N8	44 N2 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR
N8	44 N2 ø6.3 c/20 C=VAR
N9	52 N3 ø6.3 c/20 C=VAR
N10	21 N4 ø6.3 c/20 C=VAR
N11	51 N3 ø6.3 c/20 C=VAR
N10	21 N4 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR
N7	44 N2 ø6.3 c/20 C=VAR
N12	20 N1 ø6.3 c/20 C=VAR
N13	24 N5 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR
N12	20 N1 ø6.3 c/20 C=VAR
N13	24 N5 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR
N8	44 N2 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR

Ferro	Armadura de distribuição
N6	20 N1 ø6.3 c/20 C=VAR
N13	24 N5 ø6.3 c/20 C=VAR
N12	20 N1 ø6.3 c/20 C=VAR
N6	20 N1 ø6.3 c/20 C=VAR
N13	24 N5 ø6.3 c/20 C=VAR
N12	20 N1 ø6.3 c/20 C=VAR

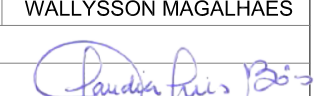
Relação do aço

AÇO	Negativos X		Negativos Y	
	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)
CAS0	1	6.3	280	VAR
	2	6.3	264	VAR
	3	6.3	103	VAR
	4	6.3	42	VAR
	5	6.3	96	VAR
	6	8.0	70	VAR
	7	8.0	48	VAR
	8	8.0	48	VAR
	9	8.0	13	VAR
	10	8.0	20	VAR
	11	8.0	13	VAR
	12	8.0	30	VAR
	13	8.0	44	VAR

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CAS0	6.3	1658.9	446.5
CAS0	8.0	1807.8	784.6
PESO TOTAL (kg)			1231.2

ESTRUTURA

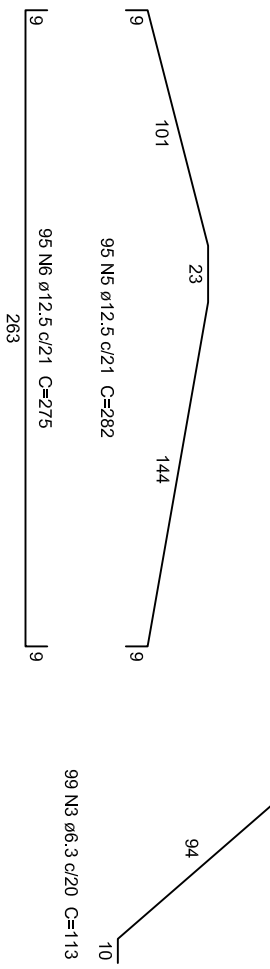
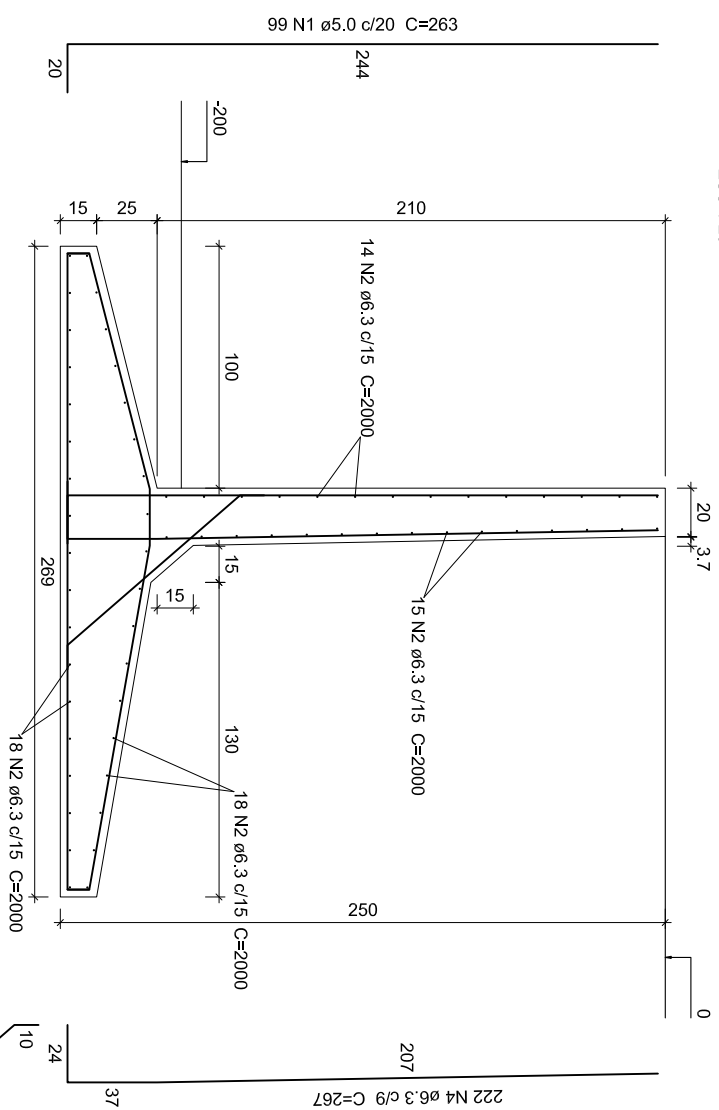
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES				
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMADURA NEGATIVA - MONUMENTO CENTRAL						

Cláudia Villas Boas
Engª Civil
CREA-CE 14365-D

12-13



MURO DE ARRIMO CURVO M1
ESC 1:25



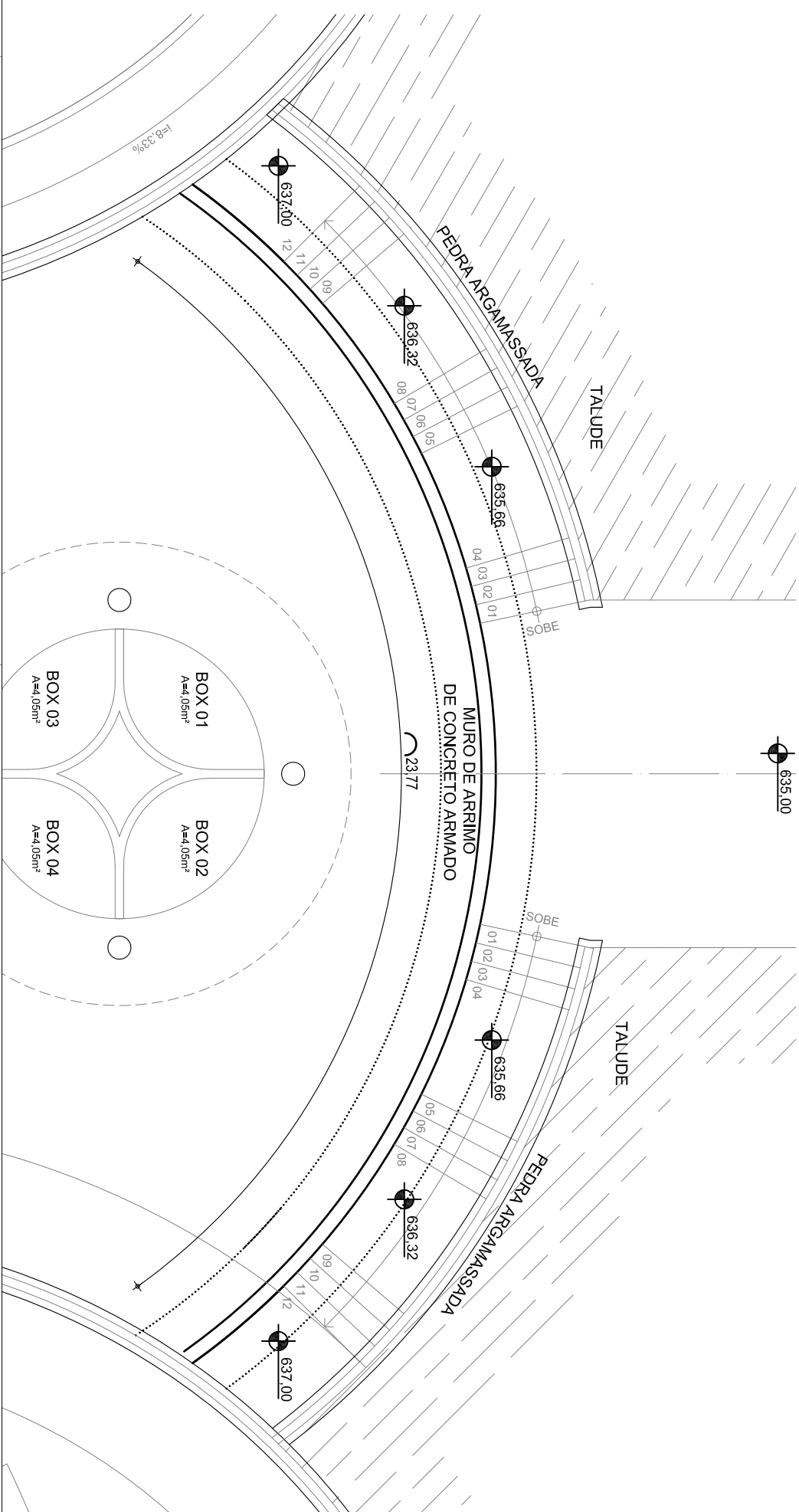
Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	99	263	26037
CA50	2	6.3	65	2000	130000
CA50	3	6.3	99	113	11187
CA60	4	6.3	222	267	59274
CA60	5	12.5	95	282	26790
CA60	6	12.5	95	275	26125

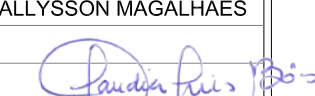
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	2004.7	539.6
CA50	12.5	529.2	560.7
CA60	5.0	260.4	44.1
PESO TOTAL (kg)			
CA50	1100.3		
CA60	44.1		

Volume de concreto (C-25) = 24,86 m³
Área de forma = 196,47 m²

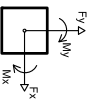
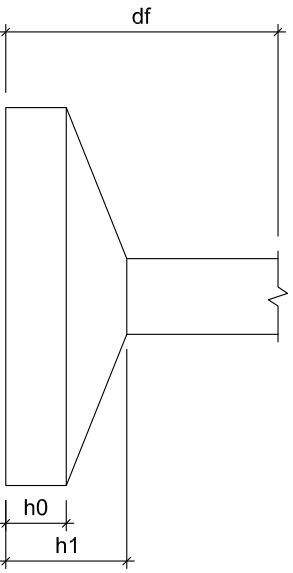
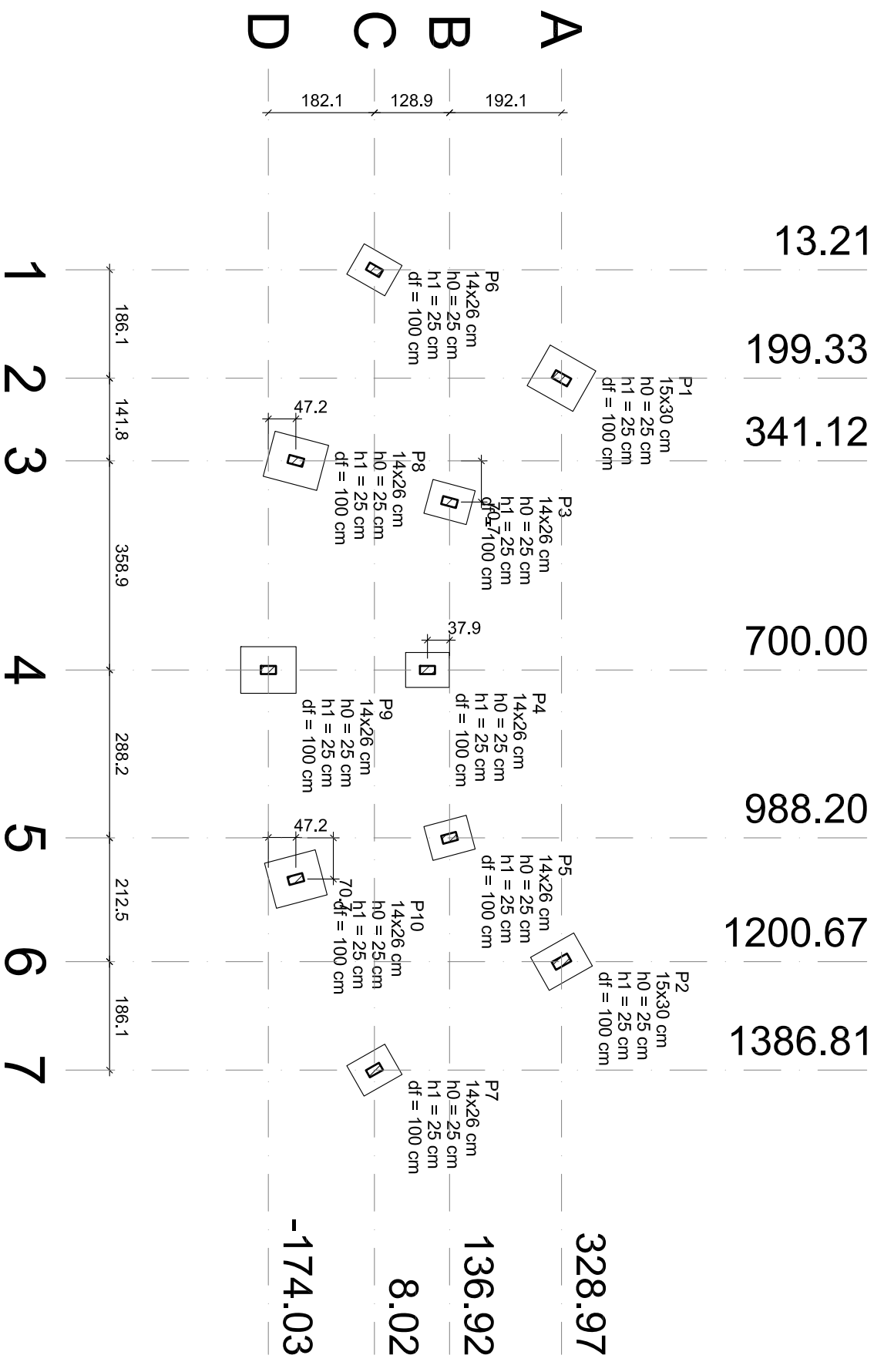


ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CLIENTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 13-13			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	DETALHE MURO DE ARRIMO						



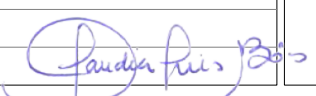
Nome	Pilar		Fundação				df (cm)
	Seção (cm)	Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)		
P1	15x30	80	90	25	25	100	
P2	15x30	65	85	25	25	100	
P3	14x26	60	75	25	25	100	
P4	14x26	60	75	25	25	100	
P5	14x26	60	75	25	25	100	
P6	14x26	60	75	25	25	100	
P7	14x26	60	75	25	25	100	
P8	14x26	80	95	25	25	100	
P9	14x26	80	95	25	25	100	
P10	14x26	80	90	25	25	100	



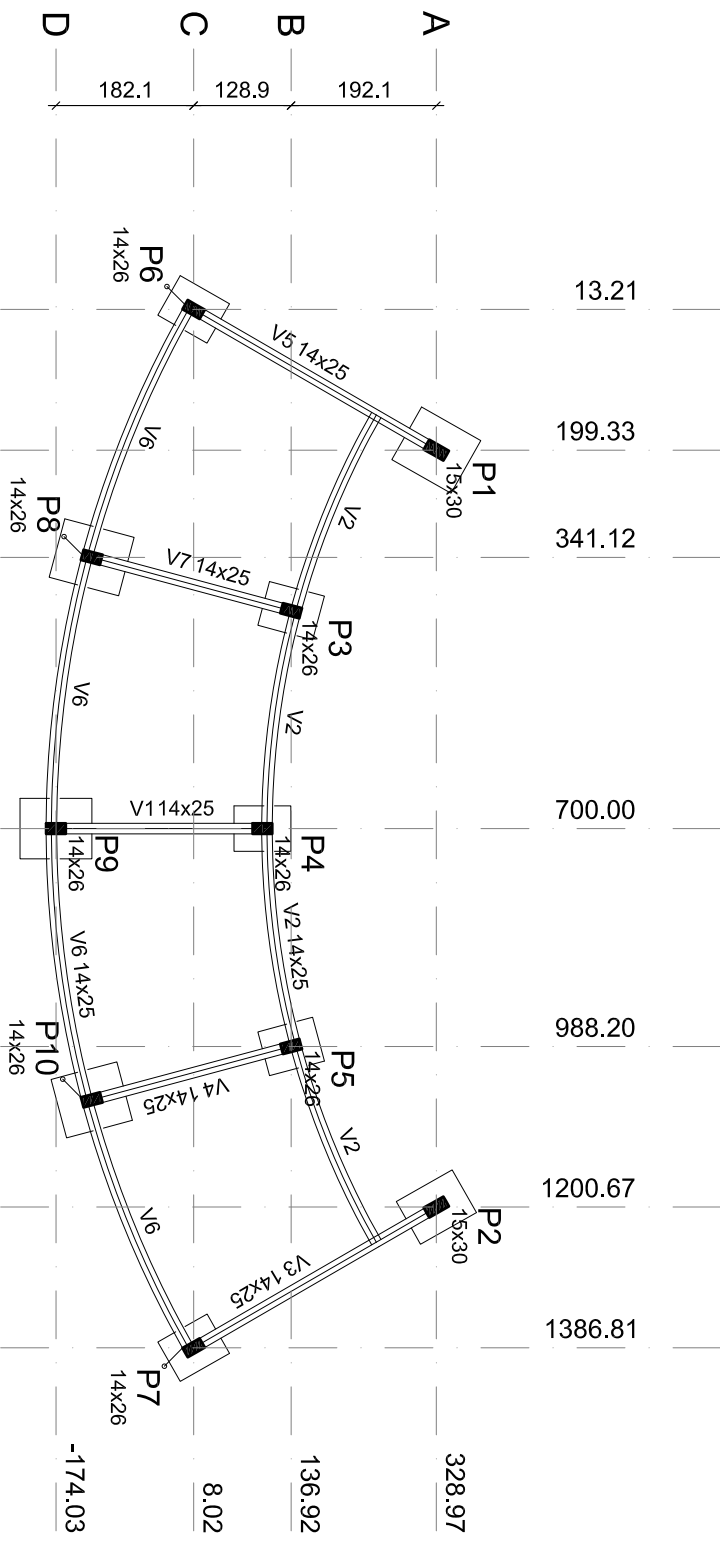
Planta de locação

escala 1:100

ESTRUTURA

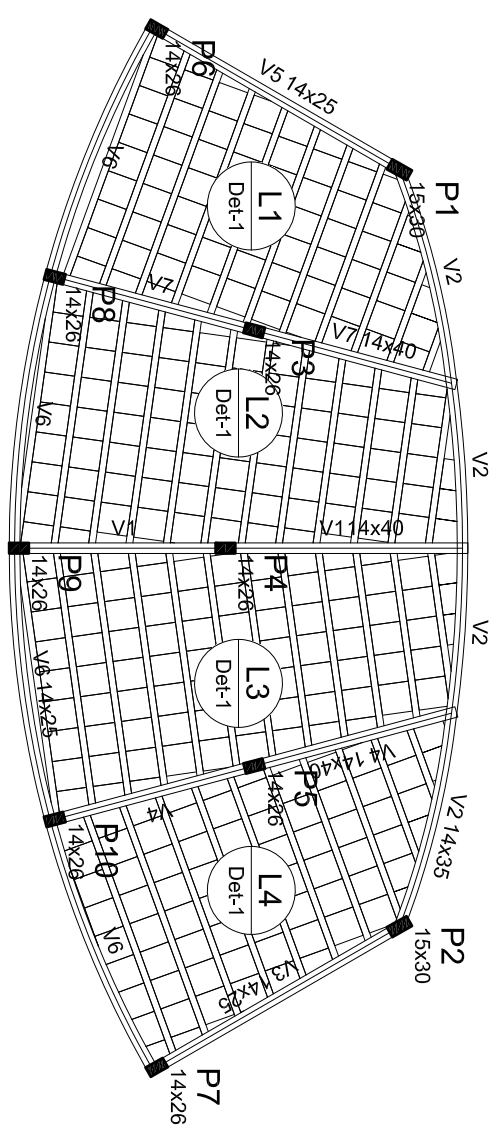
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 01-11			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	PLANTA DE LOCAÇÃO - ALTAR						





Forma do pavimento TÉRREO

escala 1:100



Forma do pavimento COBERTURA

escala 1:100

Características dos materiais

fck (kgf/cm ²)	Ecs (kgf/cm ²)
250	238000

Legenda dos Pilares

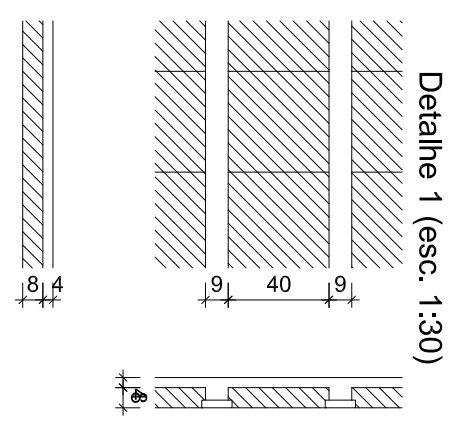
	Pilar que morre
	Pilar que passa
	Pilar que nasce
	Pilar com mudança de seção

Blocos de enchimento

Detalhe	Tipo	Nome	Dimensões(cm)			Quantidade
			hp	bx	by	
1	EPS Unidirecional	B8/40/40	8	40	40	309

Características dos materiais

fck (kgf/cm ²)	Ecs (kgf/cm ²)
250	238000



Legenda dos Pilares

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

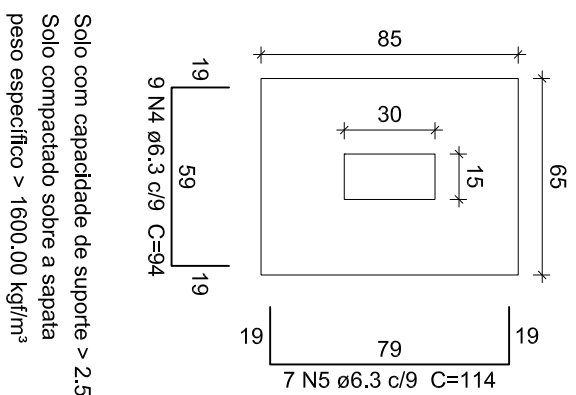
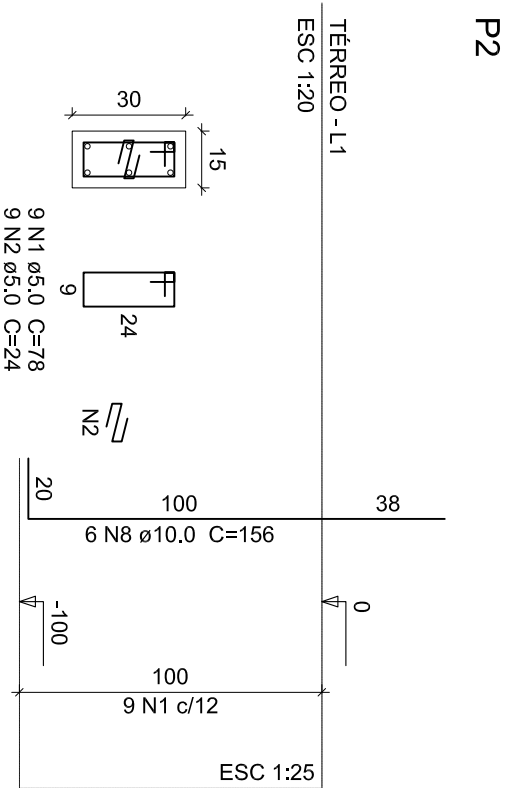
ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 02-11			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	FORMA DO TÉRREO E DA COBERTURA - ALTAR						



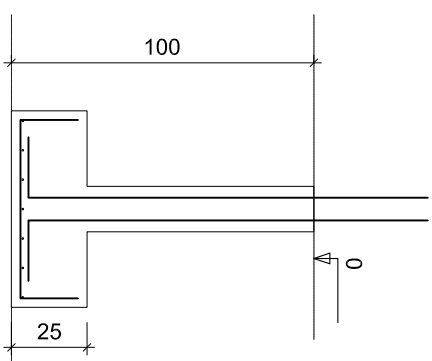
Cláudia Villas Boas
Eng^o Civil
CREA-CE 14365-D

S2
PLANTA
ESC 1:25



Solo com capacidade de suporte > 2.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600,00 kgf/m³

CORTE
ESC 1:25



S2
5xS6
Relação do aço

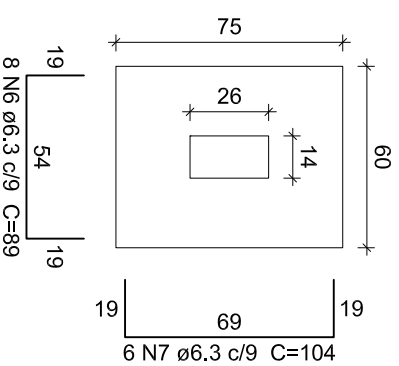
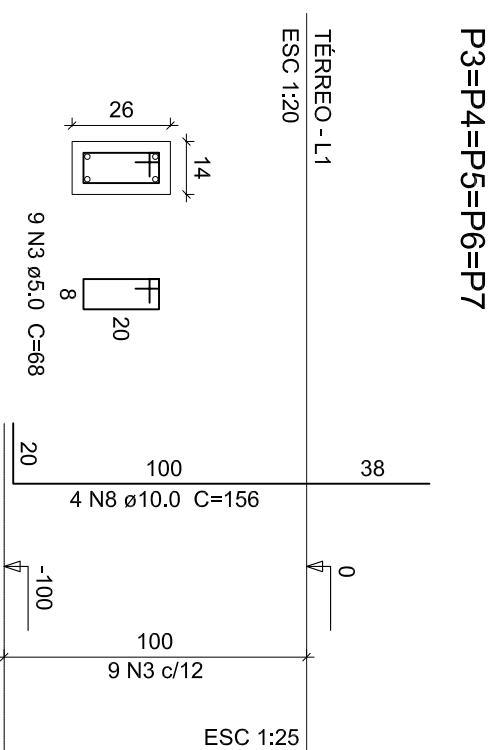
ACO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	9	78	702
	2	5.0	9	24	216
	3	5.0	45	68	3060
CA50	4	6.3	9	94	846
	5	6.3	7	114	798
	6	6.3	40	89	3560
	7	6.3	30	104	3120
	8	10.0	26	156	4056

Resumo do aço

ACO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	83.3	22.4
CA60	10.0	40.6	27.5
PESO TOTAL (kg)			6.7
CA50	49.9		
CA60	6.7		

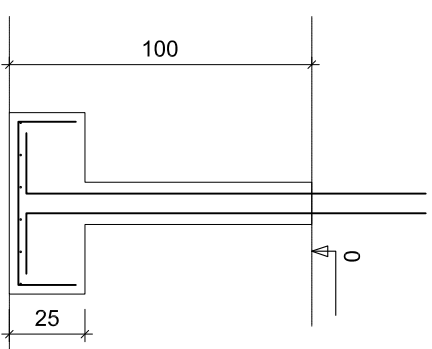
Volume de concreto (C-25) = 0.93 m³
Área de forma = 9.03 m²

S3=S4=S5=S6=S7
PLANTA
ESC 1:25

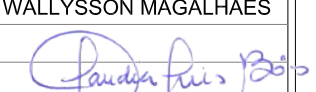


Solo com capacidade de suporte > 2.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600,00 kgf/m³

CORTE
ESC 1:25



ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 Cláudia Villas Boas Eng ^o Civil CREA-CE 14365-D			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	FUNDAÇÕES 01 - ALTAR			03-11			



S8=S9
PLANTA
ESC 1:25

CORTE
ESC 1:25

2xS9

S10

Relação do aço

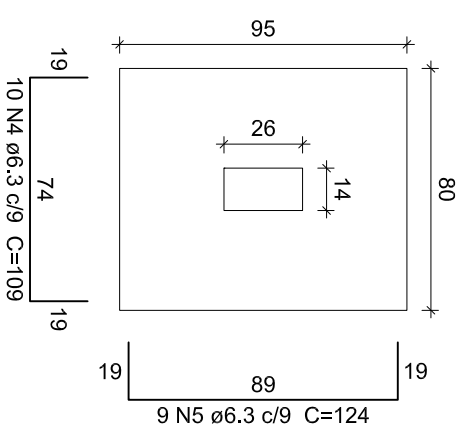
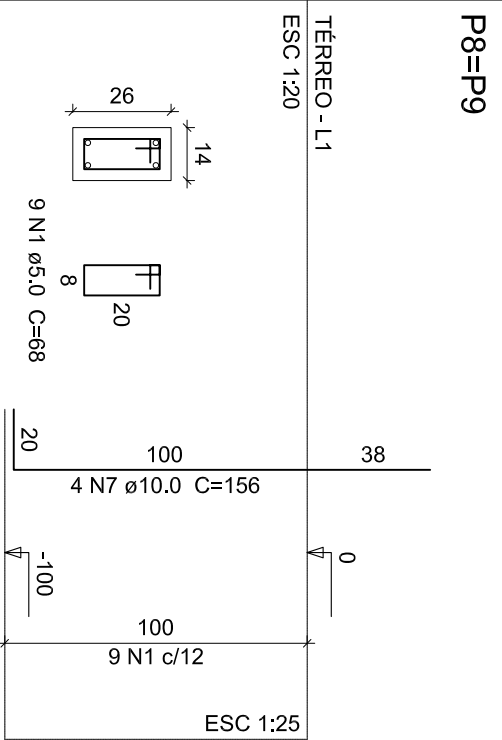
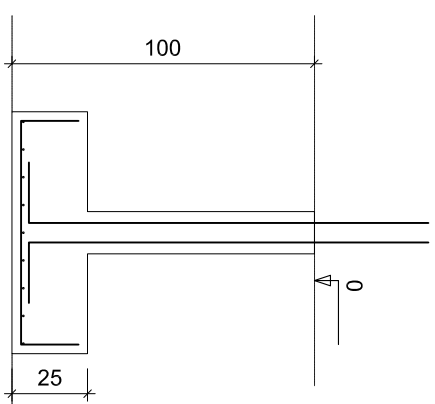
ACO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	27	68	1836
	2	5,0	9	78	702
	3	5,0	9	24	216
CA50	4	6,3	40	109	4360
	5	6,3	18	124	2232
	6	6,3	18	119	2142
	7	10,0	18	156	2808

Resumo do aço

ACO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6,3	87,4	23,5
CA60	10,0	28,1	19
CA60	5,0	27,6	4,7
PESO TOTAL (kg)			
CA50			42,6
CA60			4,7

Volume de concreto (C-25) = 0,89 m³
Área de forma = 6,75 m²

Solo com capacidade de suporte > 2,50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600,00 kgf/m³

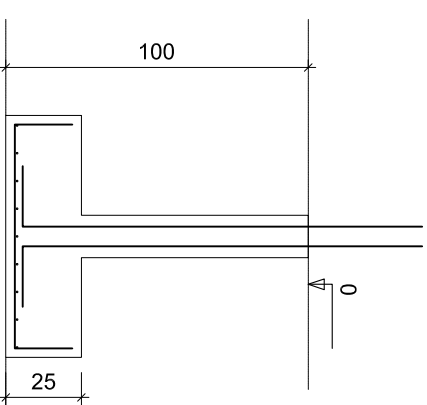
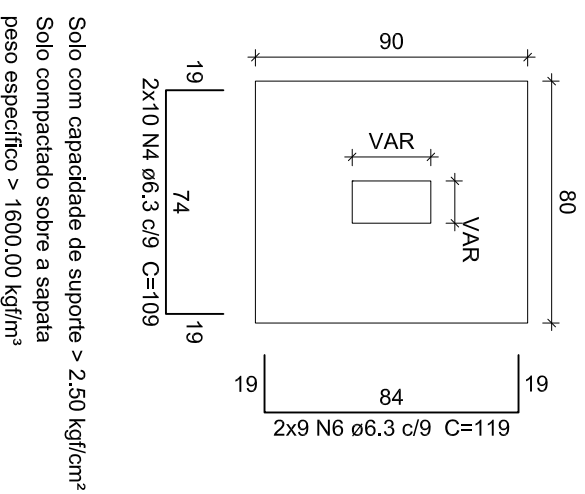
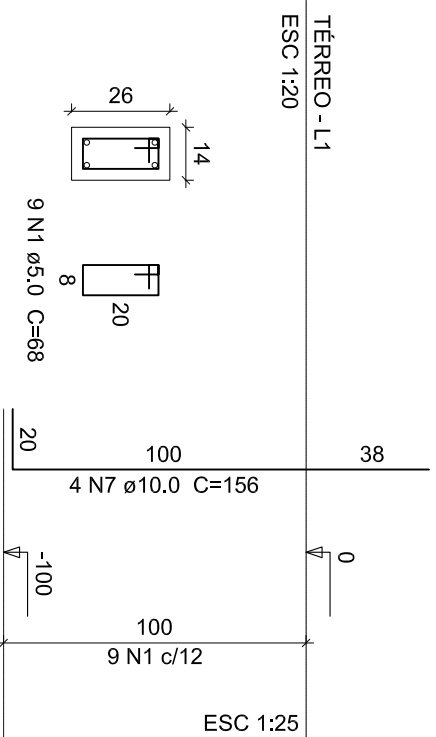
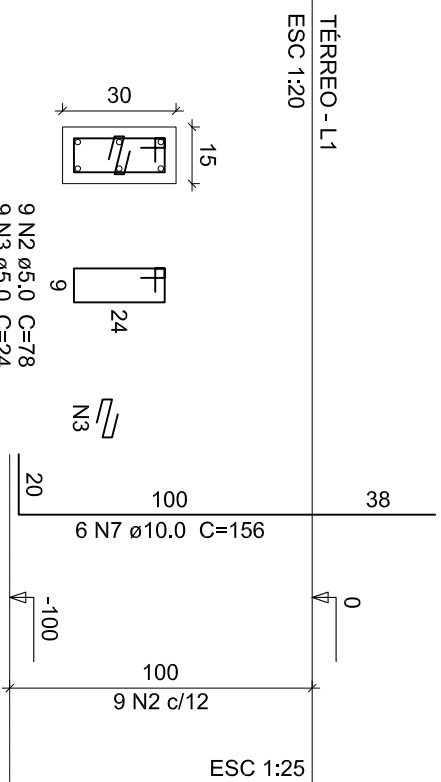


P1

P10

S1=S10
PLANTA
ESC 1:25

CORTE
ESC 1:25



Solo com capacidade de suporte > 2,50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600,00 kgf/m³

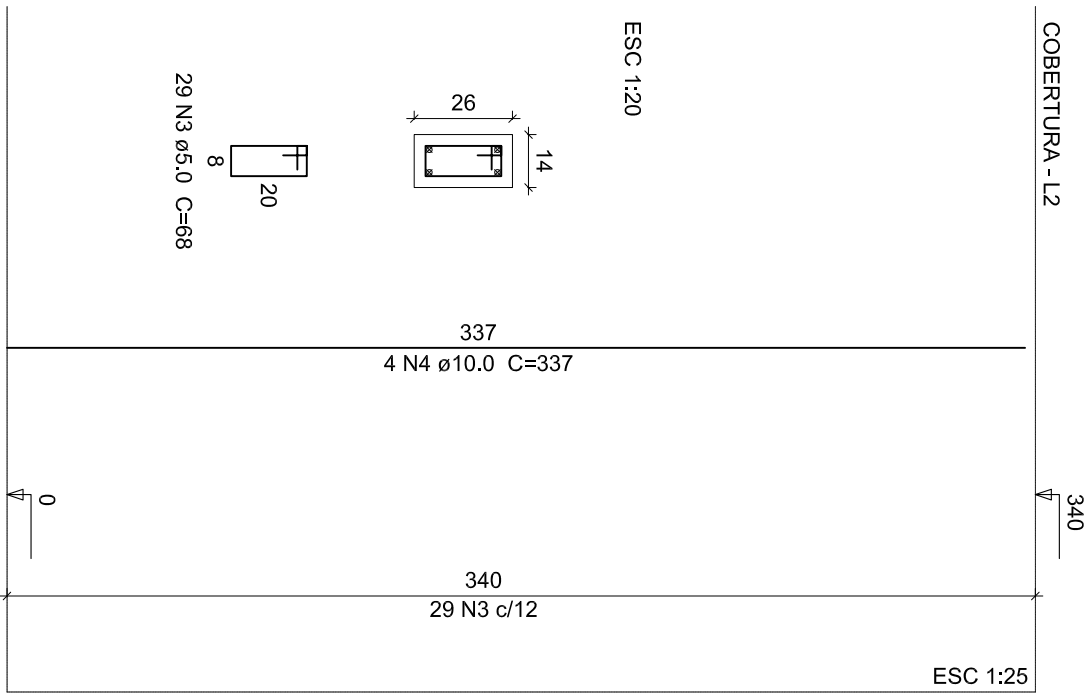
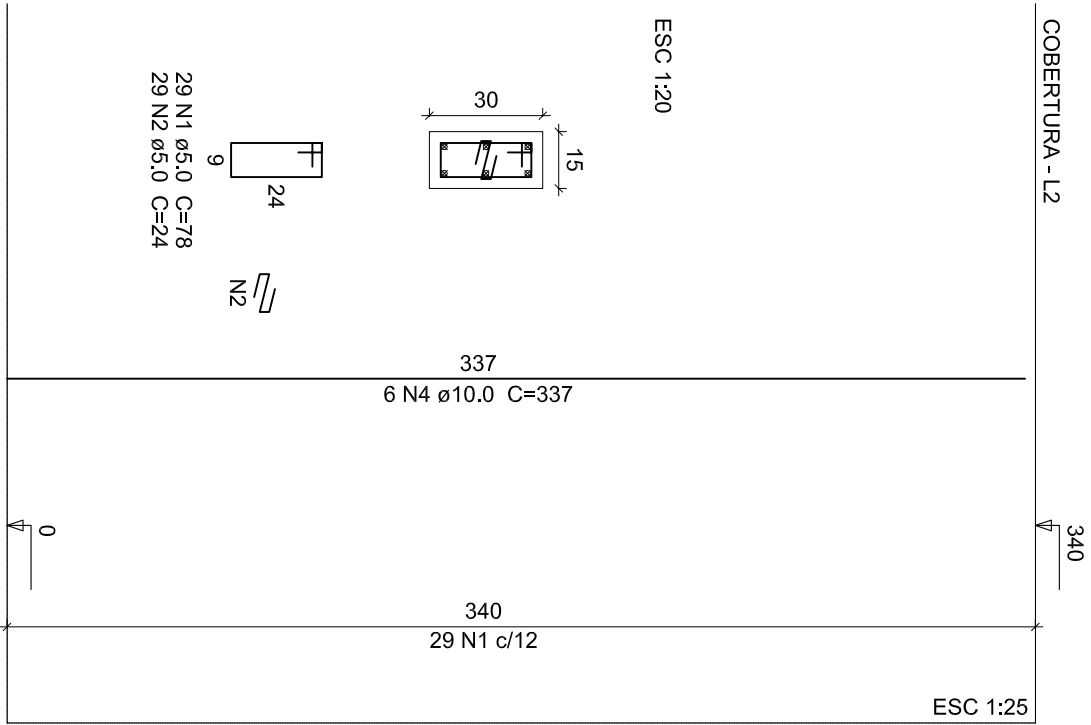
ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	<p>Cláudia Villas Boas Engª Civil CREA-CE 14365-D</p>			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ	CONTEÚDO					



P1=P2

P3=P4=P5=P6=P7=P8=P9=P10



Relação do aço

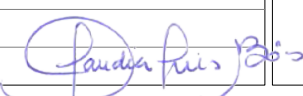
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	58	78	4524
	2	5.0	58	24	1392
	3	5.0	232	68	15776
CA50	4	10.0	44	337	14828

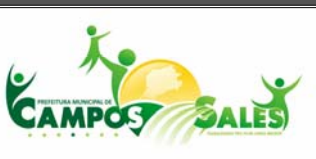
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	148.3	104.6
CA60	5.0	215.9	36.5
PESO TOTAL (kg)			
CA50	104.6		
CA60	36.5		

Volume de concreto (C-25) = 1.3 m³
 Área de forma = 25.83 m²

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 05-11			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DOS PILARES - ALTAR						



Relação do aço

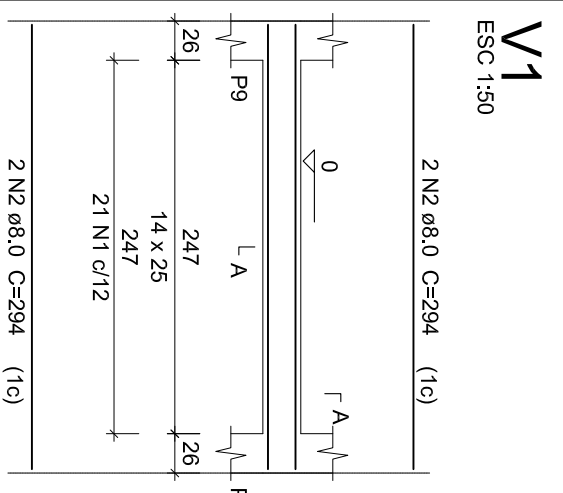
V1 V2 V3
V4 V5 V7

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	213	70	14910
CA50	2	8,0	12	294	3528
	3	8,0	2	1153	2306
	4	8,0	2	1181	2362
	5	8,0	8	394	3402

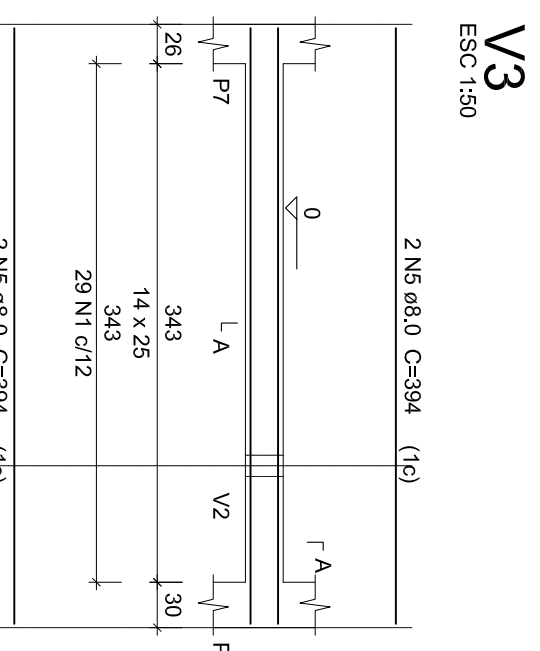
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8,0	113,5	49,3
CA60	5,0	149,1	25,3
PESO TOTAL (kg)			74,6
CA50			49,3
CA60			25,3

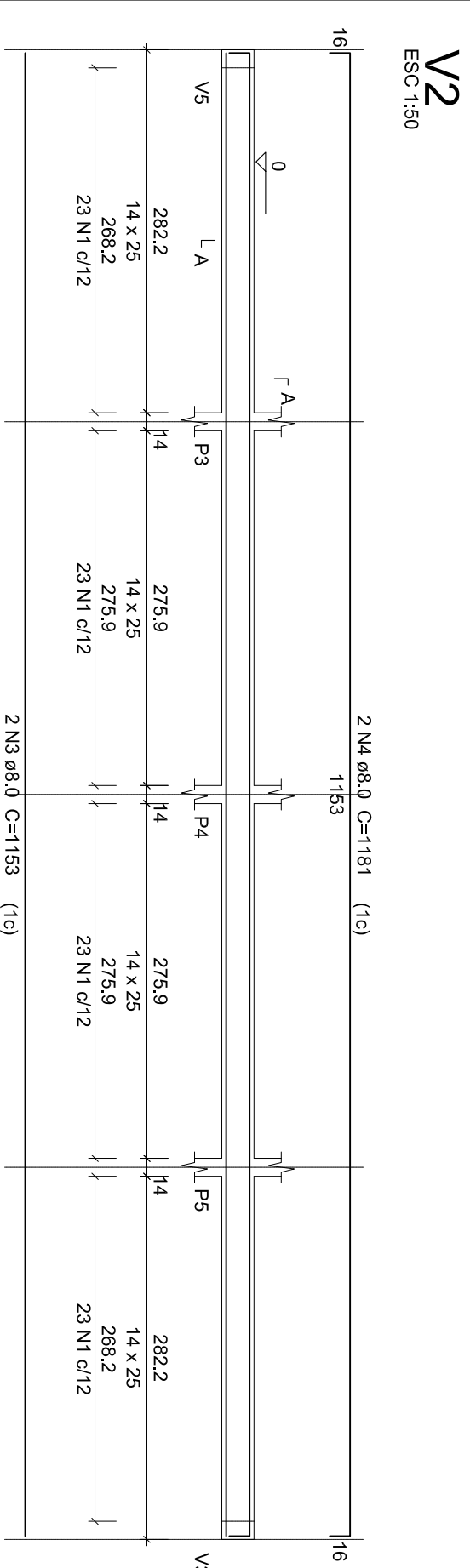
Volume de concreto (C-25) = 1 m³
Área de forma = 18,26 m²



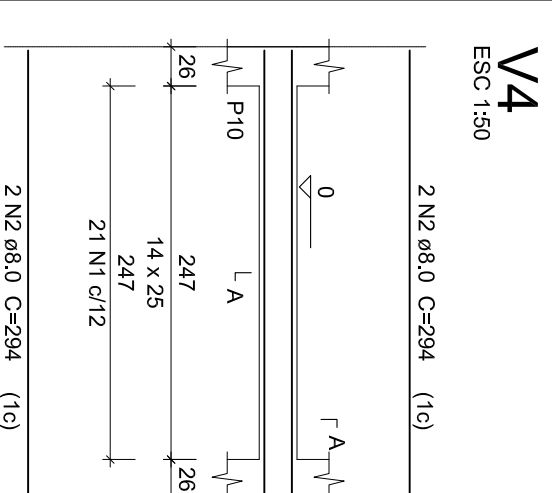
SEÇÃO A-A
ESC 1:25



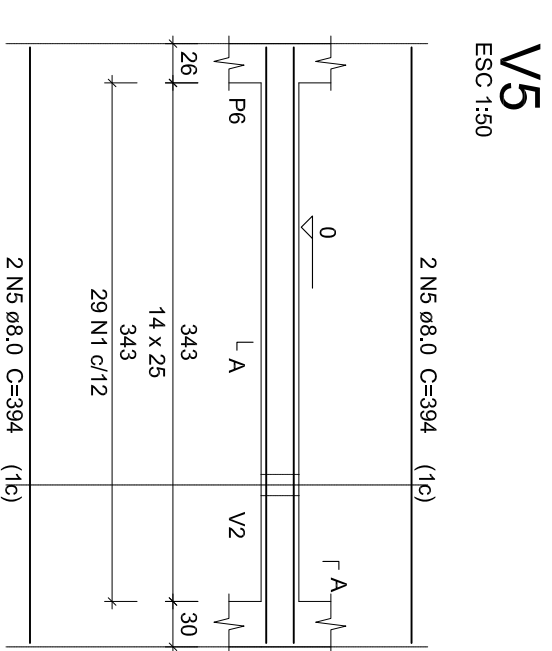
SEÇÃO A-A
ESC 1:25



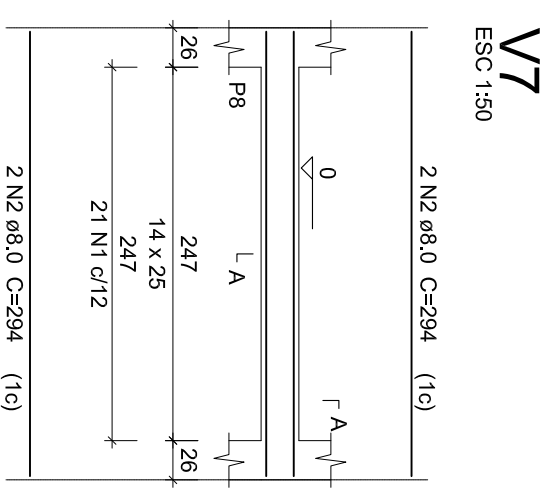
SEÇÃO A-A
ESC 1:25



SEÇÃO A-A
ESC 1:25

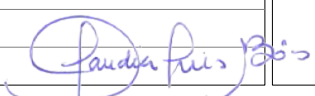
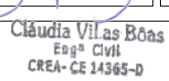


SEÇÃO A-A
ESC 1:25



SEÇÃO A-A
ESC 1:25

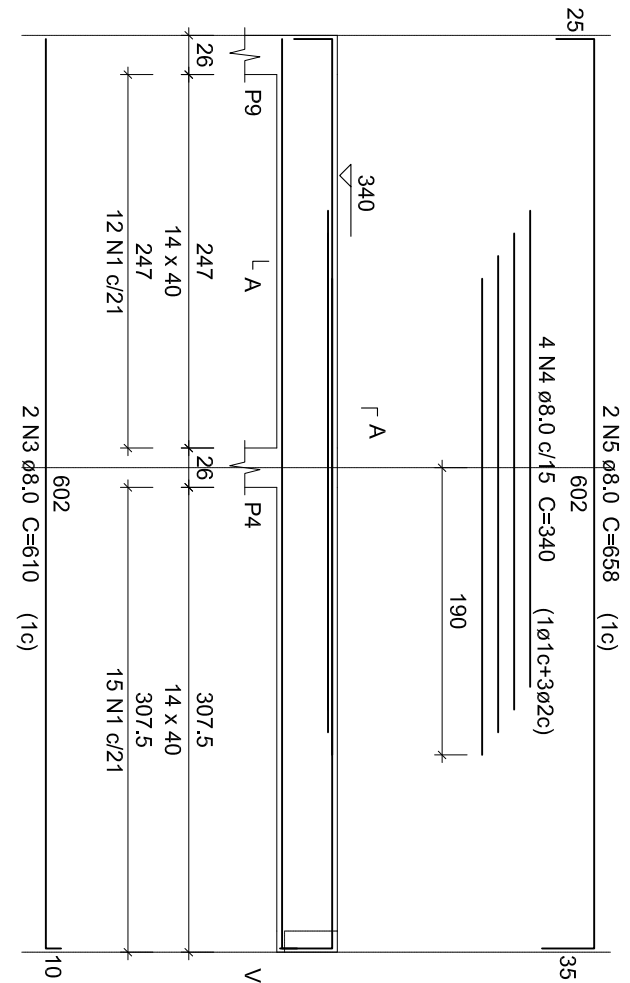
ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES				
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS 01 - ALTAR						

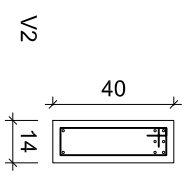


V1

ESC 1:50



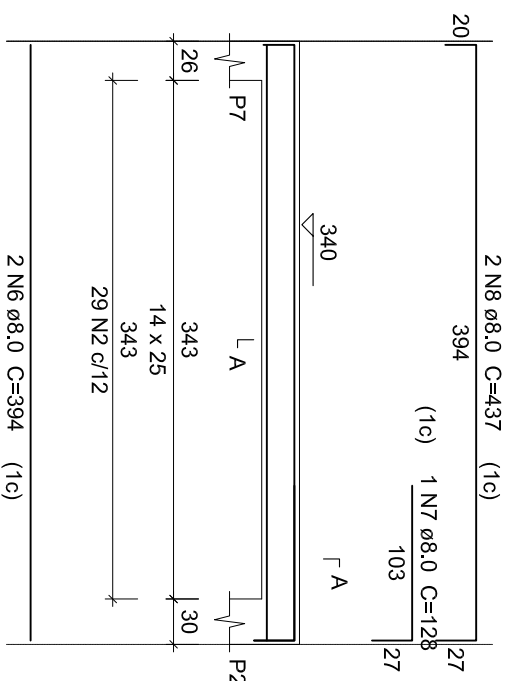
SEÇÃO A-A
ESC 1:25



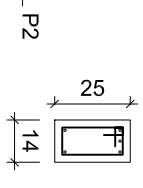
27 N1 ø5.0 C=100

V3

ESC 1:50



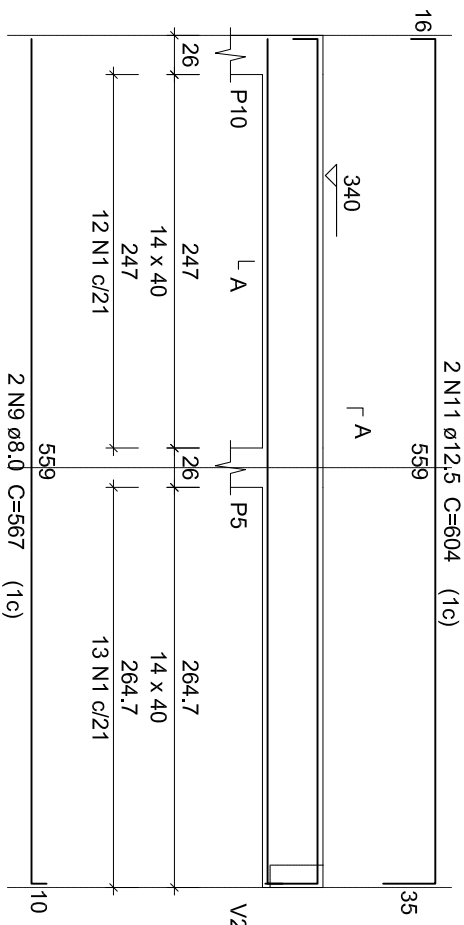
SEÇÃO A-A
ESC 1:25



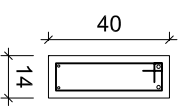
29 N2 ø5.0 C=70

V4

ESC 1:50



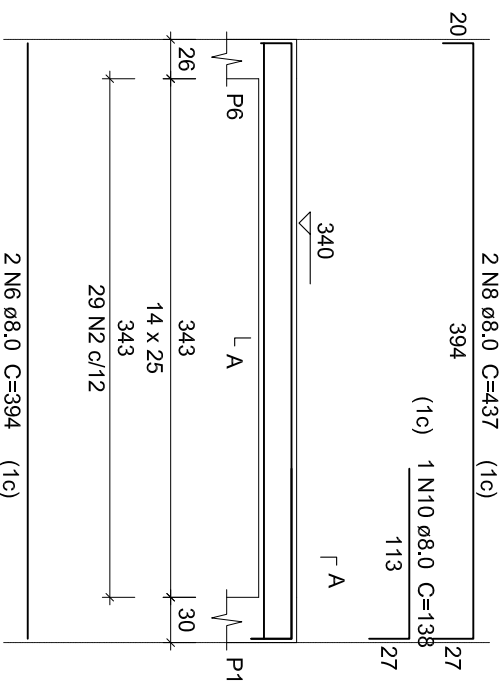
SEÇÃO A-A
ESC 1:25



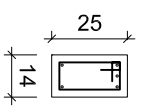
25 N1 ø5.0 C=100

V5

ESC 1:50



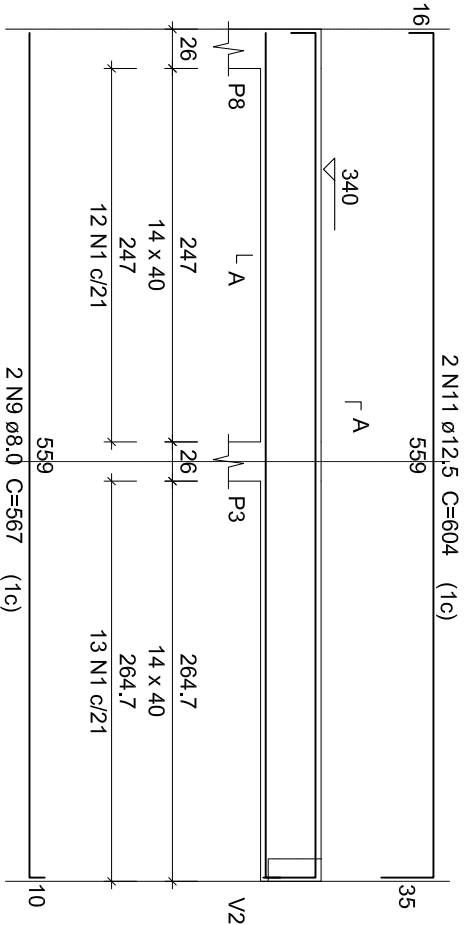
SEÇÃO A-A
ESC 1:25



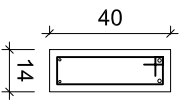
29 N2 ø5.0 C=70

V7

ESC 1:50



SEÇÃO A-A
ESC 1:25



25 N1 ø5.0 C=100

Relação do aço

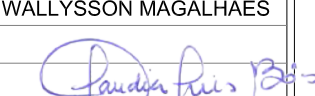
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (gm)
CA60	1	5.0	77	100	7700
CA60	2	5.0	58	70	4060
CA50	3	8.0	2	610	1220
CA50	4	8.0	4	340	1260
CA50	5	8.0	2	658	1316
CA50	6	8.0	4	394	1576
CA50	7	8.0	1	128	128
CA50	8	8.0	4	437	1748
CA50	9	8.0	4	567	2268
CA60	10	8.0	1	138	138
CA60	11	12.5	4	604	2416

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	96.6	41.9
CA60	12.5	24.2	25.6
CA60	5.0	117.6	19.9
PESO TOTAL (kg)			
CA50			67.5
CA60			19.9

Volume de concreto (C-25) = 1.25 m³
Área de forma = 21.41 m²

ESTRUTURA

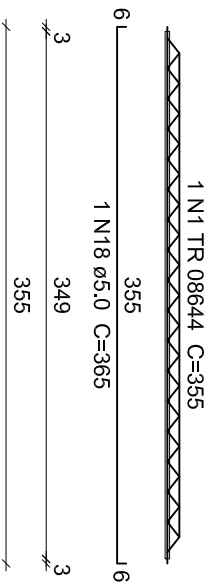
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES				
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS 02 - ALTAR						

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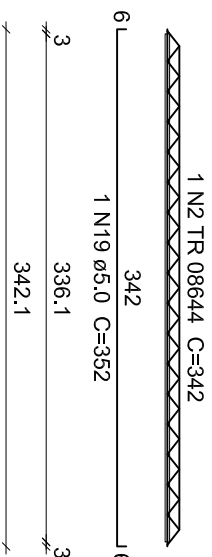
07-11



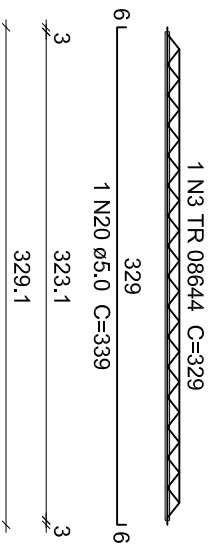
VT1a (1 unidades)
(L1)
ESC 1:50



VT1b (1 unidades)
(L1)
ESC 1:50



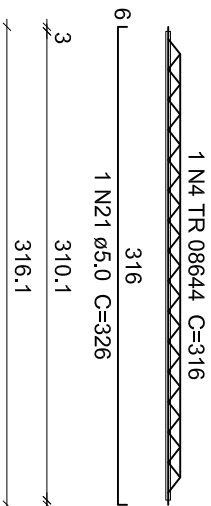
VT1c (1 unidades)
(L1)
ESC 1:50



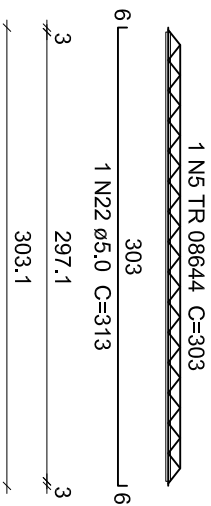
Relação do aço

VT1a	VT1b	VT1c
VT1d	VT1e	VT1f
VT1g	VT1h	VT1i
VT1j	VT1k	VT2a
VT2b	VT2c	VT2a
VT2d	VT2e	VT2d
VT2e	VT2f	

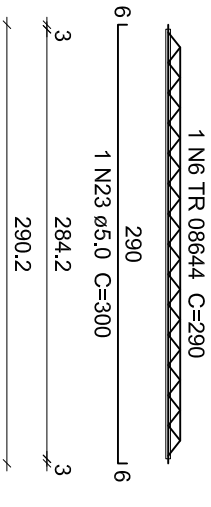
VT1d (1 unidades)
(L1)
ESC 1:50



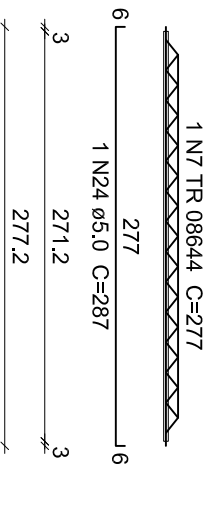
VT1e (1 unidades)
(L1)
ESC 1:50



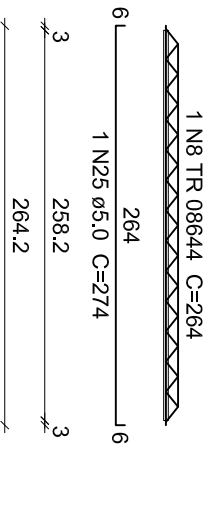
VT1f (1 unidades)
(L1)
ESC 1:50



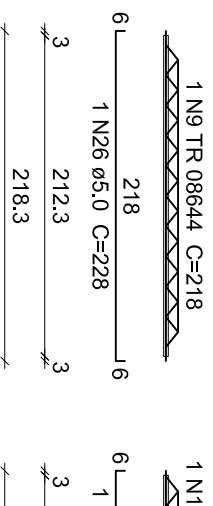
VT1g (1 unidades)
(L1)
ESC 1:50



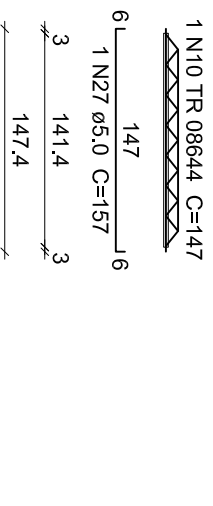
VT1h (1 unidades)
(L1)
ESC 1:50



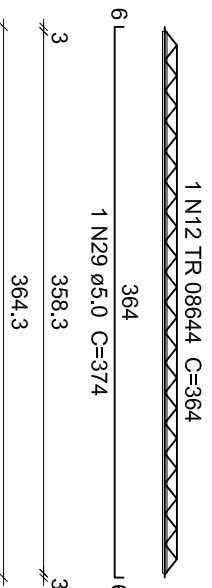
VT1i (1 unidades)
(L1)
ESC 1:50



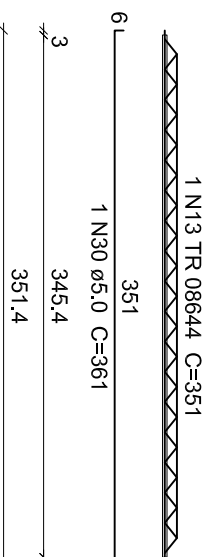
VT1j (1 unidades)
(L1)
ESC 1:50



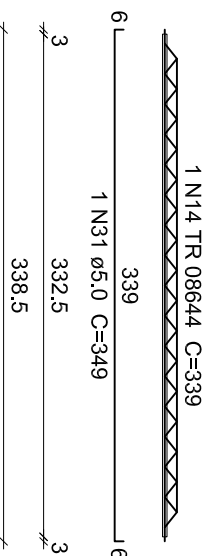
VT2a (1 unidades)
(L2)
ESC 1:50



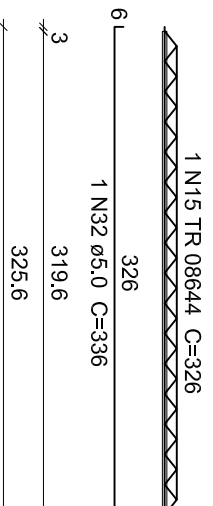
VT2b (1 unidades)
(L2)
ESC 1:50



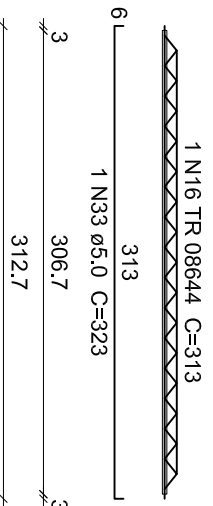
VT2c (1 unidades)
(L2)
ESC 1:50



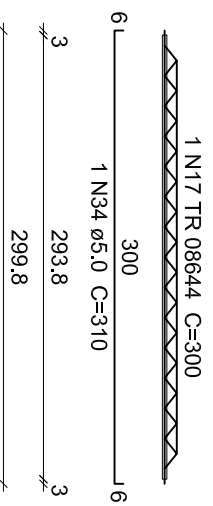
VT2d (1 unidades)
(L2)
ESC 1:50



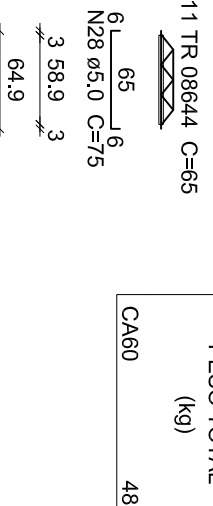
VT2e (1 unidades)
(L2)
ESC 1:50



VT2f (1 unidades)
(L2)
ESC 1:50



VT1k (1 unidades)
(L1)
ESC 1:50

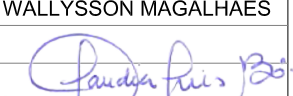


AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	TR 08644	1	355	355
	2	TR 08644	1	342	342
	3	TR 08644	1	329	329
	4	TR 08644	1	316	316
	5	TR 08644	1	303	303
	6	TR 08644	1	290	290
	7	TR 08644	1	277	277
	8	TR 08644	1	264	264
	9	TR 08644	1	218	218
	10	TR 08644	1	147	147
	11	TR 08644	1	65	65
	12	TR 08644	1	364	364
	13	TR 08644	1	351	351
	14	TR 08644	1	339	339
	15	TR 08644	1	326	326
	16	TR 08644	1	313	313
	17	TR 08644	1	300	300
	18		1	365	365
	19		1	352	352
	20		1	339	339
	21		1	326	326
	22		1	313	313
	23		1	300	300
	24		1	287	287
	25		1	274	274
	26		1	228	228
	27		1	157	157
	28		1	75	75
	29		1	374	374
	30		1	361	361
	31		1	349	349
	32		1	336	336
	33		1	323	323
	34		1	310	310

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA60	TR 08644	49	39.6
		50.7	8.6
PESO TOTAL (kg)			
CA60		48.2	

ESTRUTURA

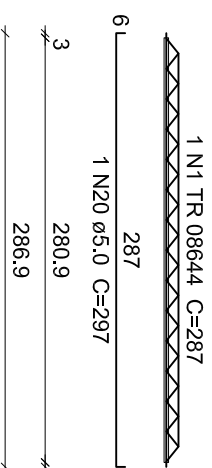
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES				
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGOTAS DAS LAJES 01 - ALTAR						

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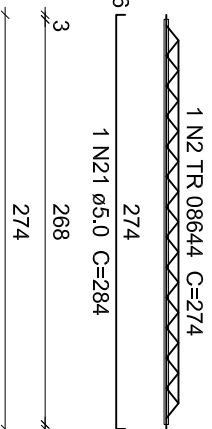
09-11



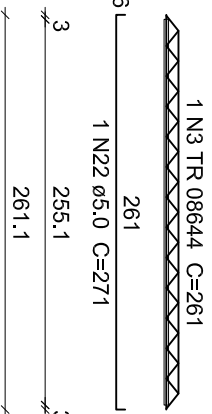
VT2g (1 unidades)
(L2)
ESC 1:50



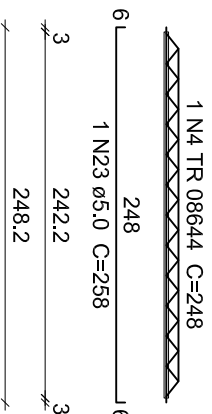
VT2h (1 unidades)
(L2)
ESC 1:50



VT2i (1 unidades)
(L2)
ESC 1:50



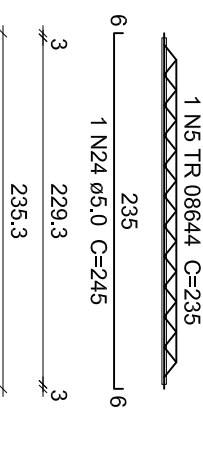
VT2j (1 unidades)
(L2)
ESC 1:50



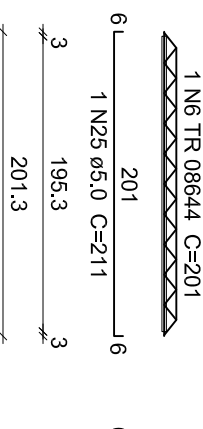
Relação do aço

VT2g	VT2h	VT2i	VT2j
VT2k	VT2l	VT2m	VT2n
VT2o	VT2p	VT2q	VT2r
VT2s	VT2t	VT2u	VT2v
VT2w	VT2x	VT2y	VT2z

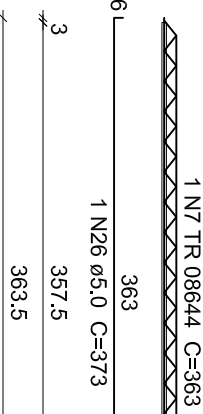
VT2k (1 unidades)
(L2)
ESC 1:50



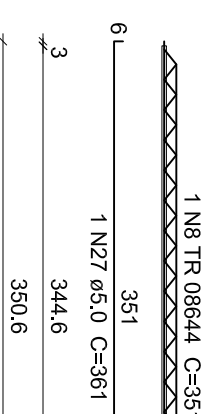
VT2l (1 unidades)
(L2)
ESC 1:50



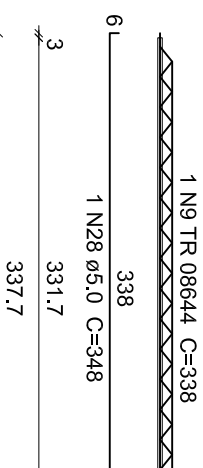
VT2m (1 unidades)
(L3)
ESC 1:50



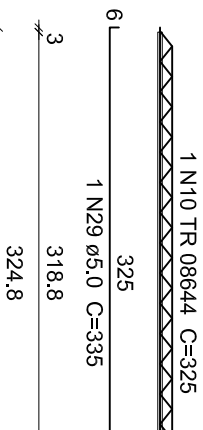
VT2o (1 unidades)
(L3)
ESC 1:50



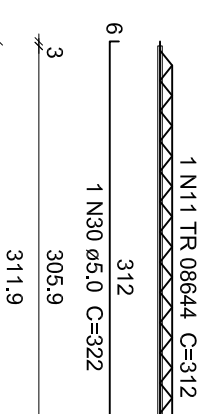
VT3c (1 unidades)
(L3)
ESC 1:50



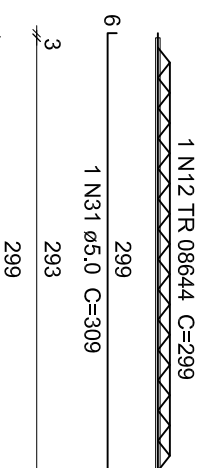
VT3d (1 unidades)
(L3)
ESC 1:50



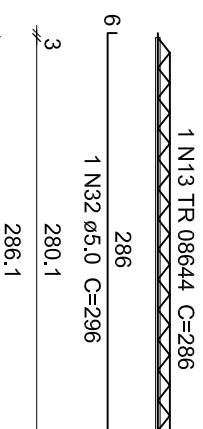
VT3e (1 unidades)
(L3)
ESC 1:50



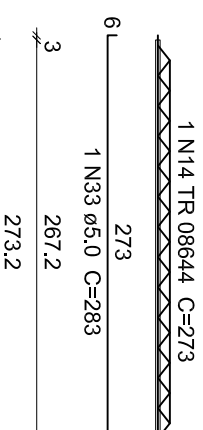
VT3f (1 unidades)
(L3)
ESC 1:50



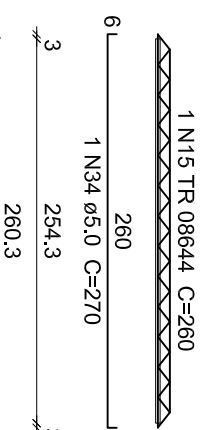
VT3g (1 unidades)
(L3)
ESC 1:50



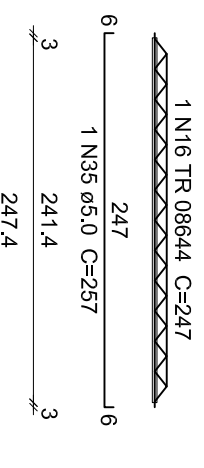
VT3h (1 unidades)
(L3)
ESC 1:50



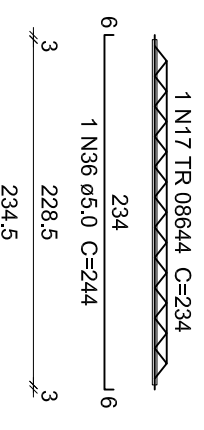
VT3i (1 unidades)
(L3)
ESC 1:50



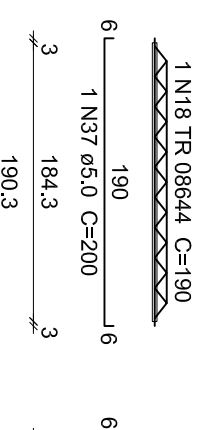
VT3j (1 unidades)
(L3)
ESC 1:50



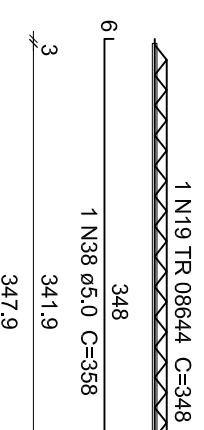
VT3k (1 unidades)
(L3)
ESC 1:50



VT3l (1 unidades)
(L3)
ESC 1:50



VT4a (1 unidades)
(L4)
ESC 1:50

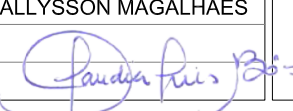


AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	TR 08644	1	287	287
	2	TR 08644	1	274	274
	3	TR 08644	1	261	261
	4	TR 08644	1	248	248
	5	TR 08644	1	235	235
	6	TR 08644	1	201	201
	7	TR 08644	1	363	363
	8	TR 08644	1	351	351
	9	TR 08644	1	338	338
	10	TR 08644	1	325	325
	11	TR 08644	1	312	312
	12	TR 08644	1	299	299
	13	TR 08644	1	286	286
	14	TR 08644	1	273	273
	15	TR 08644	1	260	260
	16	TR 08644	1	247	247
	17	TR 08644	1	234	234
	18	TR 08644	1	190	190
	19	TR 08644	1	348	348
	20	TR 08644	1	297	297
	21	5.0	1	284	284
	22	5.0	1	271	271
	23	5.0	1	258	258
	24	5.0	1	245	245
	25	5.0	1	211	211
	26	5.0	1	373	373
	27	5.0	1	361	361
	28	5.0	1	348	348
	29	5.0	1	335	335
	30	5.0	1	322	322
	31	5.0	1	309	309
	32	5.0	1	296	296
	33	5.0	1	283	283
	34	5.0	1	270	270
	35	5.0	1	257	257
	36	5.0	1	244	244
	37	5.0	1	200	200
	38	5.0	1	358	358

Resumo do aço

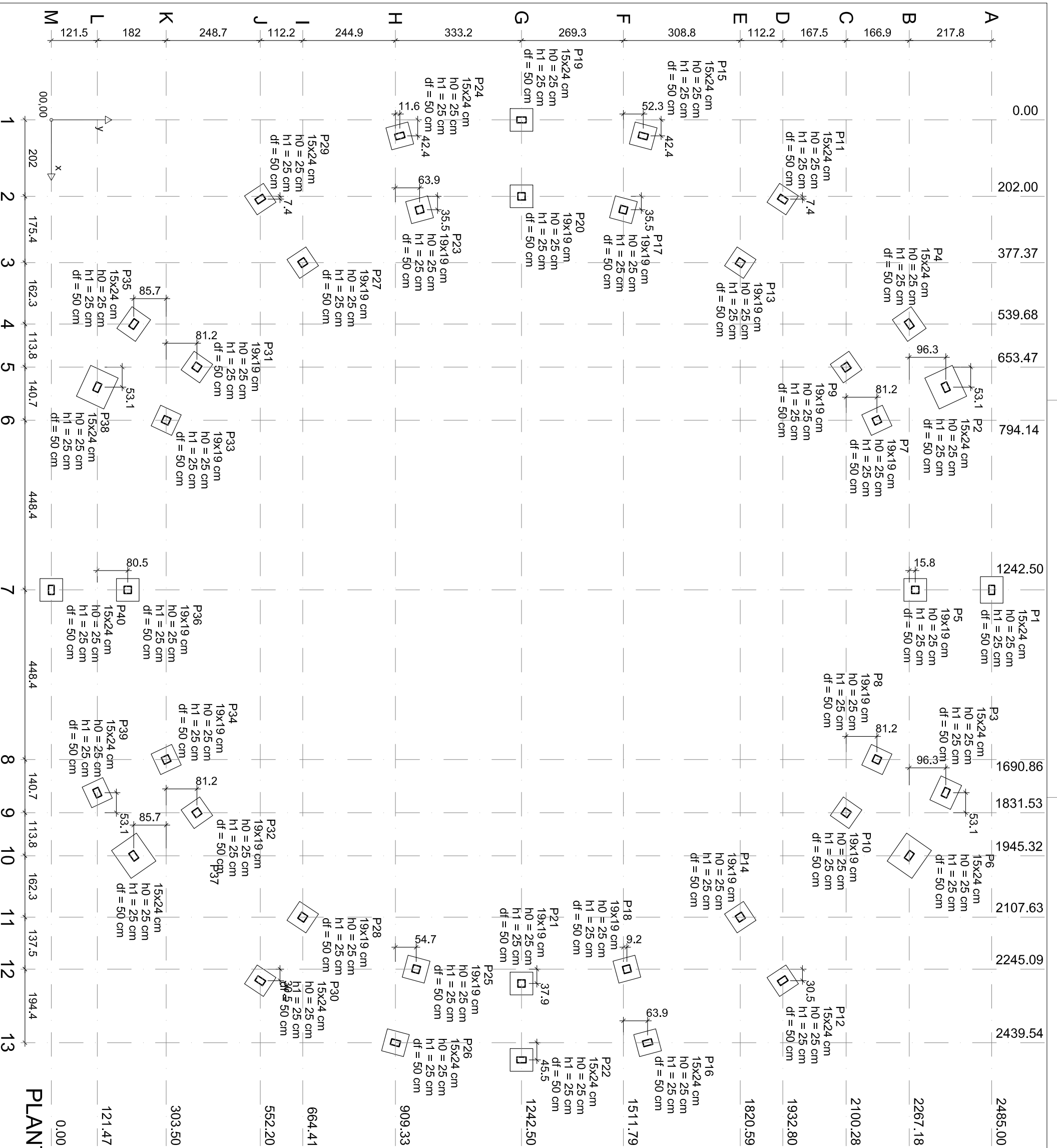
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA60	TR 08644	53.4	43.1
	5.0	55.3	
PESO TOTAL (kg)			9.4
CA60			52.5

ESTRUTURA

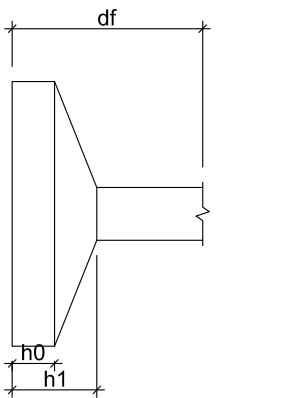
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES				
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ	ARMAÇÃO DAS VIGOTAS DAS LAJES 02 - ALTAR					



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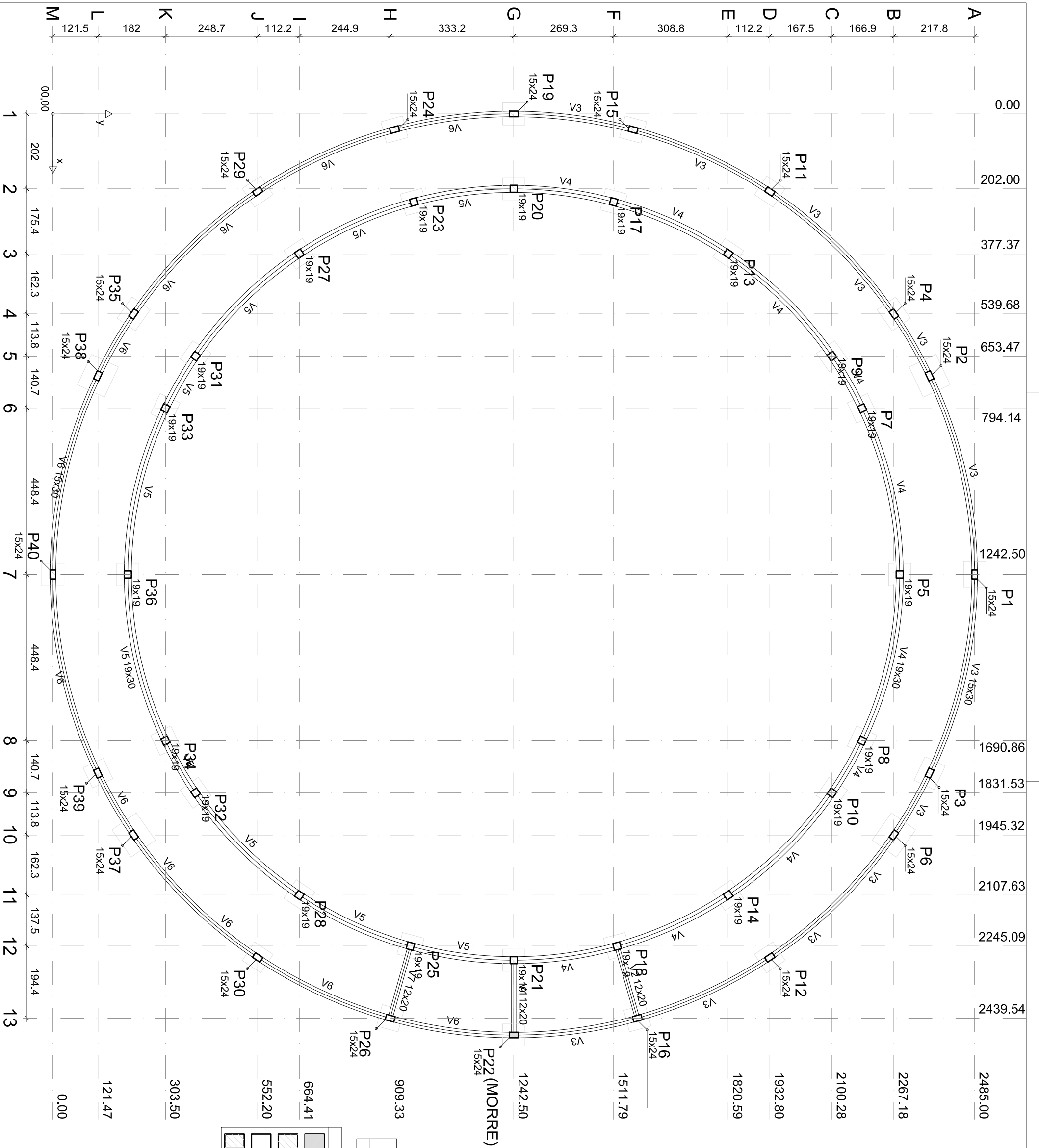
Nome	Seção	Lado B	Lado H	Fundação	h0/h1/h2	df
P1	15x24	60	70	25	25	50
P2	15x24	60	70	25	25	50
P3	15x24	60	70	25	25	50
P4	15x24	60	70	25	25	50
P5	19x19	60	60	25	25	50
P6	15x24	60	90	25	25	50
P7	19x19	60	60	25	25	50
P8	19x19	60	60	25	25	50
P9	19x19	60	60	25	25	50
P10	19x19	60	60	25	25	50
P11	15x24	60	60	25	25	50
P12	15x24	60	60	25	25	50
P13	19x19	60	60	25	25	50
P14	19x19	60	60	25	25	50
P15	15x24	60	60	25	25	50
P16	15x24	60	60	25	25	50
P17	19x19	60	60	25	25	50
P18	19x19	60	60	25	25	50
P19	15x24	60	60	25	25	50
P20	19x19	60	60	25	25	50
P21	19x19	60	60	25	25	50
P22	15x24	60	60	25	25	50
P23	19x19	60	60	25	25	50
P24	15x24	60	60	25	25	50
P25	19x19	60	60	25	25	50
P26	15x24	60	60	25	25	50
P27	19x19	60	60	25	25	50
P28	19x19	60	60	25	25	50
P29	15x24	60	60	25	25	50
P30	15x24	60	60	25	25	50
P31	19x19	60	60	25	25	50
P32	19x19	60	60	25	25	50
P33	19x19	60	60	25	25	50
P34	19x19	60	60	25	25	50
P35	15x24	60	60	25	25	50
P36	19x19	60	60	25	25	50
P37	15x24	60	60	25	25	50
P38	15x24	60	60	25	25	50
P39	15x24	60	60	25	25	50
P40	15x24	60	60	25	25	50



PLANTA DE LOCAÇÃO
escala 1:100

		ESTRUTURA		DATA: MAIO/18	ESCALA: 1/100
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	 Cláudia Villas Boas Engª Civil CREA-CE 14365-D	
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES		
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ				
CONTEÚDO	FORMA DE LOCAÇÃO - ESTRUTURA DE ACESSO A SANTA				

01-09



Características dos materiais	
fck (kgf/cm²)	Ecs (kgf/cm²)
250	238000

Legenda dos Pilares	
	Pilar que morre
	Pilar que passa
	Pilar que nasce
	Pilar com mudança de seção

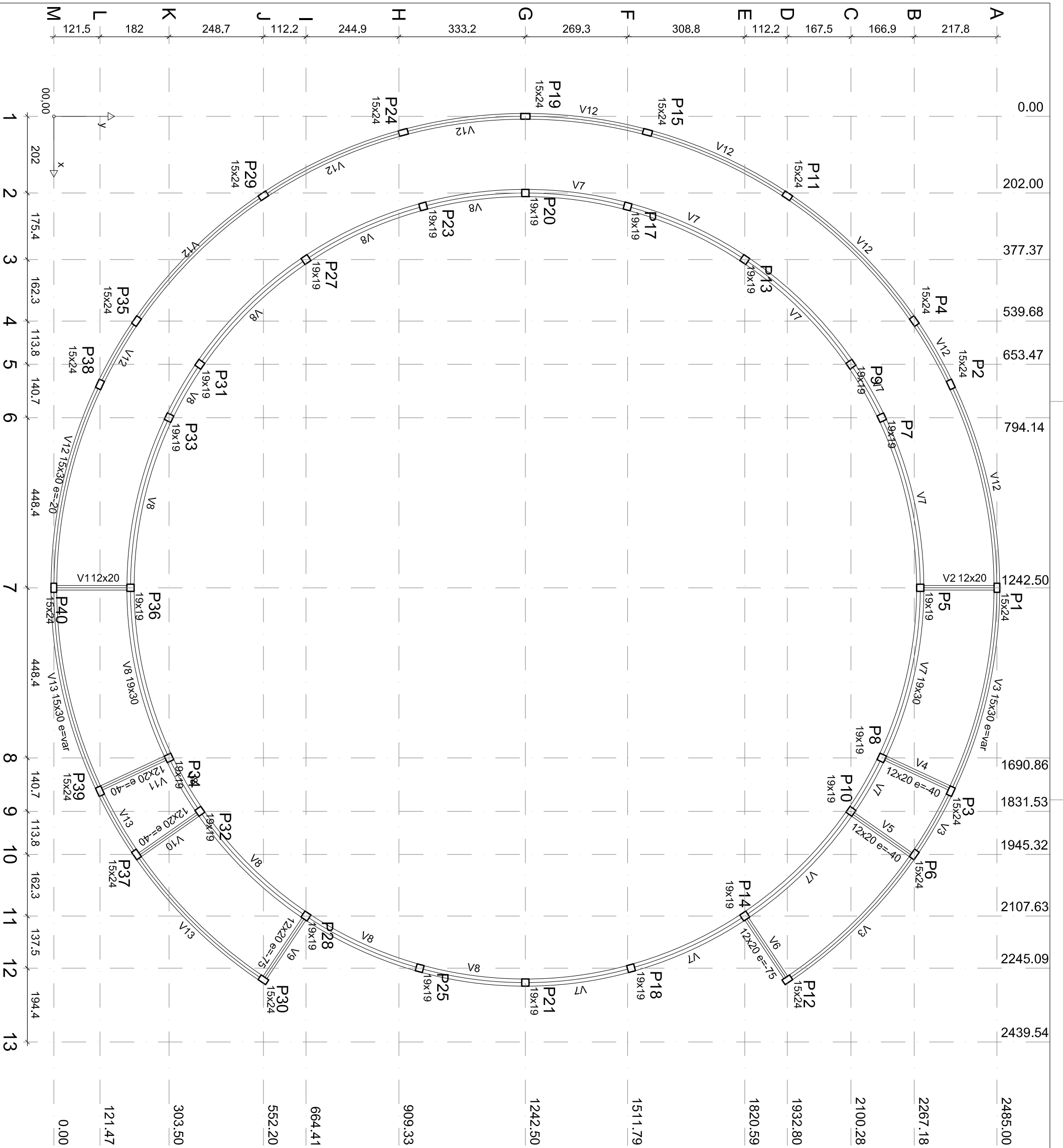
FORMA DO TERREO
escala 1:100

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 02-09			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	FORMA DO TÉRREO - ESTRUTURA DE ACESSO A SANTA						



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CREA-CE 14365-D



Características dos materiais

fck (kgf/cm²)	Ecs (kgf/cm²)
250	238000

Legenda dos Pilares

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

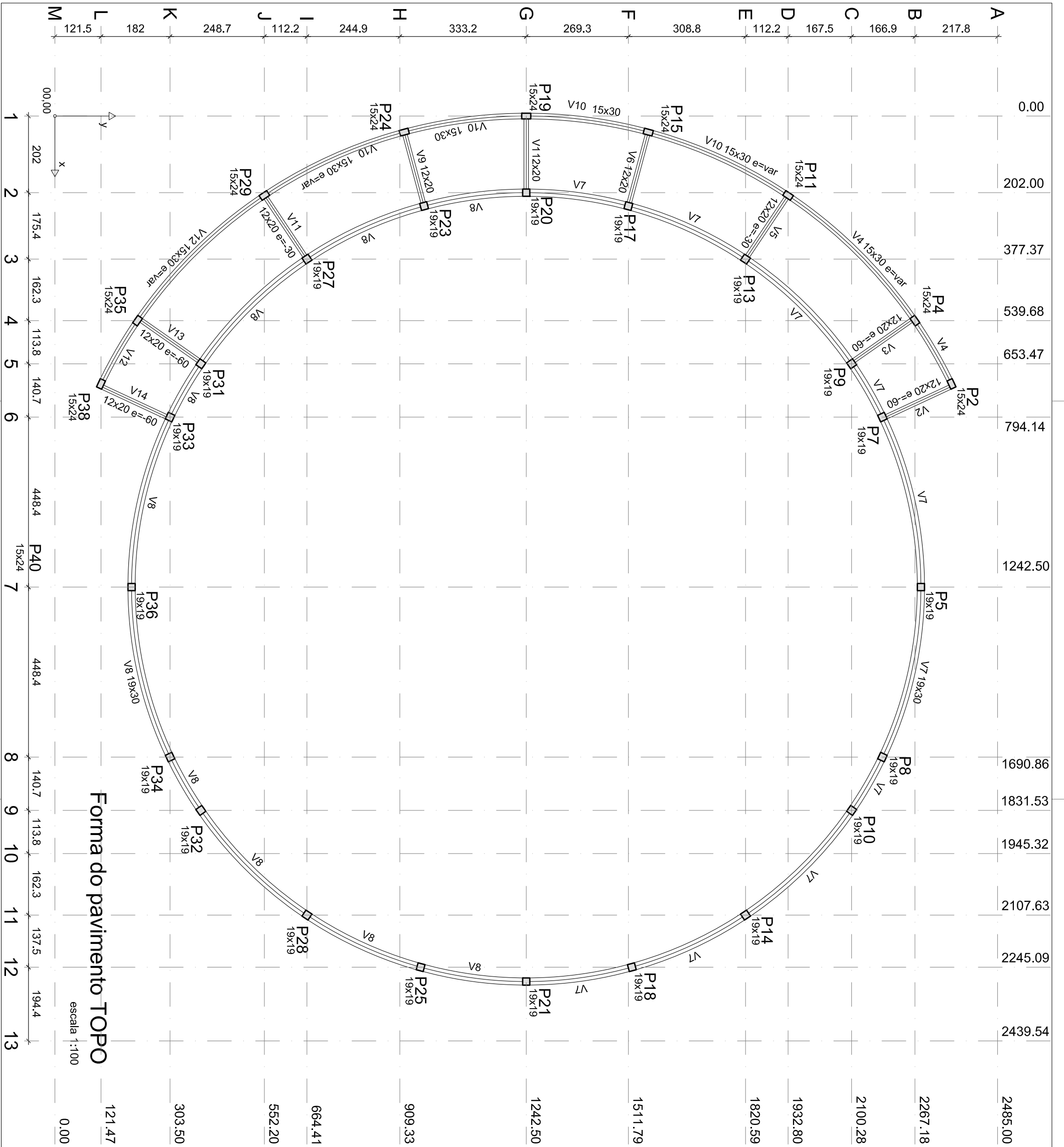
FORMA DO PAV. MEIO
escala 1:100

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 03-09			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	FORMA DO PAV. MEIO (H=1,00m) - ESTRUTURA DE ACESSO A SANTA						



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Forma do pavimento TOPO

escala 1:100

Características dos materiais	
fck (kgf/cm ²)	Ecs (kgf/cm ²)
250	238000

Legenda dos Pilares	
	Pilar que morre
	Pilar que passa
	Pilar que nasce
	Pilar com mudança de seção

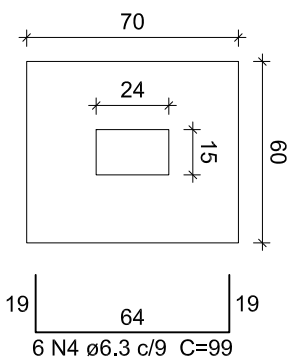
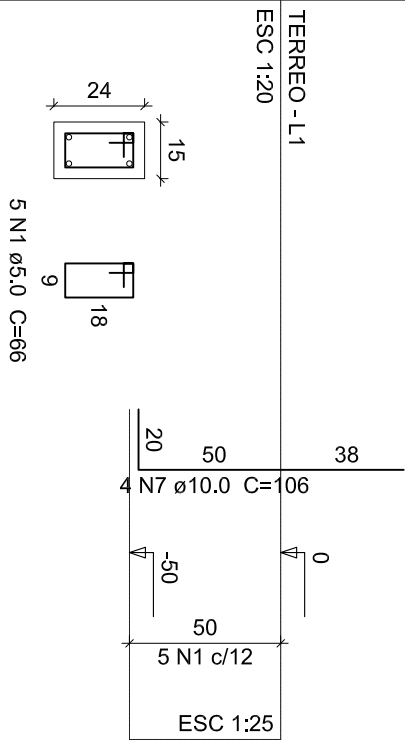
ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	1/100
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 04-09			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ	CONTEÚDO					

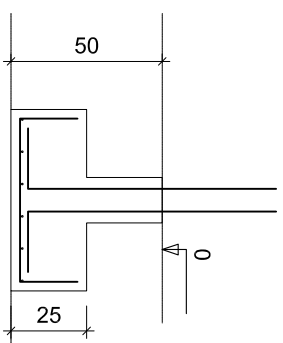


P1=P3=P4=P35

S1=S3=S4=S35
PLANTA
ESC 1:25



CORTE
ESC 1:25



Relação do aço
S10 4XS35 4XS37

ÁÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	100	66	6600
CA60	2	5.0	100	64	6400
CA50	3	6.3	448	89	39872
CA50	4	6.3	24	99	2376
CA50	5	6.3	40	109	4360
CA50	6	6.3	36	119	4284
CA60	7	10.0	148	106	15688
CA60	8	10.0	12	65	780

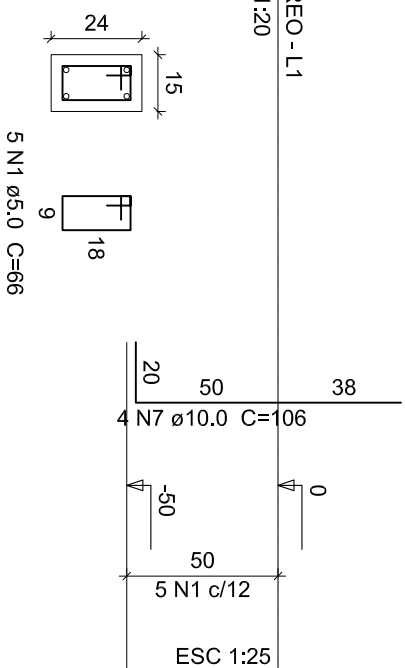
Resumo do aço

ÁÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	509	137
CA50	10.0	164.7	111.7
CA60	5.0	130	22
PESO TOTAL (kg)			
CA50	248.7		
CA60	22		

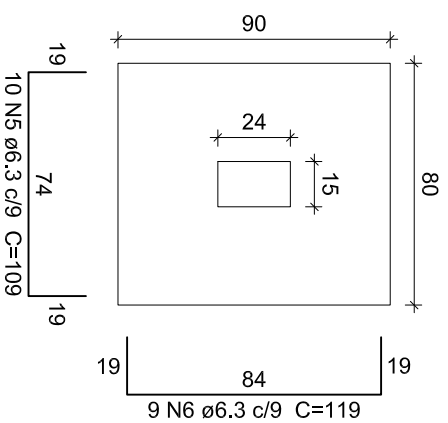
Volume de concreto (C-25) = 4,74 m³
Área de forma = 40,6 m²

P2=P6=P37=P38

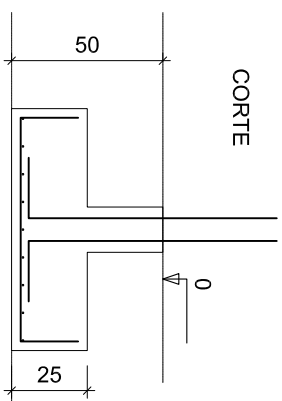
TERREO - L1
ESC 1:20



S2=S6=S37=S38
PLANTA
ESC 1:25

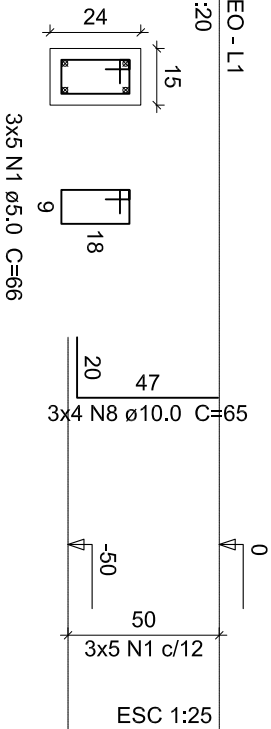


ESC 1:25



P16=P22=P26

TERREO - L1
ESC 1:20



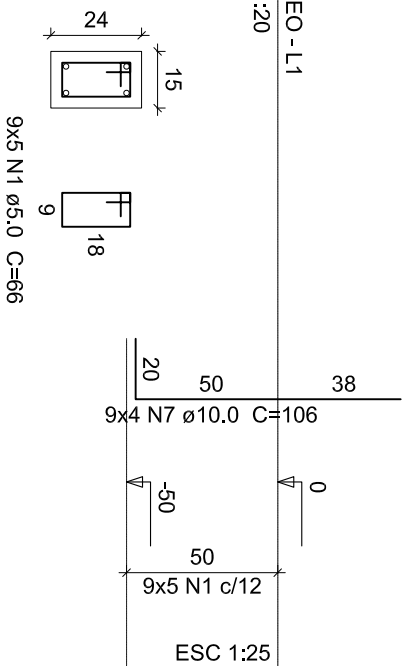
PLANTA
ESC 1:25

CORTE
ESC 1:25

S5=S7=S8=S9=S10=S11=S12=S13=S14=S15=S16
=S17=S18=S19=S20=S21=S22=S23=S24=S25
=S26=S27=S28=S29=S30=S31=S32=S33=S34
=S36=S39=S40

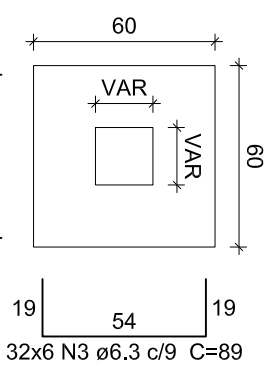
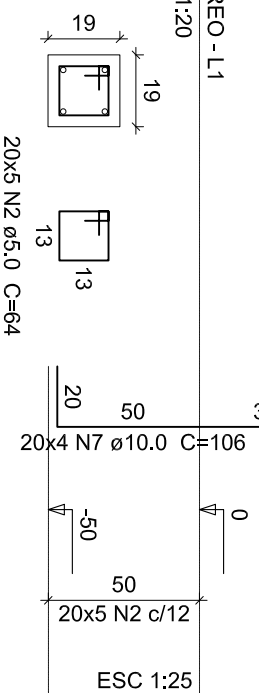
P11=P12=P15=P19=P24=P29=P30=P39=P40

TERREO - L1
ESC 1:20

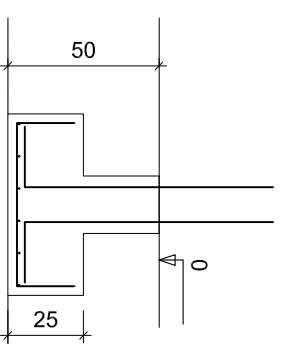


P5=P7=P8=P9=P10=P13=P14=P17=P18=P20=P21
=P23=P25=P27=P28=P31=P32=P33=P34=P36

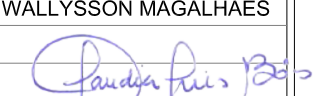
TERREO - L1
ESC 1:20



Solo com capacidade de suporte > 4,00 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600,00 kgf/m³



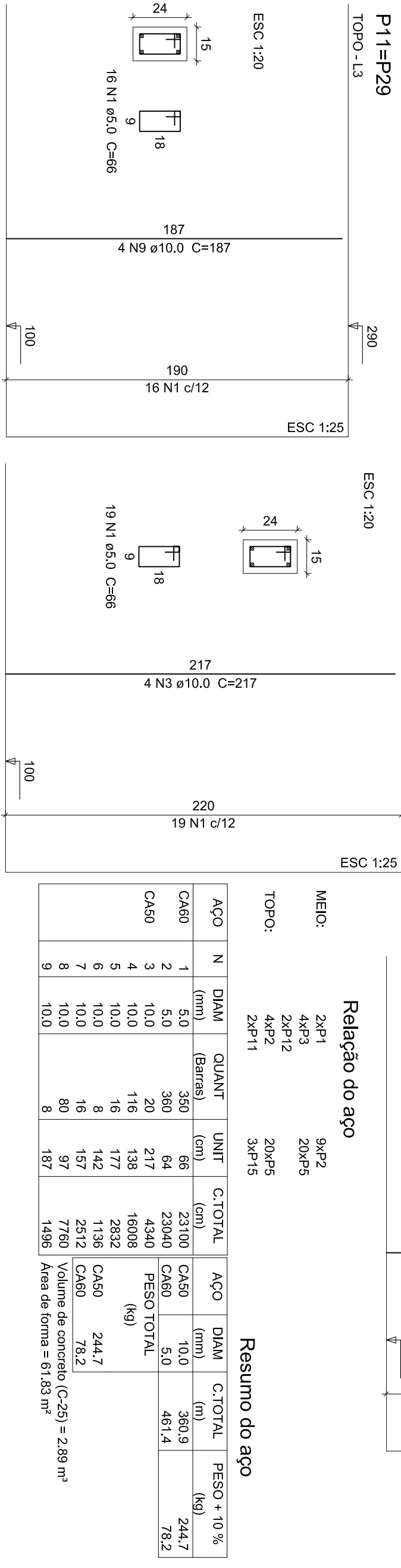
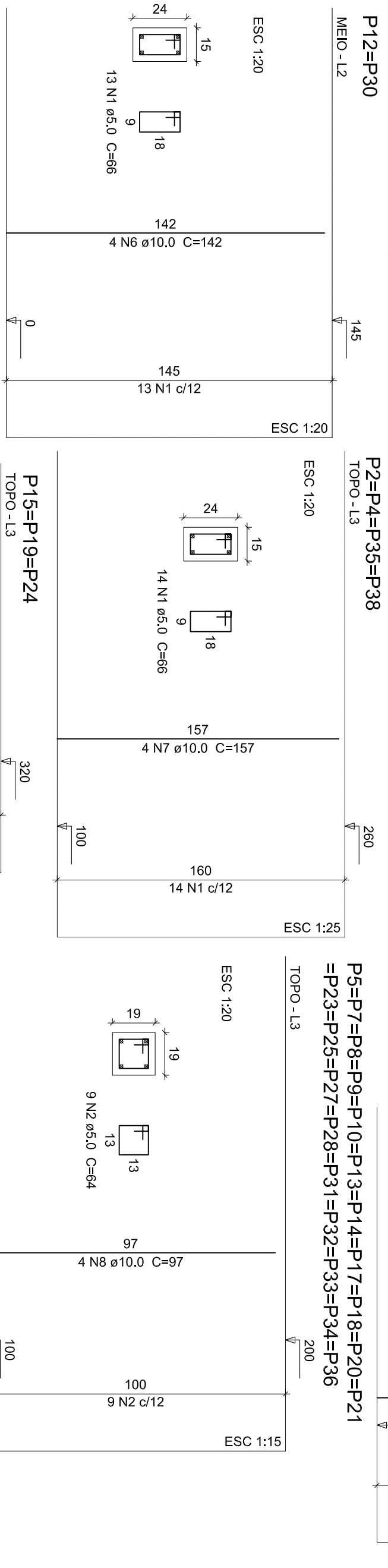
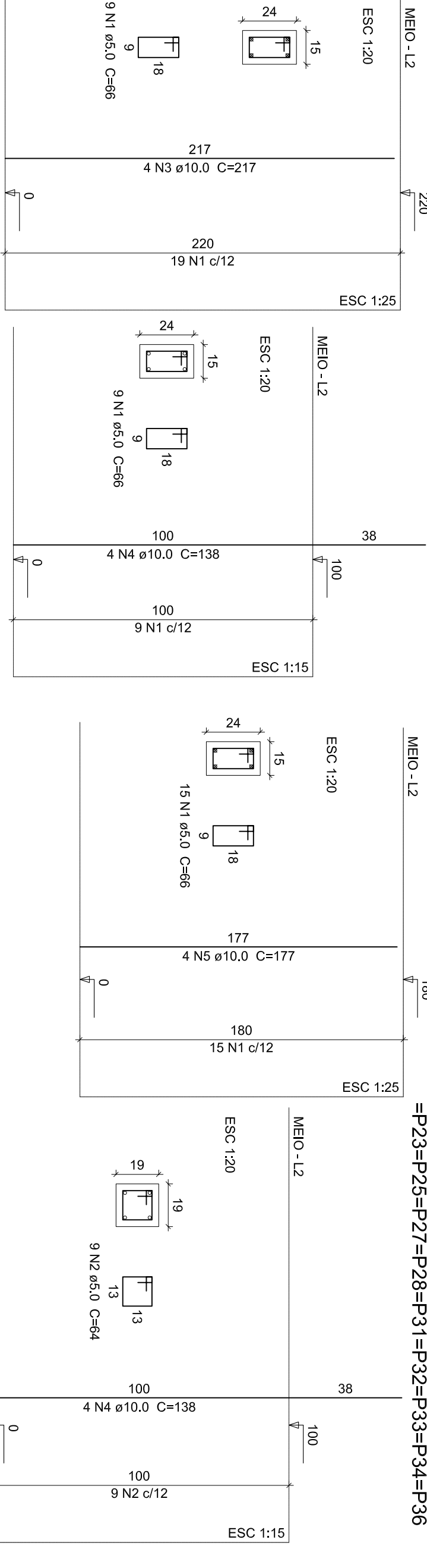
ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	05-09			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	FUNDAÇÕES - ESTRUTURA DE ACESSO A SANTA						

Cláudia Villas Boas
Engª Civil
CREA-CE 14365-D



P1=P40 P2=P4=P11=P15=P19=P24=P29=P35=P38 P3=P6=P37=P39 P5=P7=P8=P9=P10=P13=P14=P17=P18=P20=P21
 =P23=P25=P27=P28=P31=P32=P33=P34=P36



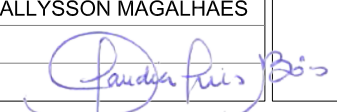
Relação do aço

MEIO:	2xP1	9xP2
	4xP3	20xP5
TOPO:	2xP12	
	4xP2	20xP5
	2xP11	3xP15

Resumo do aço

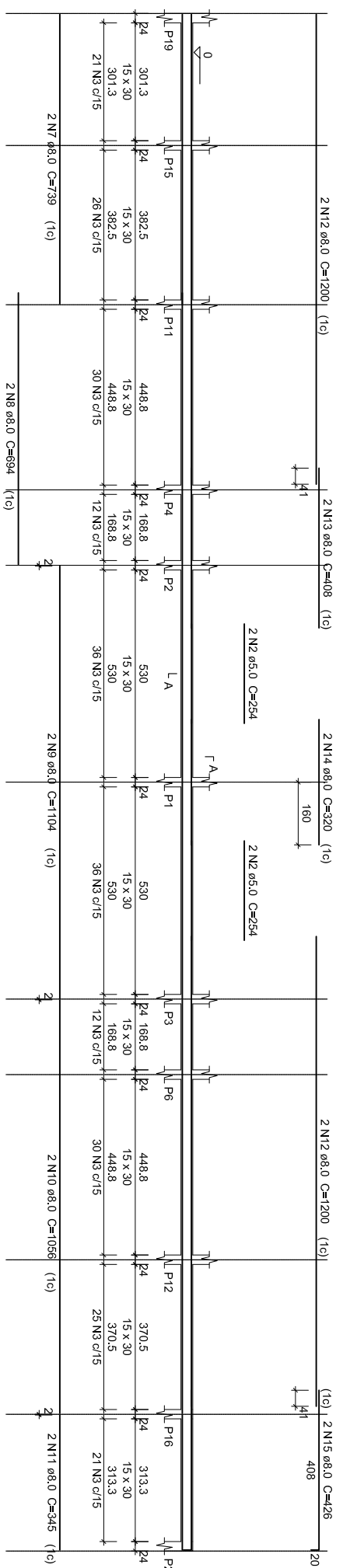
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)	AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA60	1	5.0	350	66	23100	CA50	10.0	360.9	244.7
CA60	2	5.0	360	64	23040	CA60	5.0	461.4	78.2
CA50	3	10.0	20	217	4340	PESO TOTAL (kg) CA50 244.7 CA60 78.2 Volume de concreto (C-25) = 2.89 m³ Área de forma = 61.83 m²			
CA50	4	10.0	116	138	16008				
CA50	5	10.0	16	177	2832				
CA50	6	10.0	8	142	1136				
CA50	7	10.0	16	157	2512				
CA50	8	10.0	80	97	7760				
CA50	9	10.0	8	187	1496				

ESTRUTURA

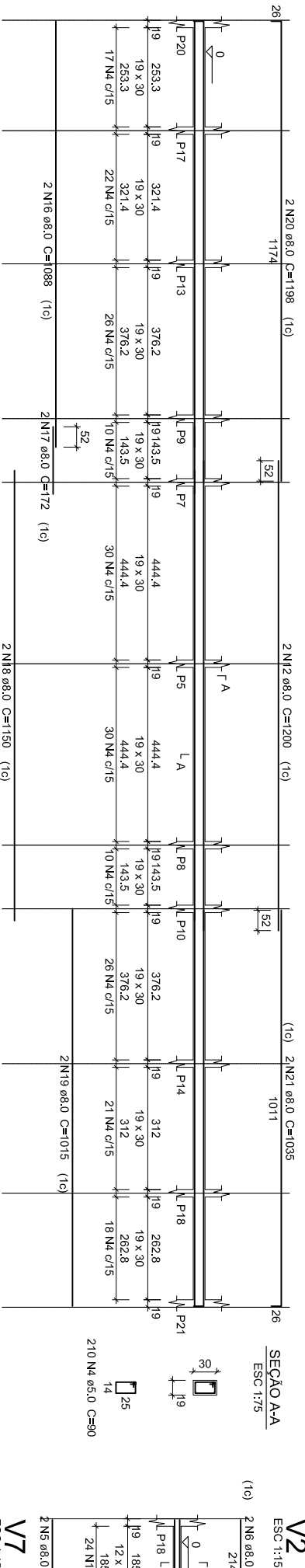
PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 06-09			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DOS PILARES - ESTRUTURA DE ACESSO A SANTA						



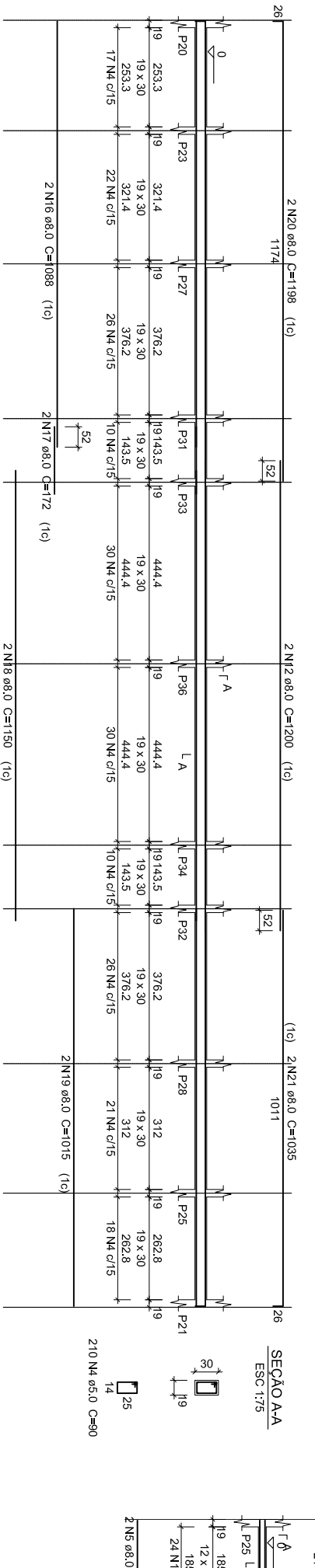
V3 (CURVA)
ESC 1:150



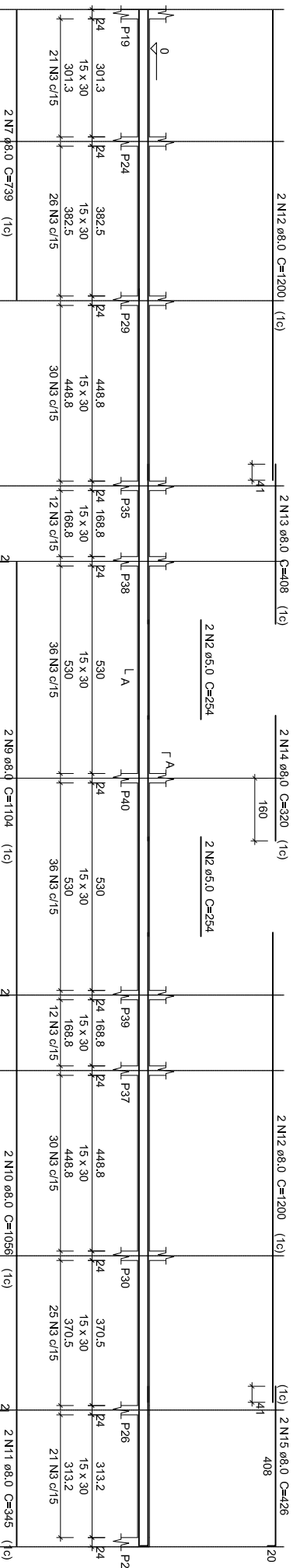
V4 (CURVA)
ESC 1:150



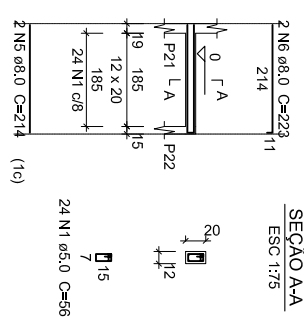
V5 (CURVA)
ESC 1:150



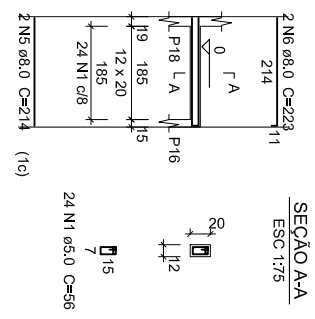
V6 (CURVA)
ESC 1:150



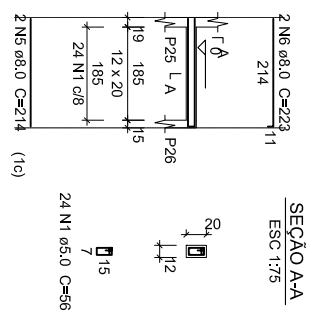
V1
ESC 1:150



V2
ESC 1:150



V7
ESC 1:150



Relação do aço

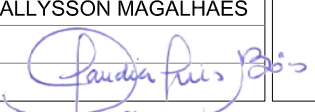
ACO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	72	56	4032
CA60	2	5,0	8	254	2032
CA60	3	5,0	498	82	40836
CA60	4	5,0	420	90	37800
CA60	5	8,0	6	214	1284
CA60	6	8,0	6	223	1338
CA60	7	8,0	4	739	2956
CA60	8	8,0	4	694	2776
CA60	9	8,0	4	1104	4416
CA60	10	8,0	4	1056	4224
CA60	11	8,0	4	345	1380
CA60	12	8,0	12	1200	14400
CA60	13	8,0	4	320	1280
CA60	14	8,0	4	408	1632
CA60	15	8,0	4	426	1704
CA60	16	8,0	4	1088	4352
CA60	17	8,0	4	1172	4688
CA60	18	8,0	4	1150	4600
CA60	19	8,0	4	1015	4060
CA60	20	8,0	4	1198	4792
CA60	21	8,0	4	1035	4140

Resumo do aço

ACO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8,0	600,3	260,5
CA60	5,0	847	143,6
PESO TOTAL			404,1
CA50	260,5		
CA60	143,6		

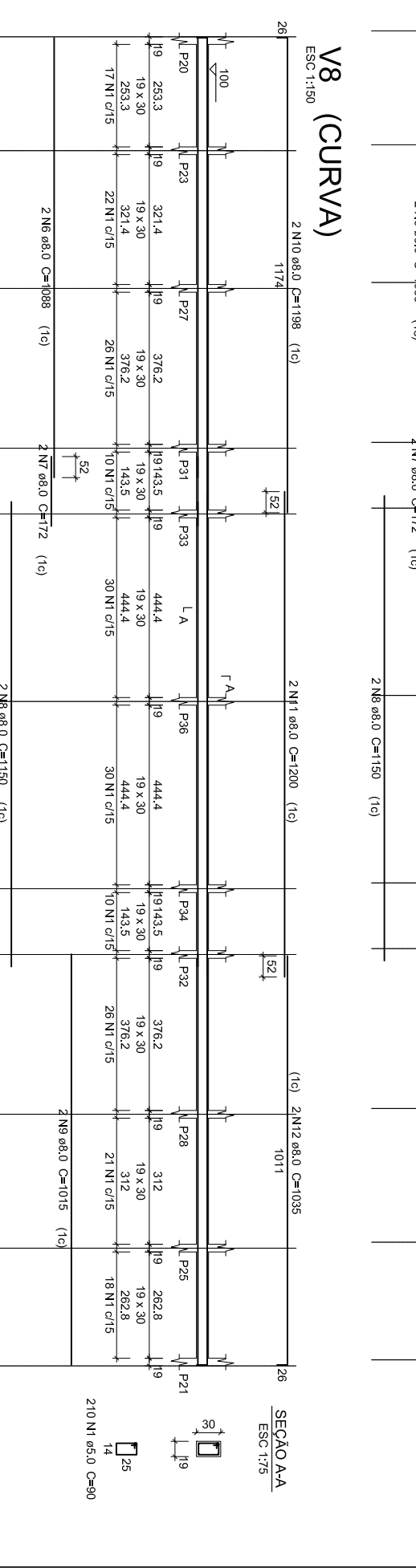
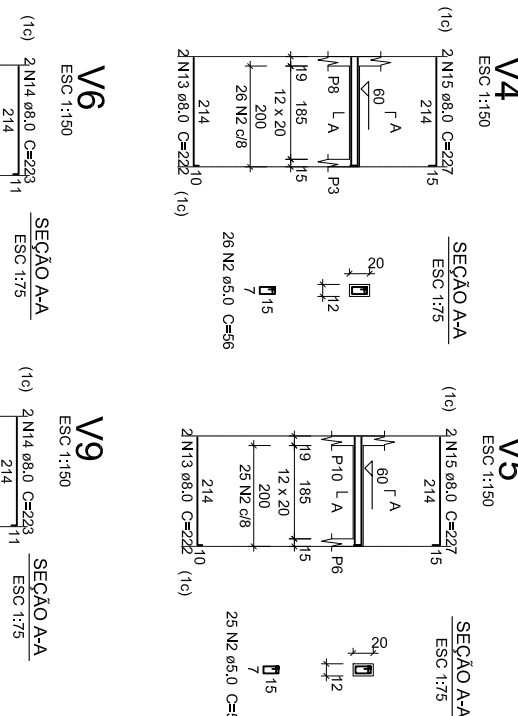
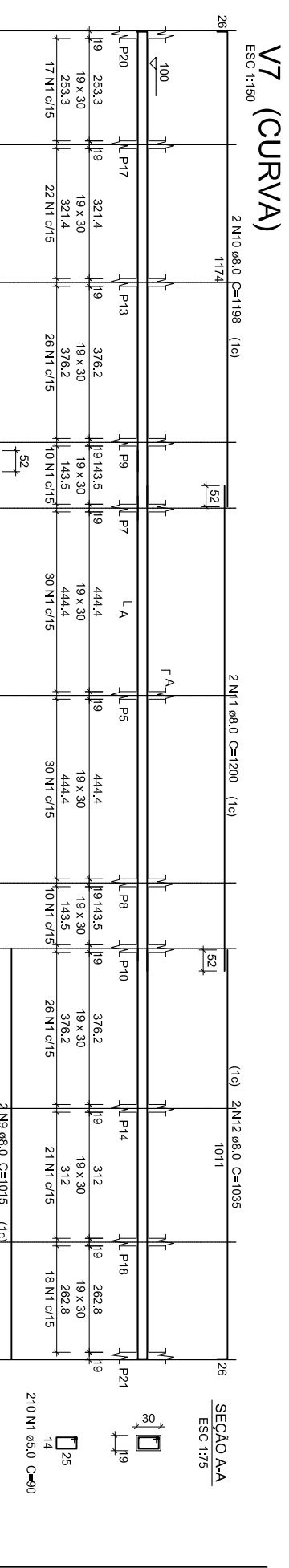
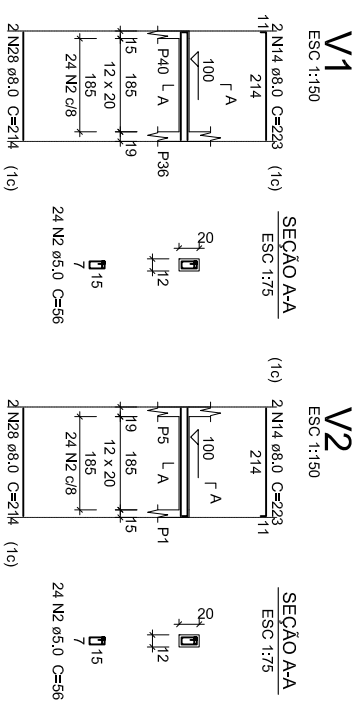
Volume de concreto (C-25) = 7,44 m³
Área de forma = 114,25 m²

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	 07 -09			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS 01 - ESTRUTURA DE ACESSO A SANTA						



Claudia Villas Boas
Engª Civil
CREA-CE 14365-D



Relação do aço

ACO	N	DIAM (mm)	QUANT (Barras)	UNIF (cm)	C.TOTAL (cm)
CA60	1	5,0	420	56	37800
	2	5,0	202	56	11312
	3	5,0	8	254	2032
	4	5,0	406	82	33292
	5	5,0	238	952	22616
	6	8,0	4	1088	4352
	7	8,0	4	172	688
	8	8,0	4	1150	4600
	9	8,0	4	1015	4060
	10	8,0	4	1198	4792
	11	8,0	4	1200	9600
	12	8,0	4	1035	4140
	13	8,0	12	222	2664
	14	8,0	8	223	1764
	15	8,0	8	227	1816
	16	8,0	4	786	3144
	17	8,0	2	875	1750
	18	8,0	2	1053	2106
	19	8,0	2	726	1452
	20	8,0	2	594	1188
	21	8,0	8	188	1504
	22	8,0	2	797	1594
	23	8,0	2	193	386
	24	8,0	2	787	1574
	25	8,0	4	512	2048
	26	8,0	4	493	1972
	27	8,0	4	143	572
	28	8,0	4	214	856

Resumo do aço

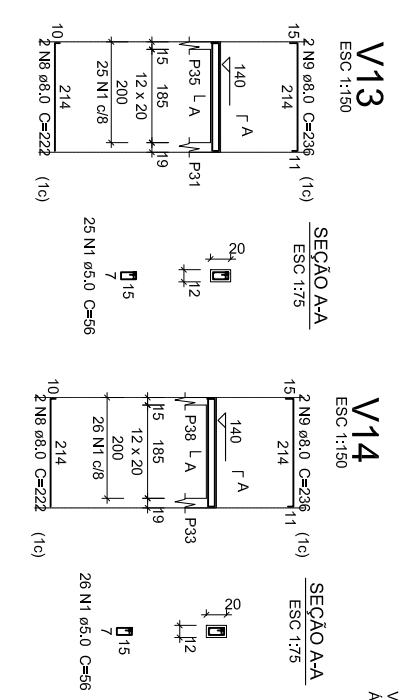
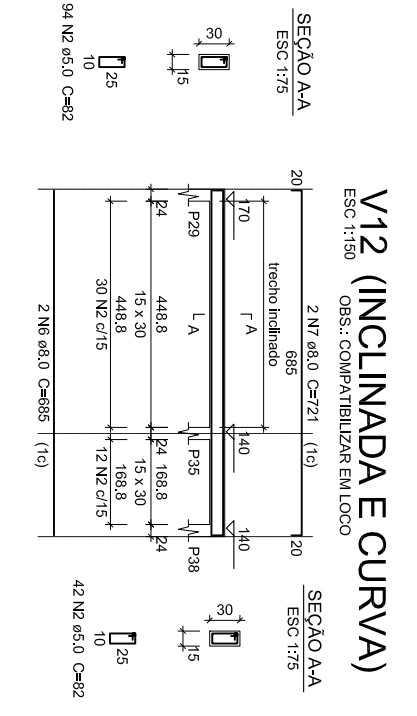
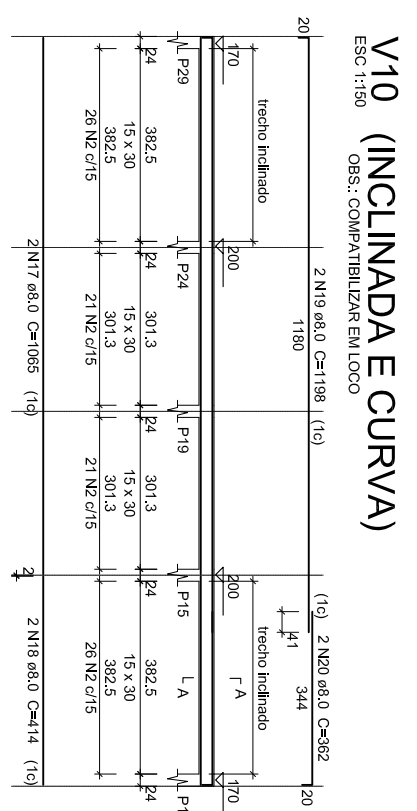
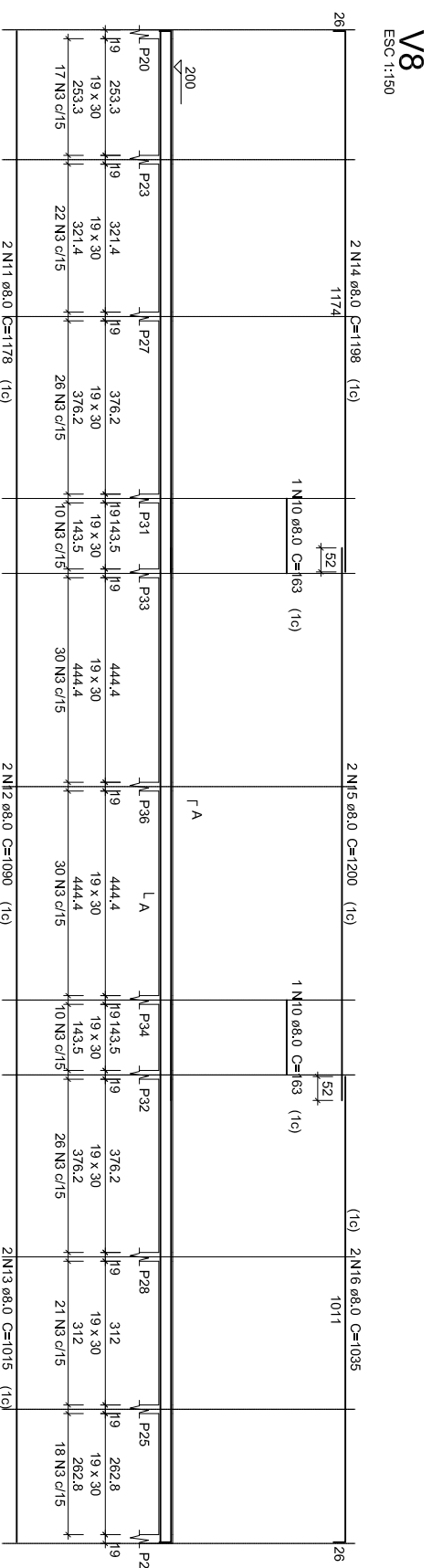
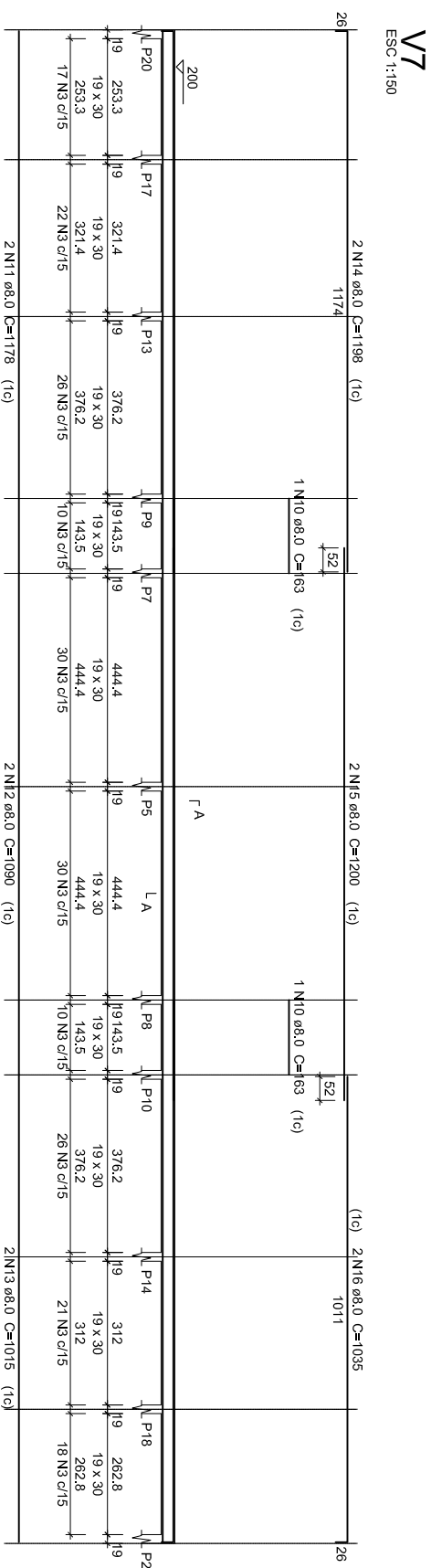
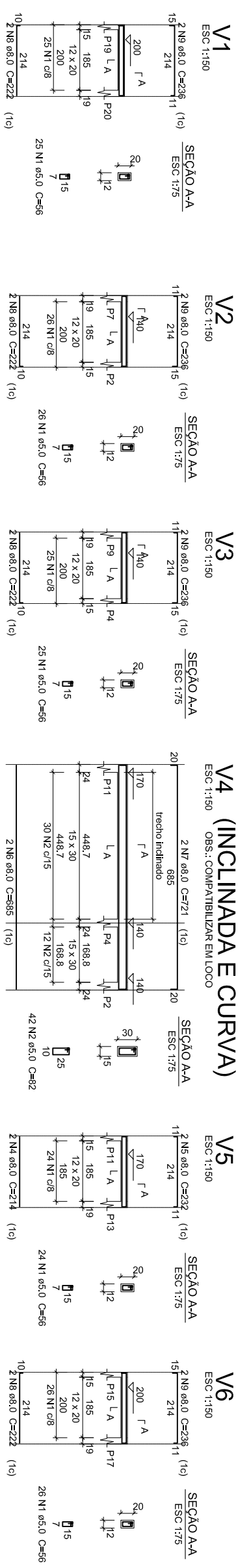
ACO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8,0	586,5	254,5
CA60	5,0	853,9	144,8
PESO TOTAL			400,3
CA50	254,5		
CA60	144,8		

Volume de concreto (C-25) = 7,05 m³
 Área de forma = 109,15 m²

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	<div style="font-size: 2em; font-weight: bold;">08-09</div>			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ	 Cláudia Villas Boas Eng. Civil CREA-CE 14365-D					
CONTEÚDO	ARMAÇÃO DAS VIGAS 02 - ESTRUTURA DE ACESSO A SANTA						





Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIF (cm)	C TOTAL (cm)
CA60	1	5,0	227	56	12712
CA50	2	5,0	178	82	14596
CA60	3	5,0	420	90	37800
CA50	4	8,0	214	214	856
	5	8,0	4	232	928
	6	8,0	4	685	2740
	7	8,0	4	721	2884
	8	8,0	14	222	3108
	9	8,0	14	236	3304
	10	8,0	4	163	652
	11	8,0	4	1178	4712
	12	8,0	4	1090	4360
	13	8,0	4	1015	4060
	14	8,0	4	1198	4792
	15	8,0	4	1200	4800
	16	8,0	4	1035	4140
	17	8,0	2	1065	2130
	18	8,0	2	1198	2396
	19	8,0	2	1198	2396
	20	8,0	2	382	724

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA60	5,0	474,2	205,8
CA60	8,0	651,1	110,4
PESO TOTAL (kg)			316,2
CA50	205,8		
CA60	110,4		

Volume de concreto (C-25) = 5,51 m³
 Área de forma = 83,68 m²

ESTRUTURA

PROJETO	URBANIZAÇÃO DA SANTA NOSSA SENHORA DA PENHA	RESPONSÁVEL	CLAUDIA VILLAS BOAS	DATA	MAIO/18	ESCALA	INDICADA
CONTRATANTE	GOVERNO MUNICIPAL DE CAMPOS SALES	DESENHO	WALLYSSON MAGALHÃES	<p style="margin: 0; font-size: 2em; font-weight: bold;">09-09</p>			
ENDEREÇO	RODOVIA BR 230 - CAMPOS SALES - CEARÁ						
CONTEÚDO	ARMAÇÃO DAS VIGAS 03 - ESTRUTURA DE ACESSO A SANTA						

