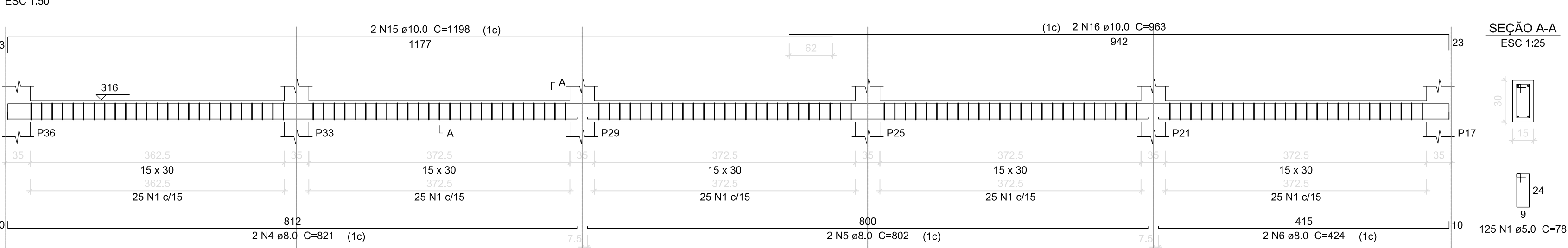
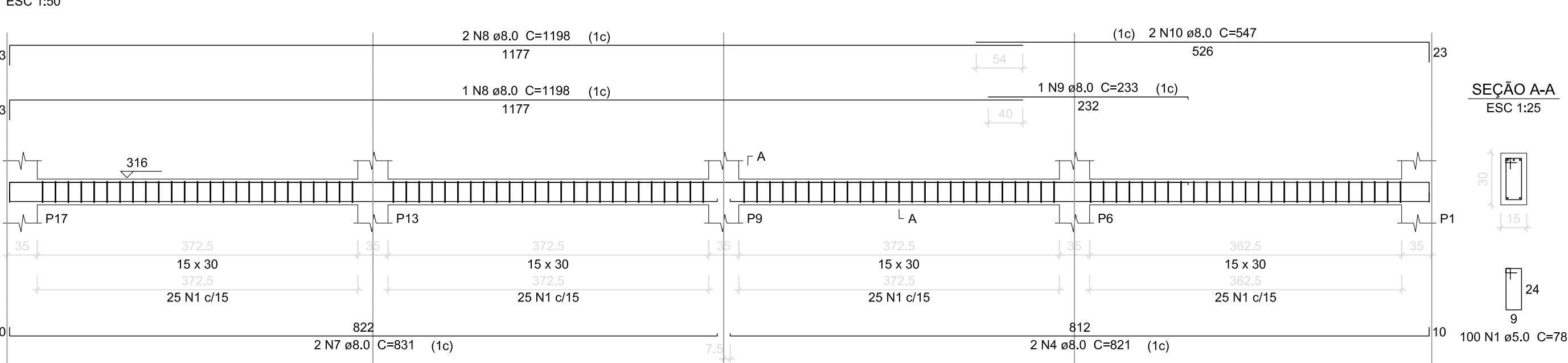


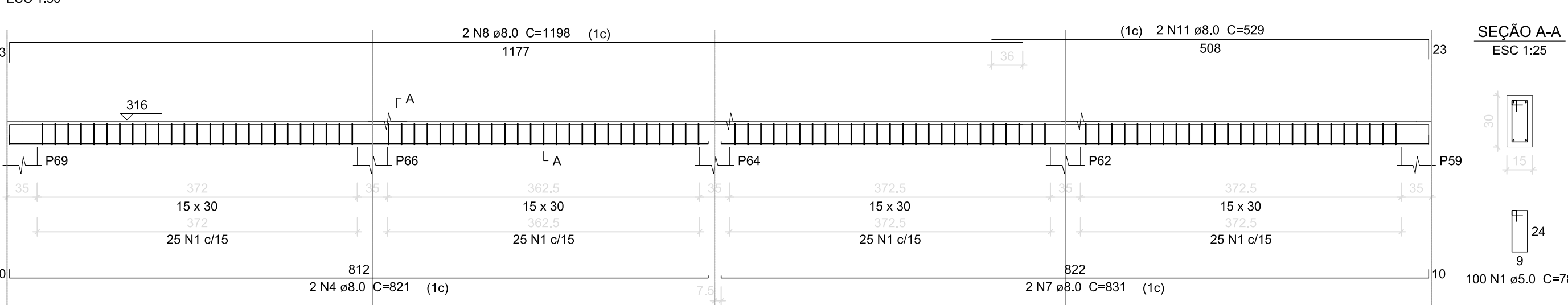
V43 (15 x 30)



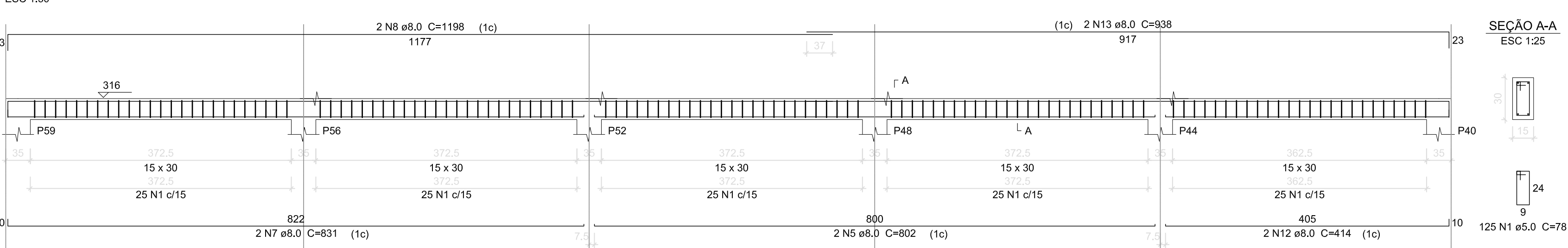
V44 (15 x 30)



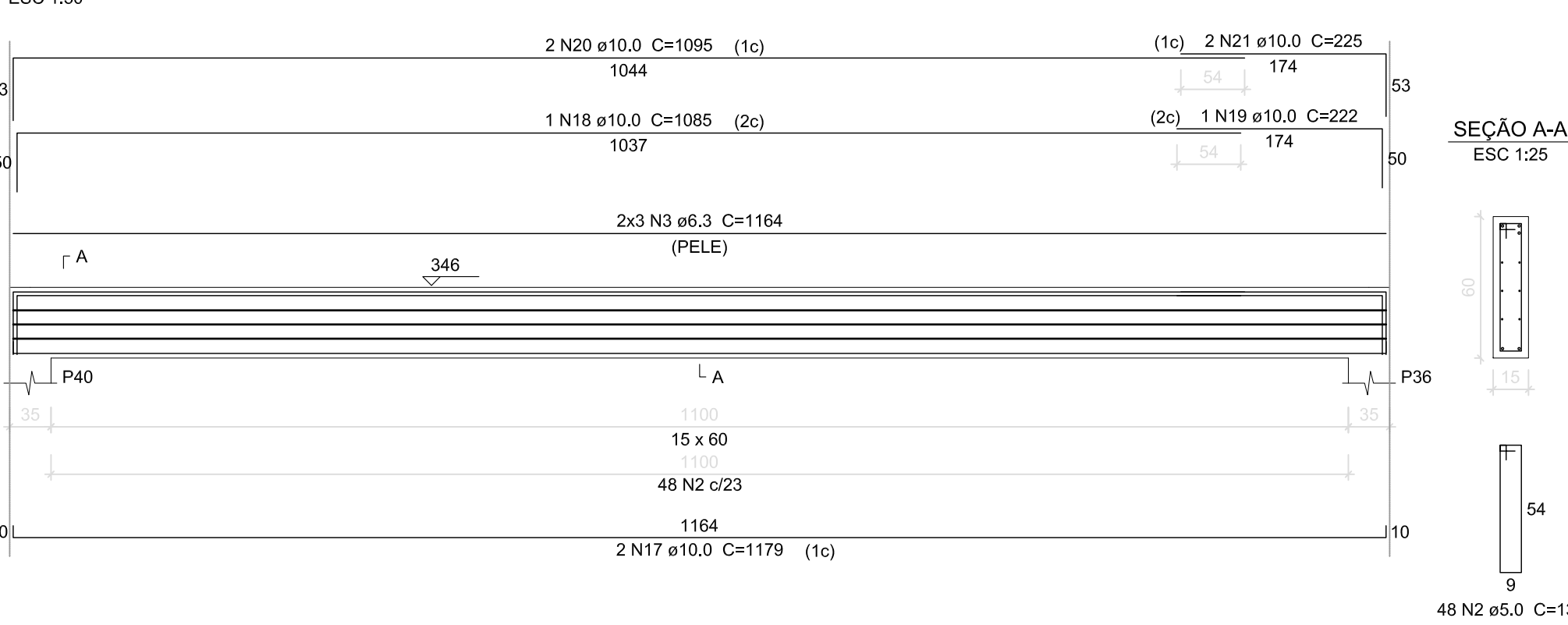
V45 (15 x 30)



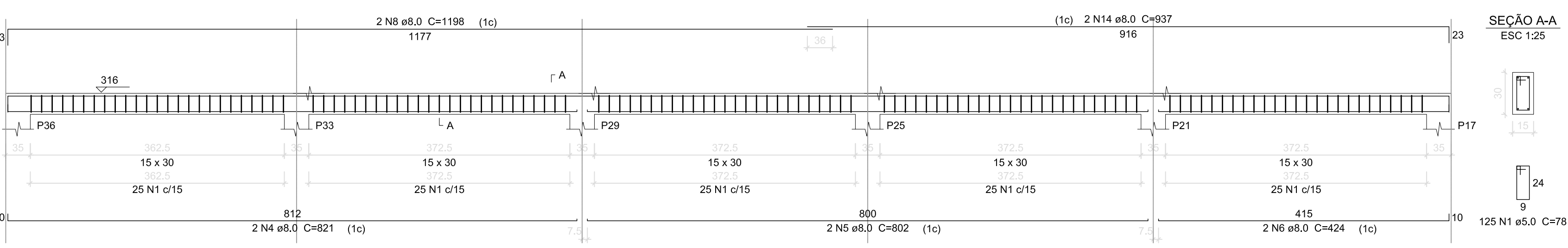
V46 (15 x 30)



V47 (15 x 60)



V48 (15 x 30)



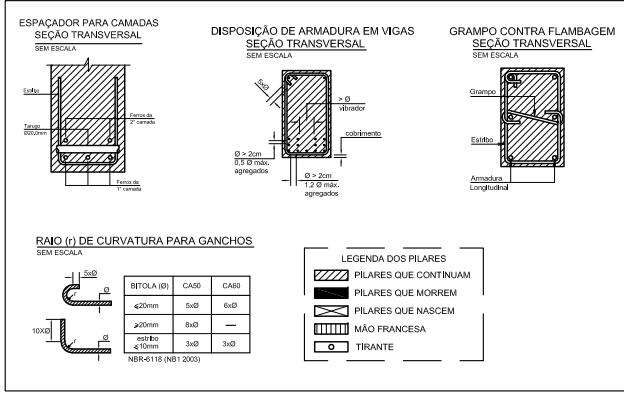
Relação do aço

V43 V46	V44 V47	V45 V48			
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	575	78	44850
CA50	2	5.0	48	138	6624
	3	6.3	6	1164	6984
	4	8.0	8	821	6568
	5	8.0	6	802	4812
	6	8.0	4	424	1696
	7	8.0	6	831	4996
	8	8.0	9	1198	10782
	9	8.0	1	233	233
	10	8.0	2	547	1094
	11	8.0	2	529	1058
	12	8.0	2	414	828
13	8.0	2	938	1876	
14	8.0	2	937	1874	
15	10.0	2	1198	2396	
16	10.0	2	963	1926	
17	10.0	2	1179	2358	
18	10.0	1	1095	1095	
19	10.0	1	222	222	
20	10.0	2	1095	2190	
21	10.0	2	225	450	

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	69.9	18.8
	8.0	358.1	155.4
	10.0	106.3	72.1
CA60	5.0	514.8	87.3
PESO TOTAL (kg)			
CA50		246.3	
CA60		87.3	

Volume de concreto (C-30) = 5.33 m³
Área de forma = 87.02 m²



CLASSE DE AGRESSIVIDADE AMBIENTAL	
II - MODERADA URBANA	
FATORES ATENANTES:	
- Condições típicas de umidade e radiação na área.	
- Ambientes ventilados com umidade e poluição.	
CONCRETO ADOTADO:	
C30 Fck = 30MPa	
Ecs = 20071 N/m²	
FATOR AGRAVAMENTO DO CONCRETO: w/s ≤ 0,05	

Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA



AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3

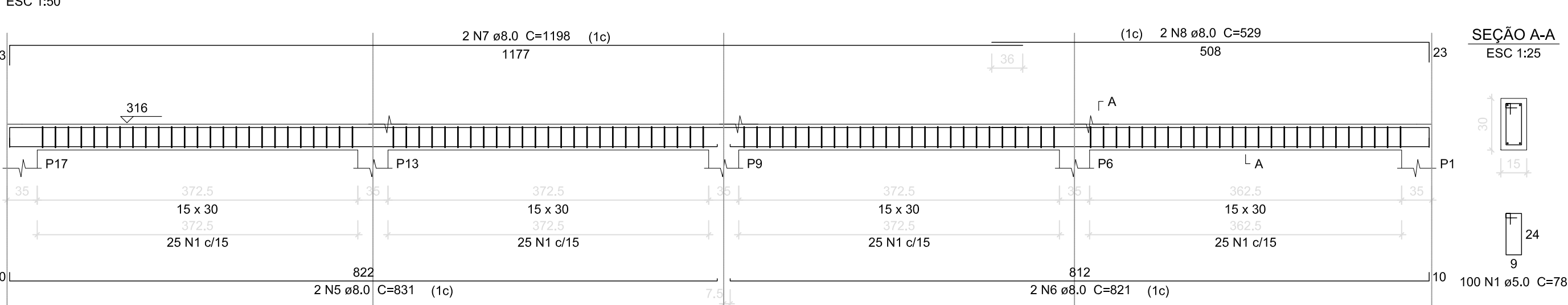


ENDEREÇO:
Rua Dom José Thomaz, 194 - Bairro São José - Aracaju/SE
dipop@ifs.edu.br
TEL: (79)3711-3139

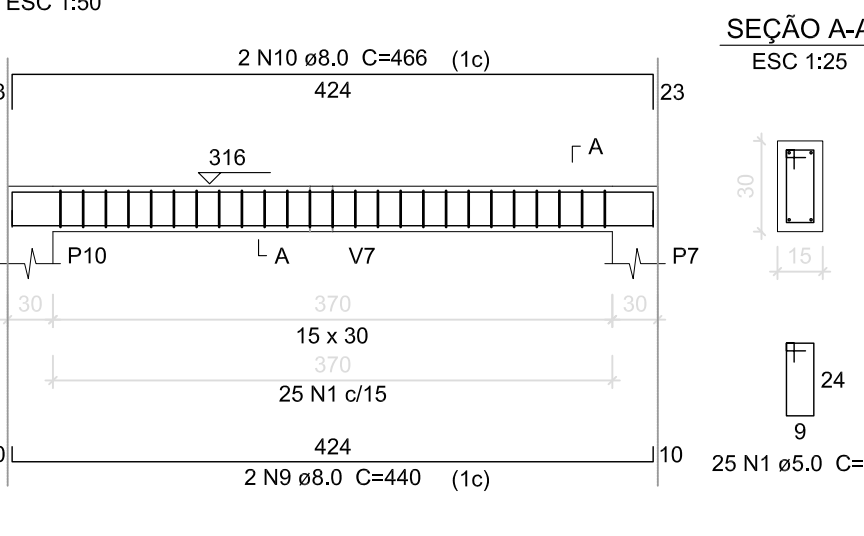
PROJETO ESTRUTURAL
CAMPUS JAPARATUBA/SE

CLIENTE:		INSTITUTO FEDERAL DE SERGIPE - CAMPUS JAPARATUBA	
ENDEREÇO:		ROD. DEP. REINALDO MOURA, S/N - JAPARATUBA/SE	
PLANTA:		BLOCO ADMINISTRATIVO ARMAÇÃO VIGAS PAV. COBERTURA	
CAMPO:		OBRA:	
ESPECIALIDADE:		FASE:	
SERIAL:		QUANTITATIVO:	
REVISÃO:		REVISÃO:	
11/14		11/14	

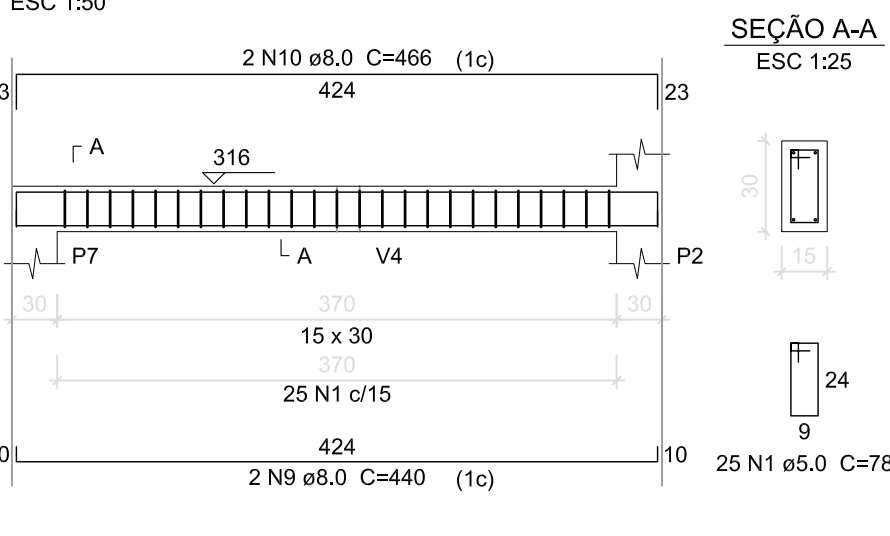
V49 (15 x 30)



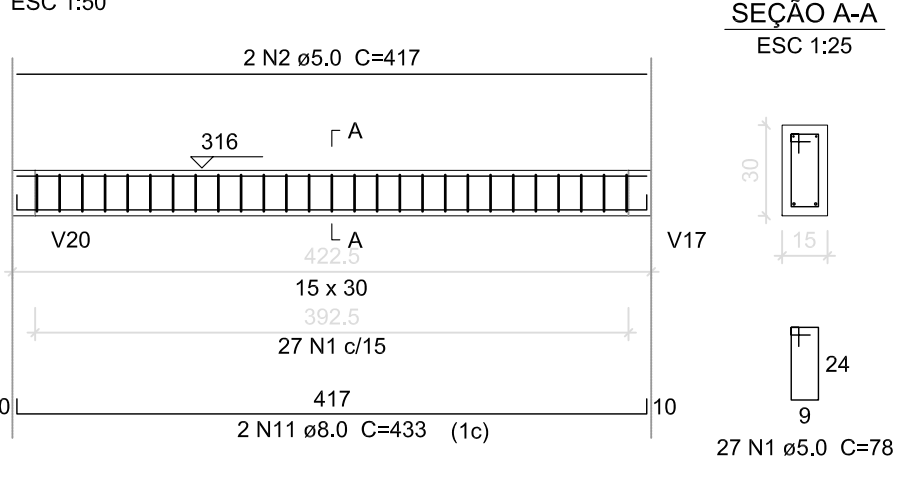
V50 (15 x 30)



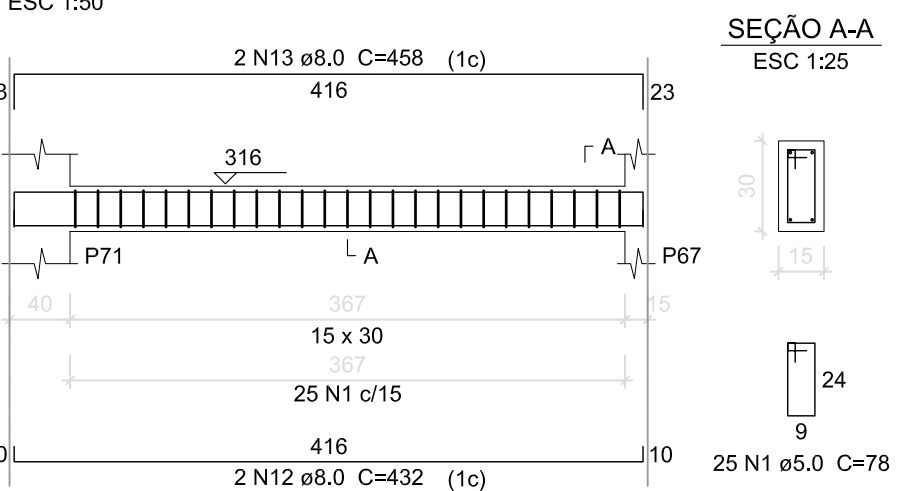
V51 (15 x 30)



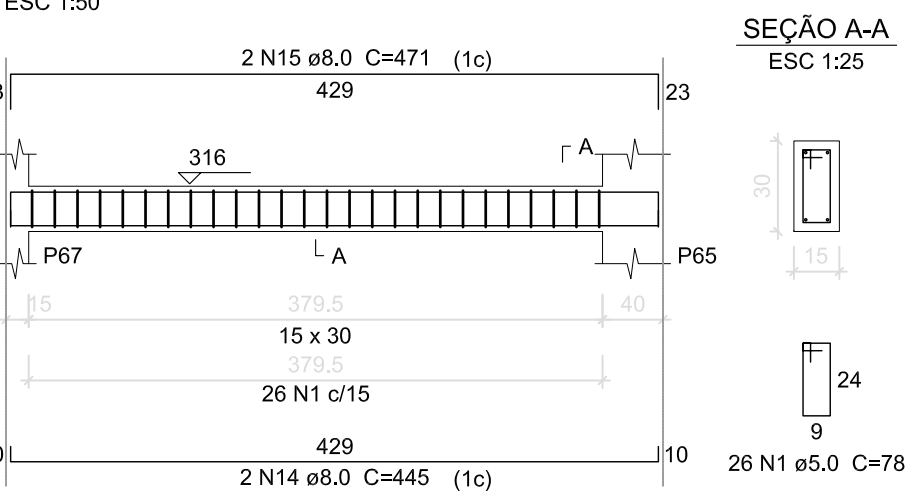
V52 (15 x 30)



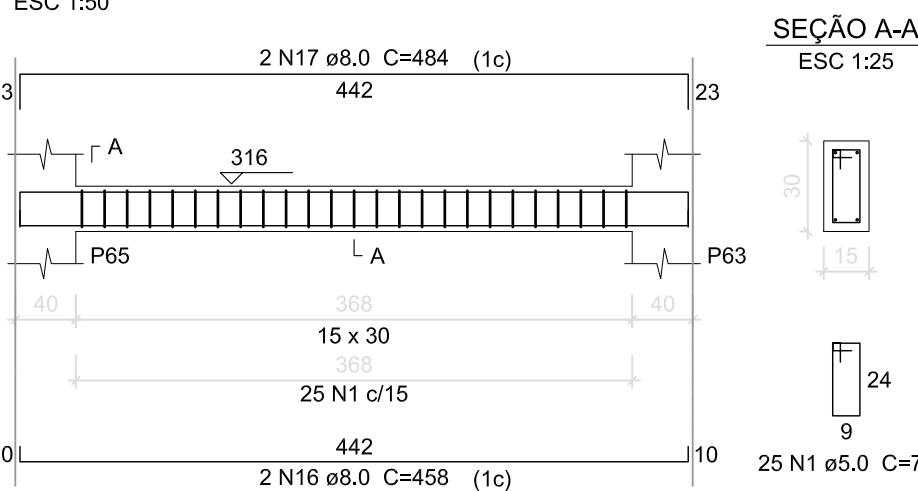
V53 (15 x 30)



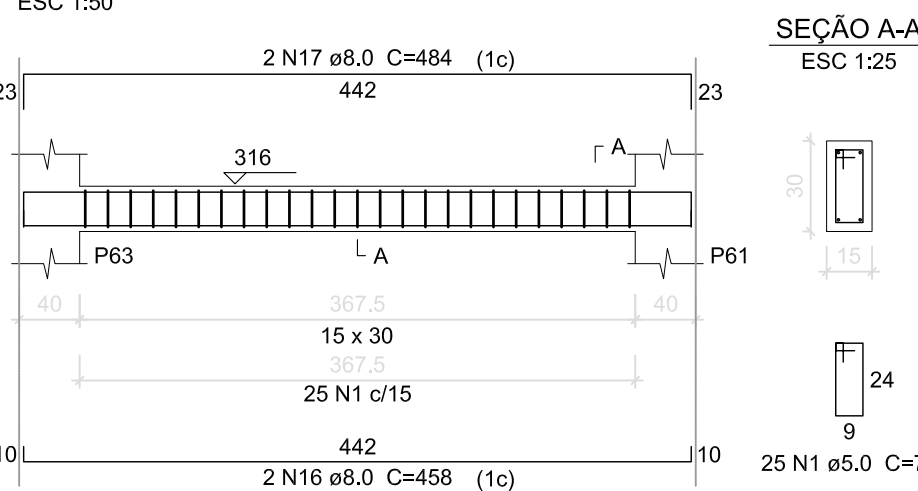
V54 (15 x 30)



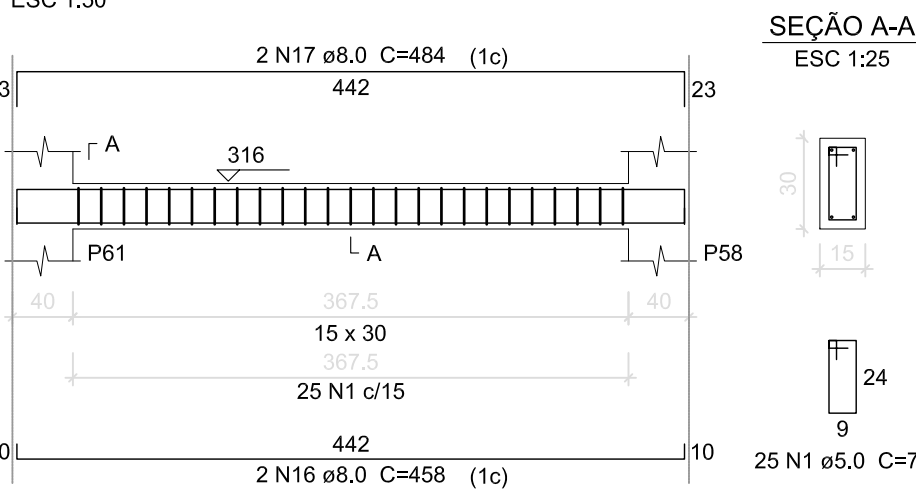
V55 (15 x 30)



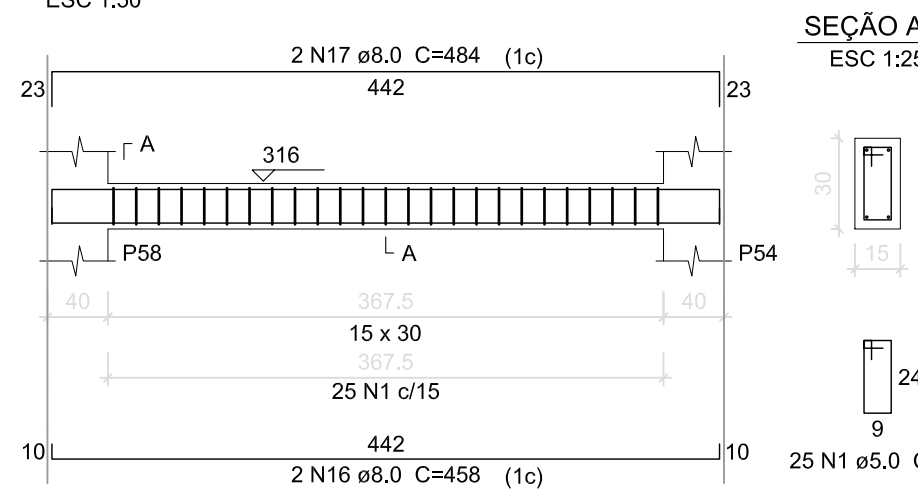
V56 (15 x 30)



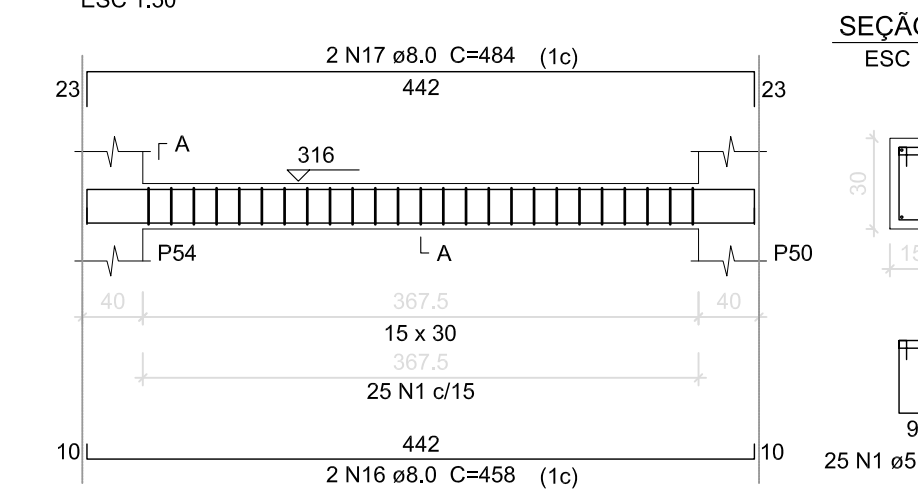
V57 (15 x 30)



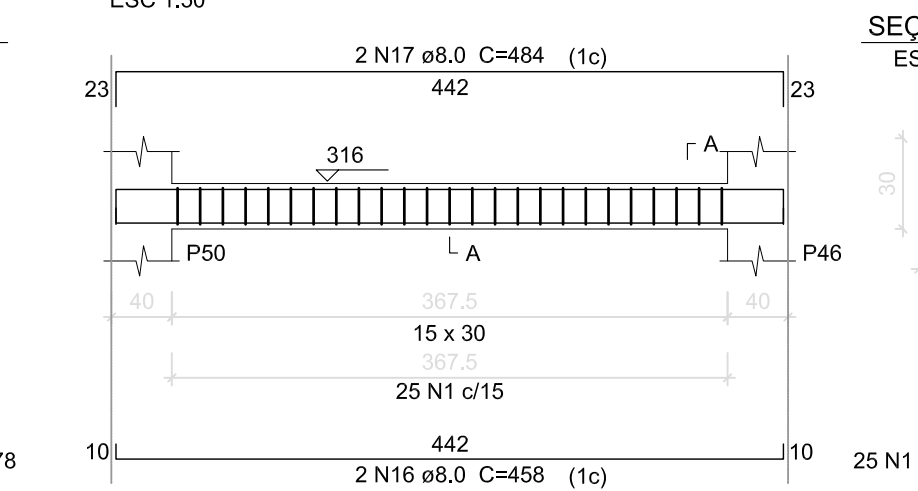
V58 (15 x 30)



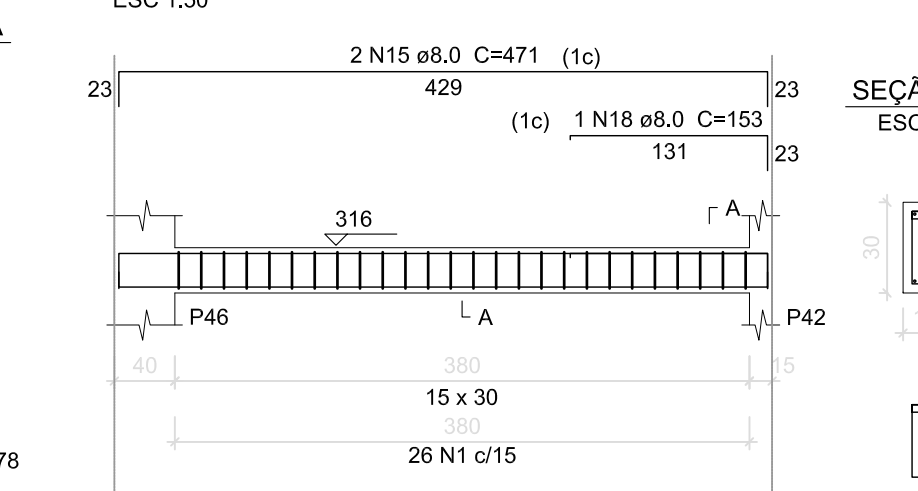
V59 (15 x 30)



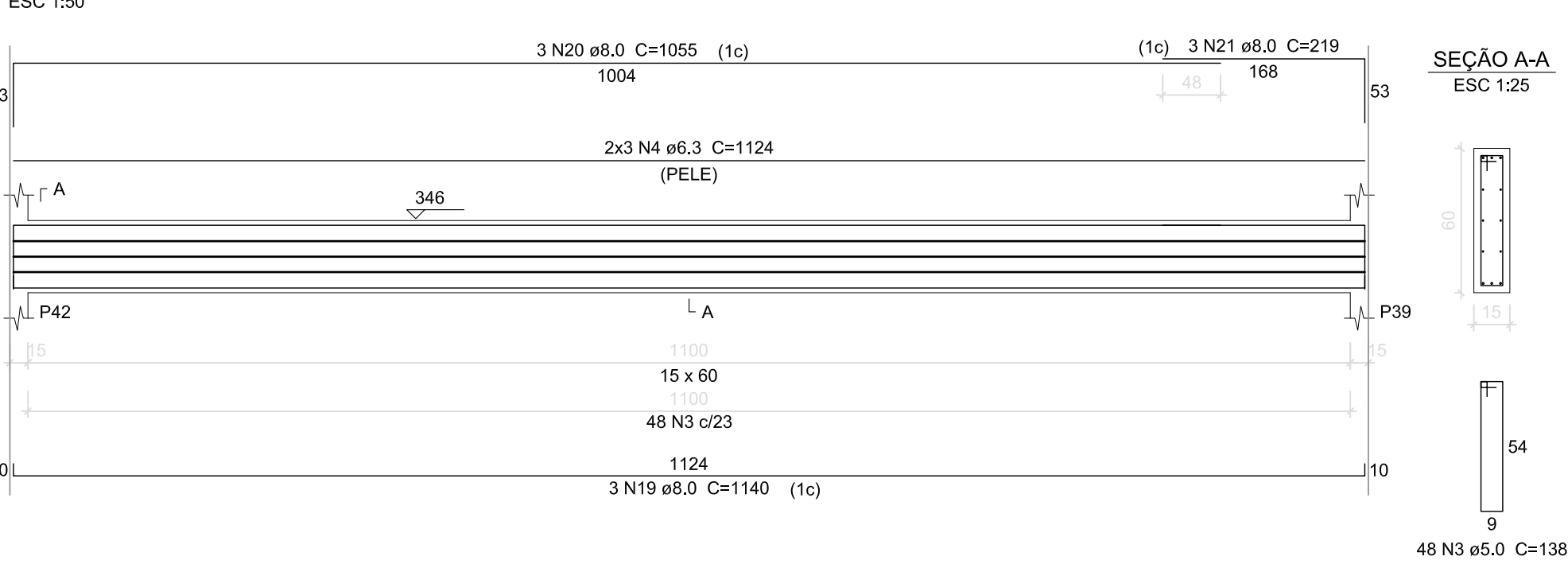
V60 (15 x 30)



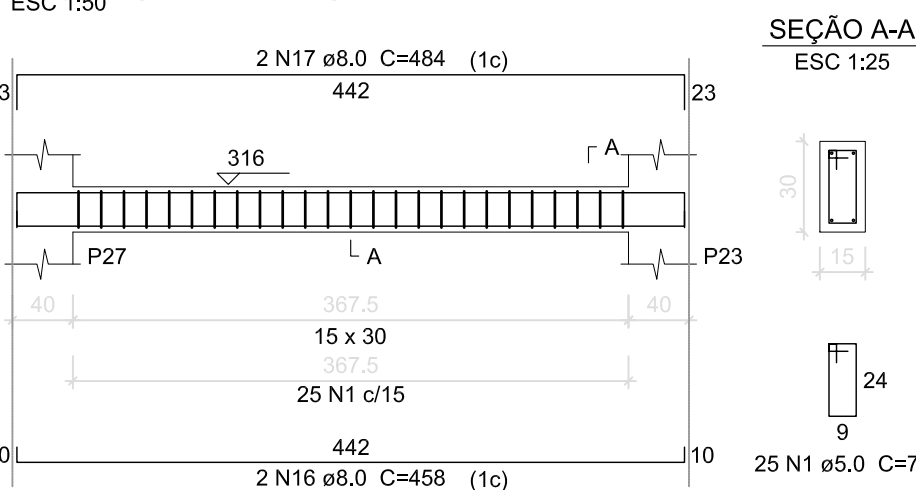
V61 (15 x 30)



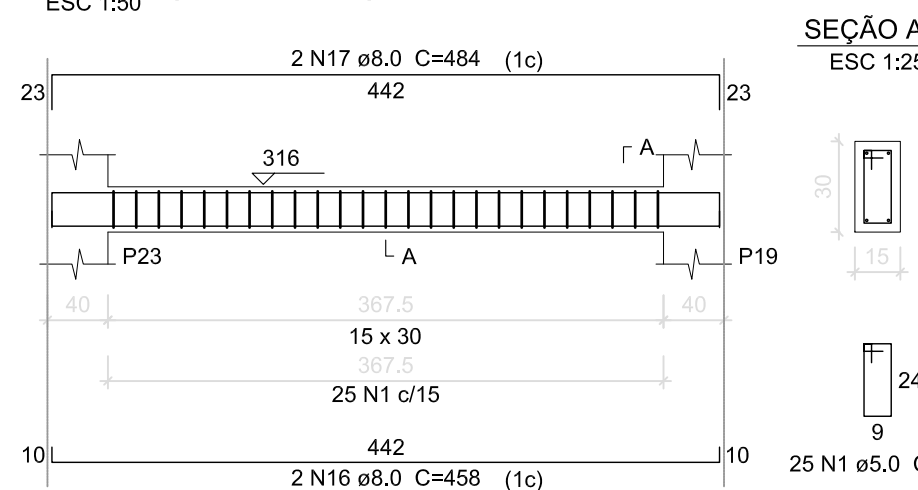
V62 (15 x 60)



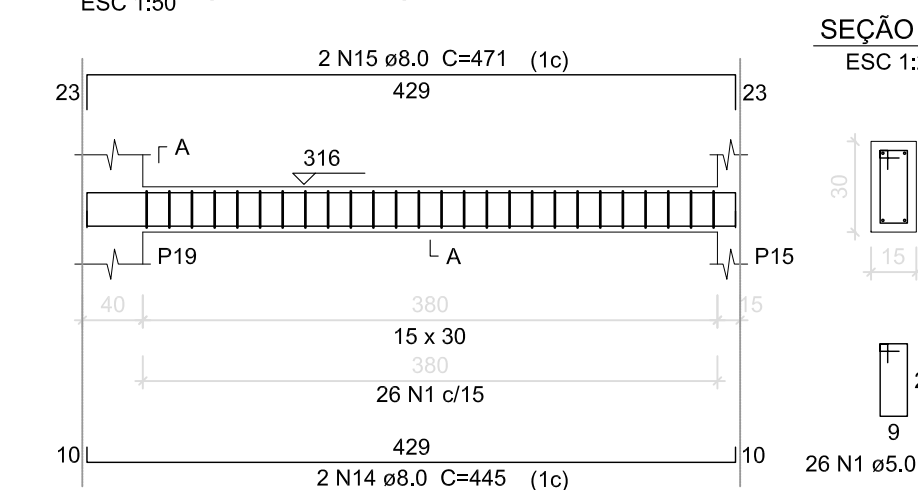
V66 (15 x 30)



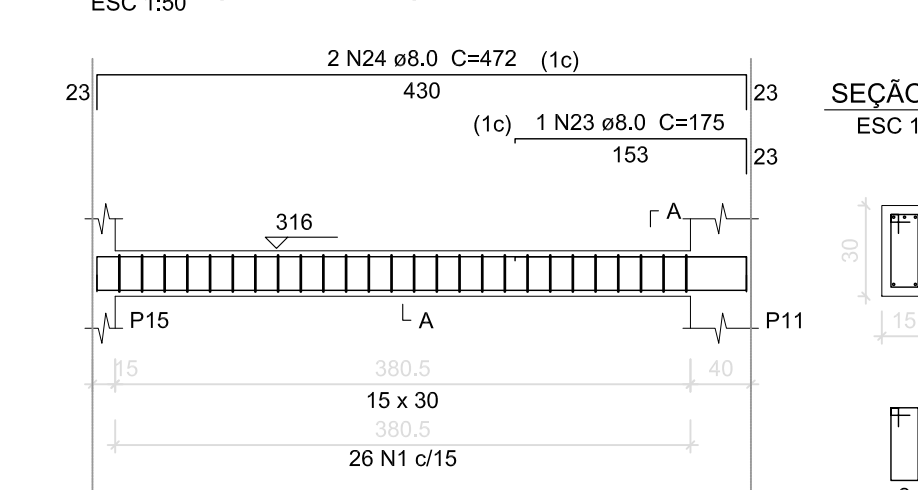
V67 (15 x 30)



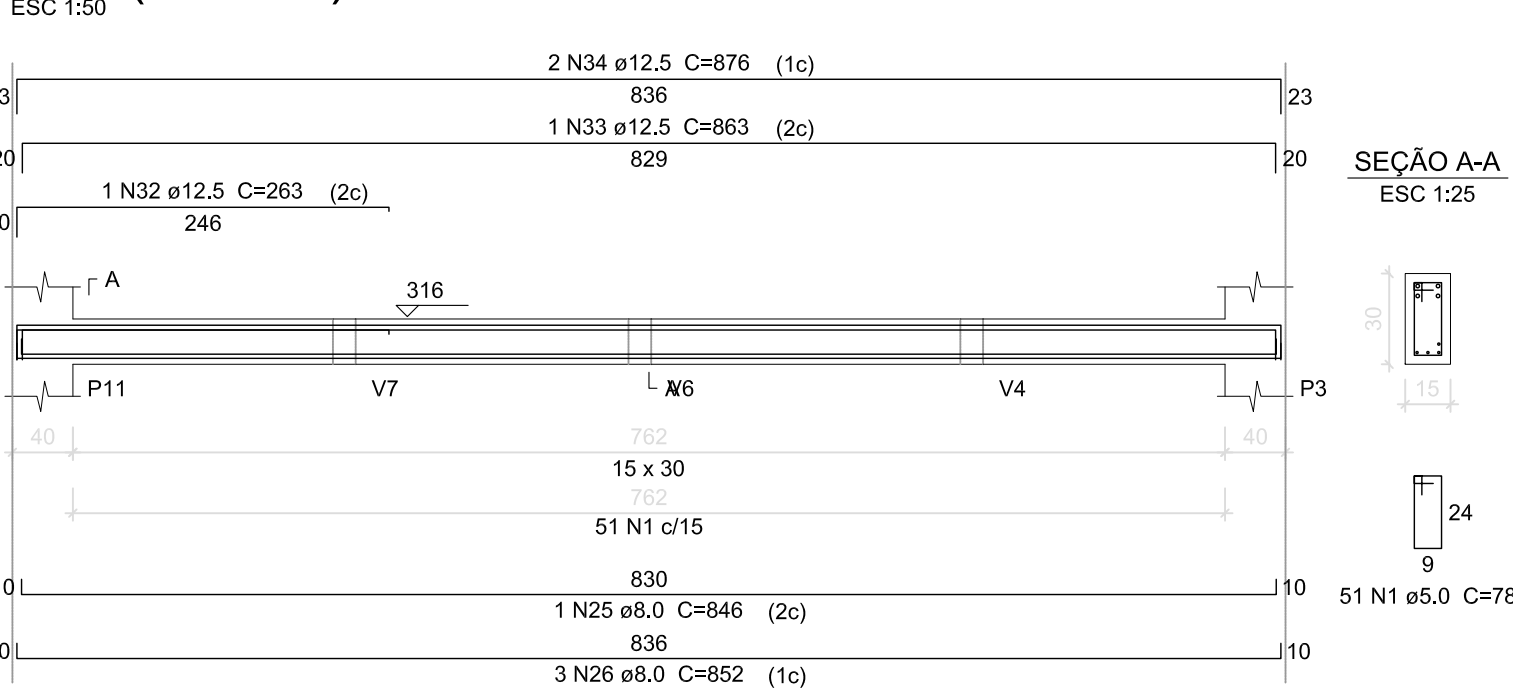
V68 (15 x 30)



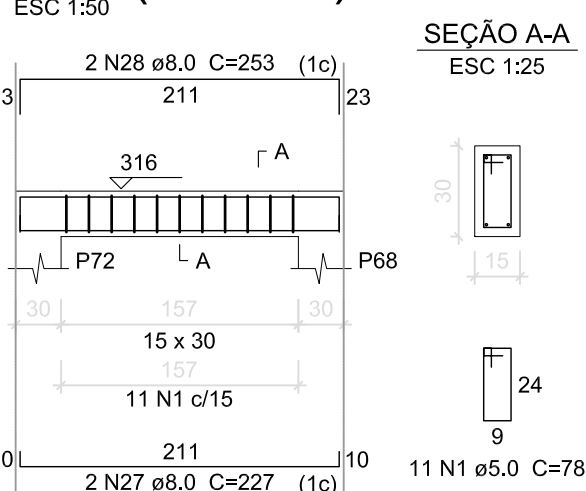
V69 (15 x 30)



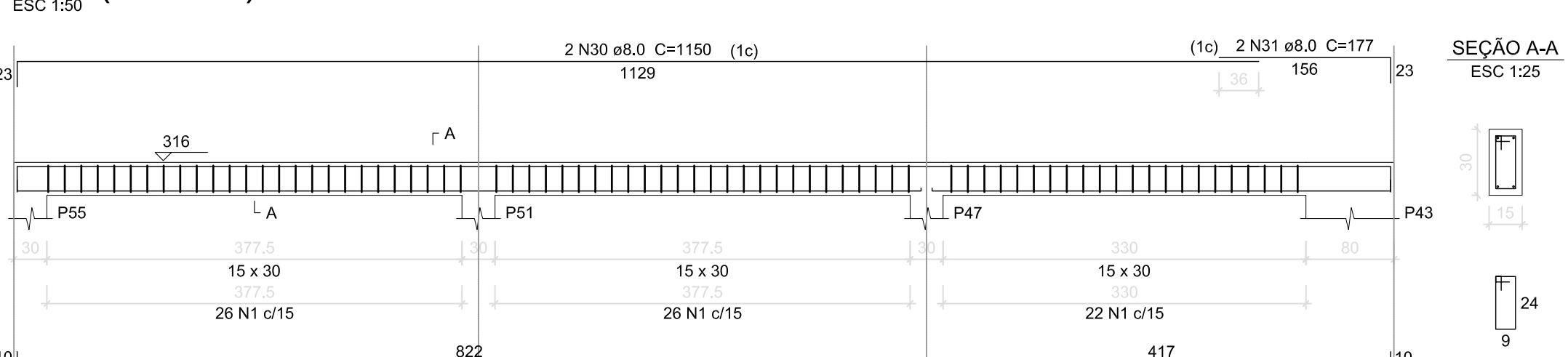
V70 (15 x 30)



V71 (15 x 30)



V72 (15 x 30)



Relação do aço


AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
V49	1	5.0	718	78	56004
V50	2	5.0	2	417	834
V51	3	5.0	48	138	6624
V52	4	6.3	6	1124	6744
V53	5	8.0	4	831	3324
V54	6	8.0	2	821	1642
V55	7	8.0	2	1198	2396
V56	8	8.0	2	529	1058
V57	9	8.0	4	440	1760
V58	10	8.0	4	466	1864
V59	11	8.0	2	433	866
V60	12	8.0	2	432	864
V61	13	8.0	2	458	916
V62	14	8.0	8	445	3560
V66	15	8.0	8	471	3768
V67	16	8.0	20	458	9160
V68	17	8.0	20	484	9680
V69	18	8.0	2	153	306
V70	19	8.0	3	1140	3420
V71	20	8.0	3	1055	3165
V72	21	8.0	3	219	657
	22	8.0	2	446	892
	23	8.0	1	175	175
	24	8.0	2	472	944
	25	8.0	1	846	846
	26	8.0	3	852	2556
	27	8.0	2	227	454
	28	8.0	2	253	506
	29	8.0	2	426	852
	30	8.0	2	1150	2300
	31	8.0	2	177	354
	32	12.5	1	263	263
	33	12.5	1	863	863
	34	12.5	2	876	1752

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	67.5	18.2
	8.0	582.9	253
	12.5	28.8	30.5
CA60	5.0	634.7	107.6
PESO TOTAL (kg)			
CA50		301.6	
CA60		107.6	

Volume de concreto (C-30) = 6.56 m³
Área de forma = 107.69 m²


Nº	ALTERAÇÃO/REVISÕES	REVISADO POR	DATA



INSTITUTO FEDERAL
SERGIPE

AUTOR DO PROJETO:

Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3



AD
ENGENHARIA

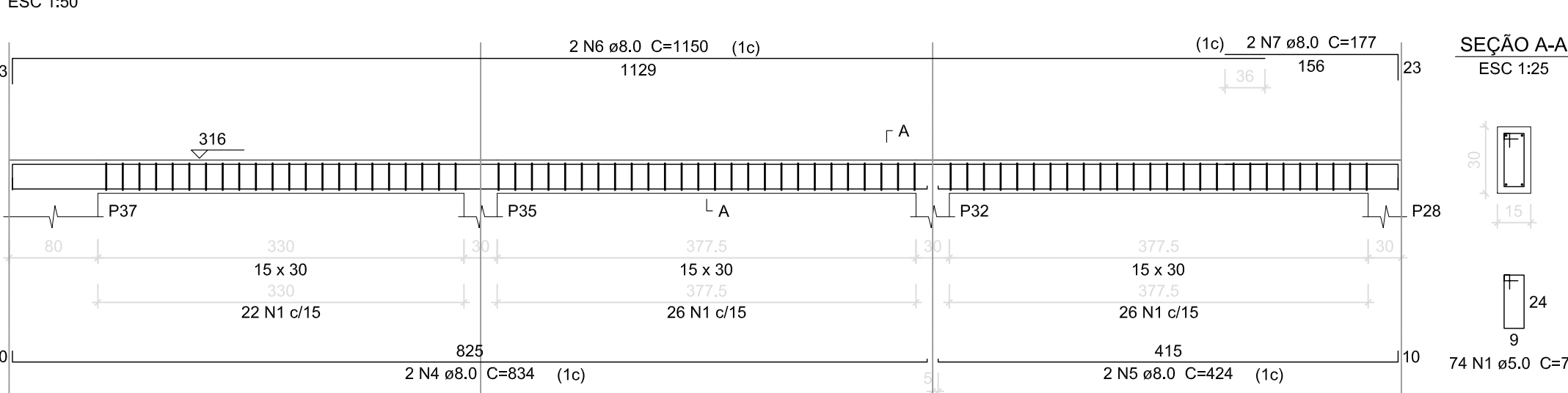
ENDEREÇO:

Rua Dom José Thomaz, 194 - Bairro São José - Aracaju/SE
dipop@ifs.edu.br TEL: (79)3711-3139

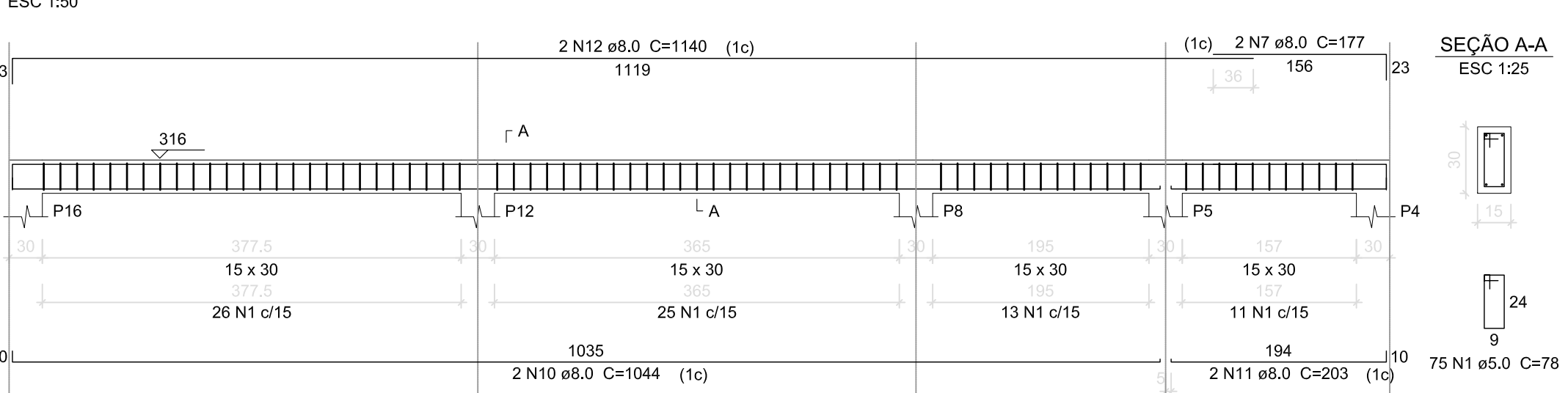
PROJETO ESTRUTURAL
CAMPUS JAPARATUBA/SE

CLIENTE:	INSTITUTO FEDERAL DE SERGIPE - CAMPUS JAPARATUBA
ENDEREÇO:	ROD. DEP. REINALDO MOURA, S/N - JAPARATUBA/SE
PLANTA:	BLOCO ADMINISTRATIVO ARMAÇÃO VIGAS PAV. COBERTURA
ESCALA:	1:100
DATA:	MAIO/2025
PRANCHA:	12/14

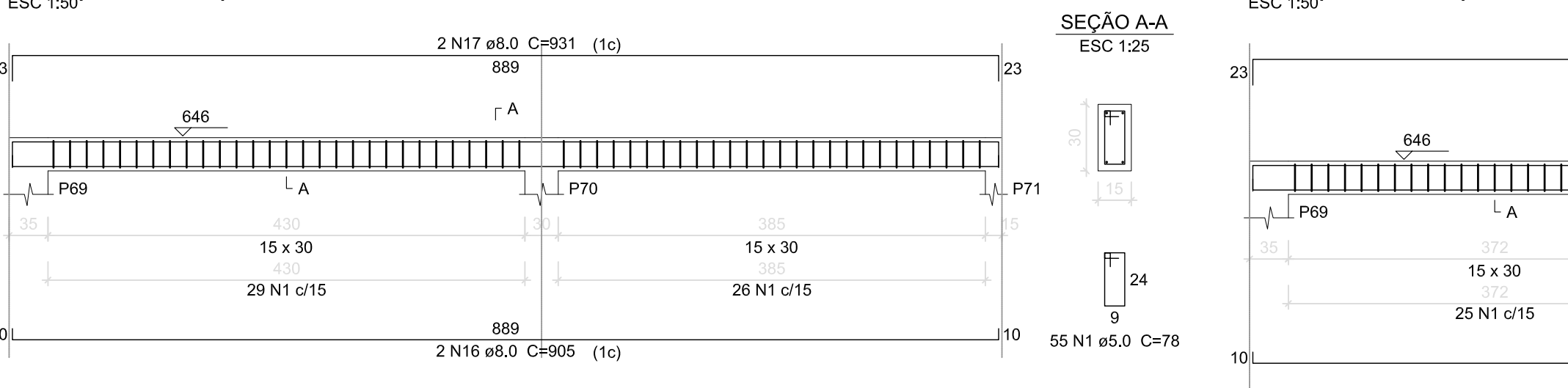
V73 (15 x 30)



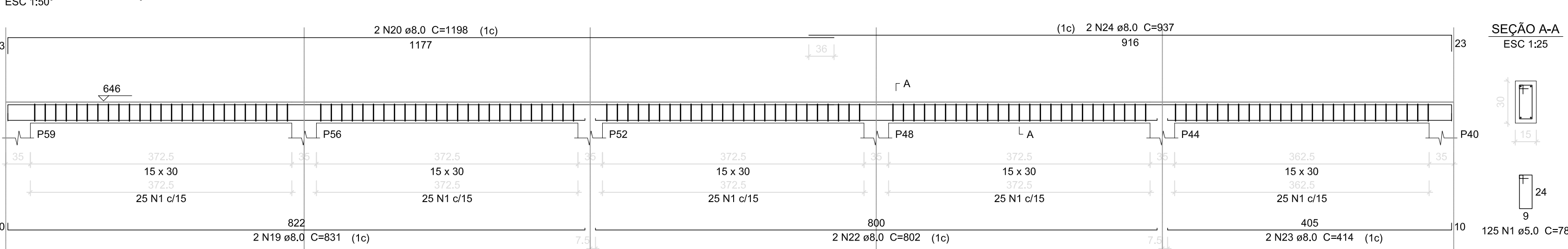
V75 (15 x 30)



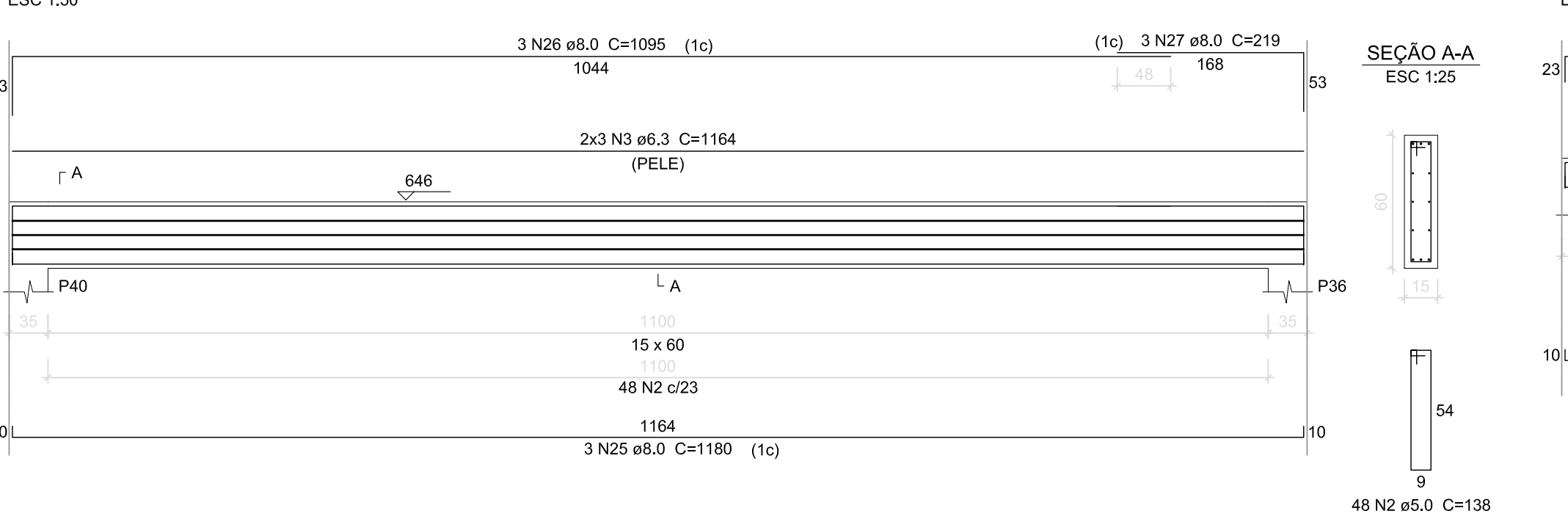
V3 (15 x 30)



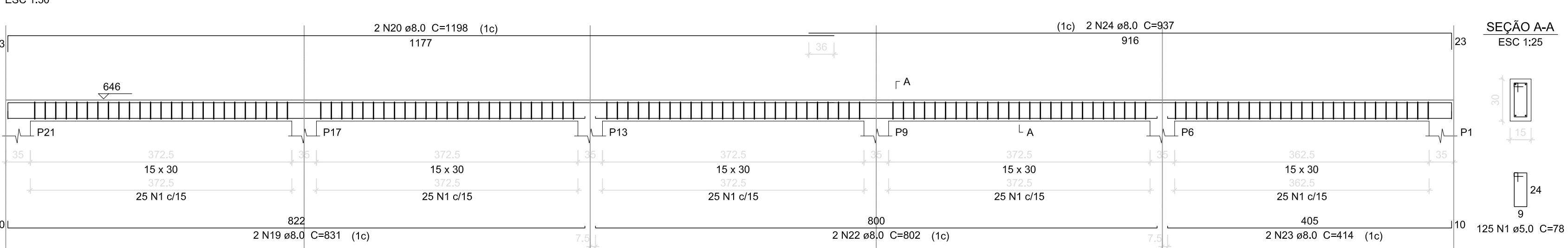
V5 (15 x 30)



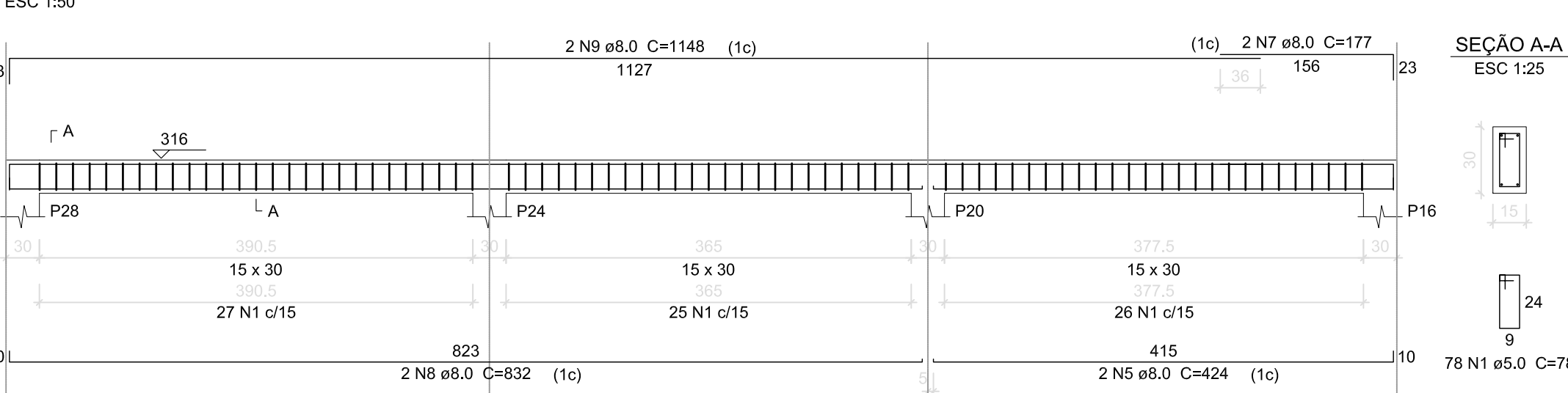
V6 (15 x 60)



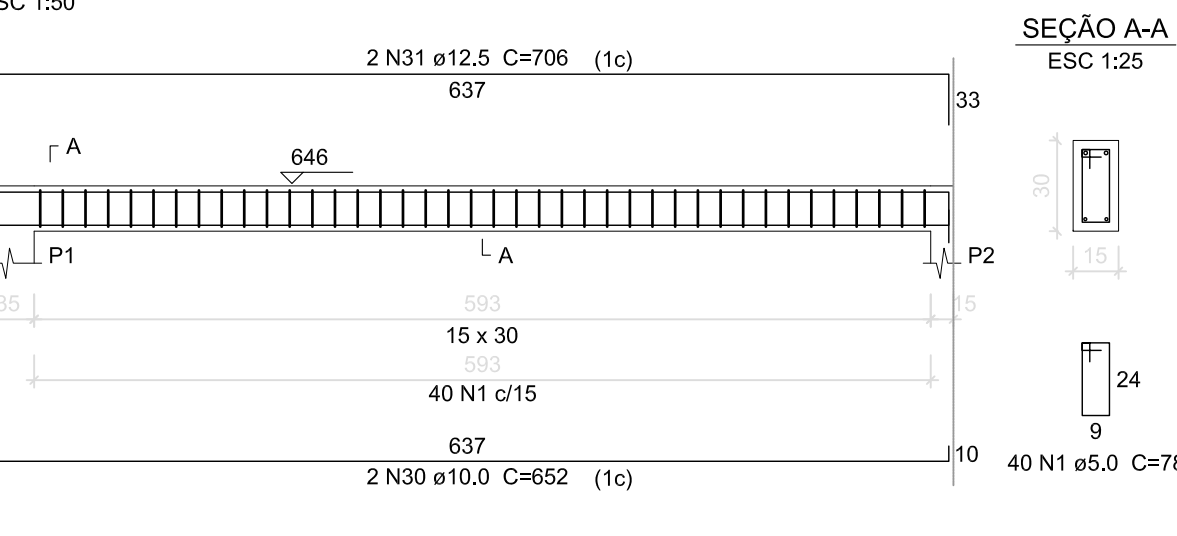
V8 (15 x 30)



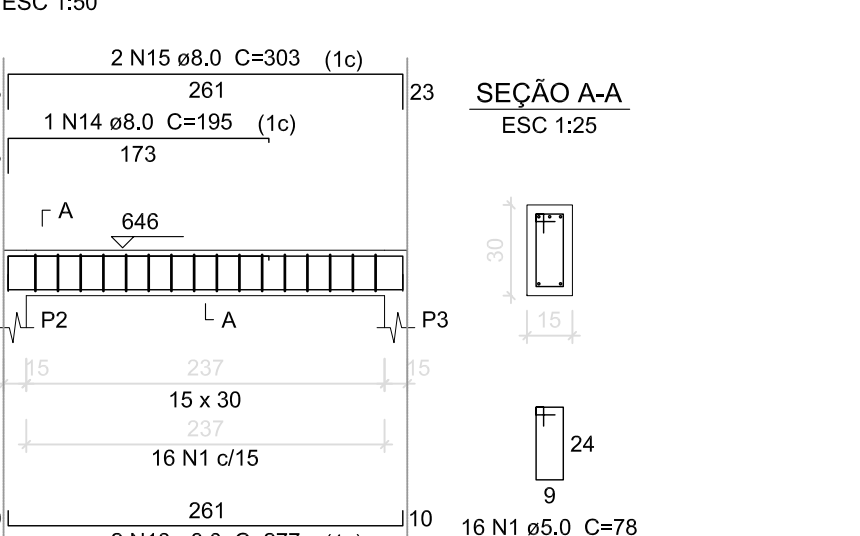
V74 (15 x 30)



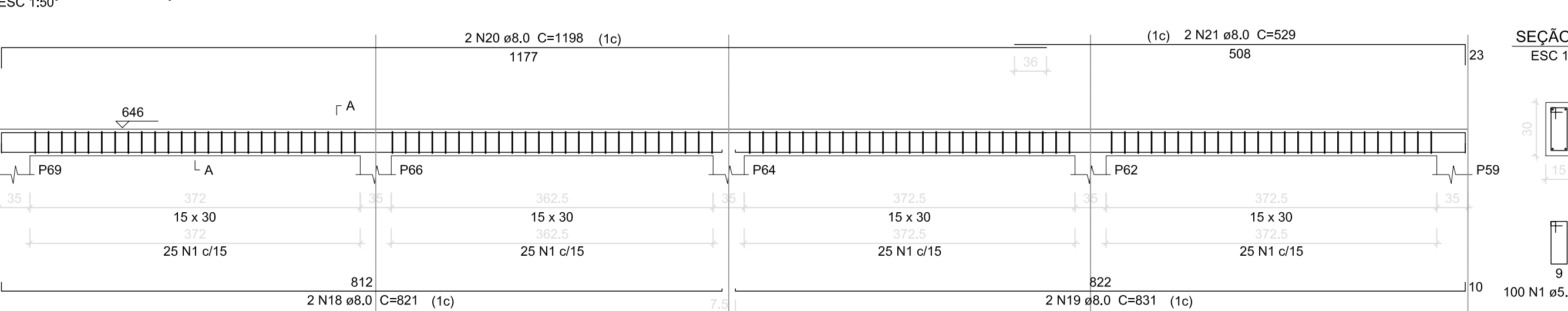
V1 (15 x 30)



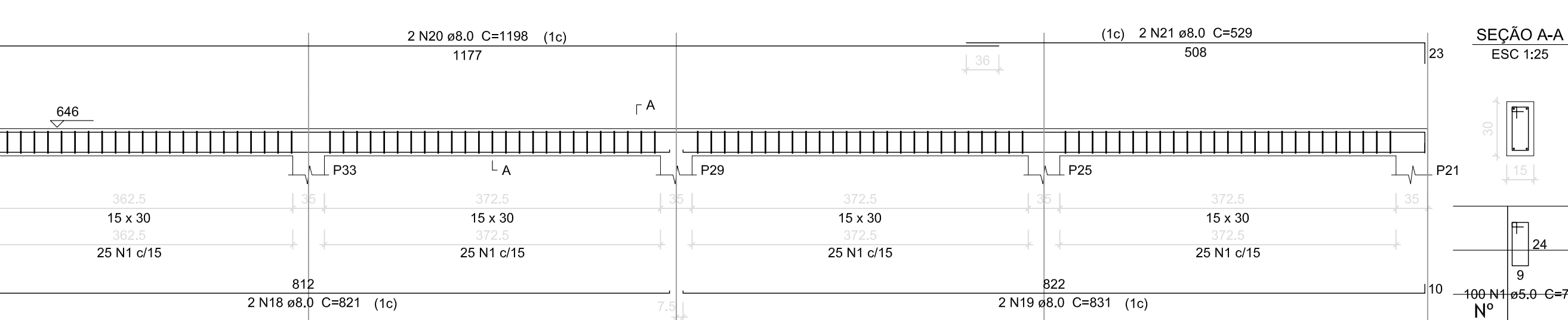
V2 (15 x 30)



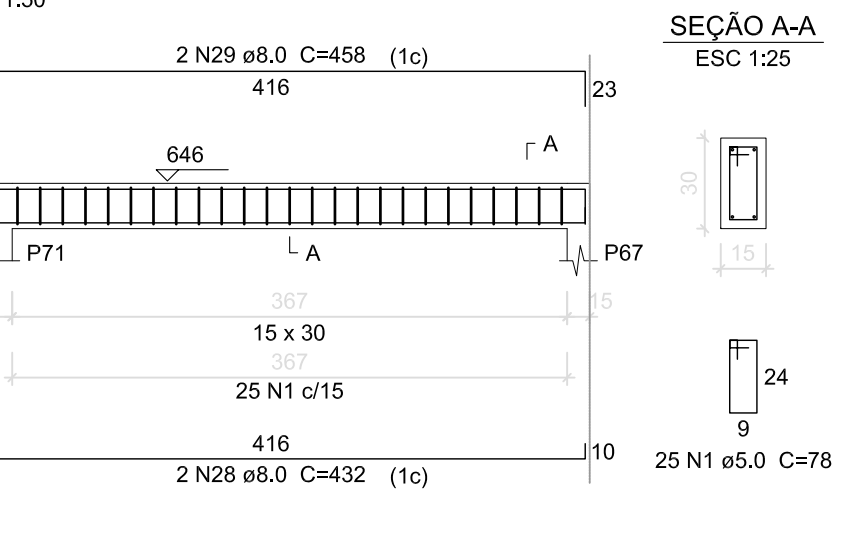
V4 (15 x 30)



V7 (15 x 30)



V9 (15 x 30)



Relação do aço

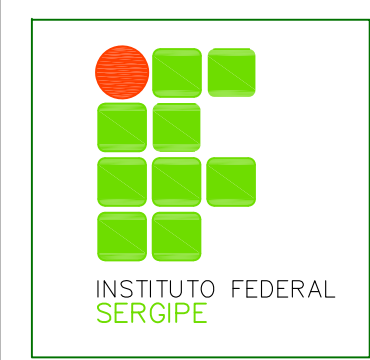
COBERTURA:	V73	V74
PLATIBANDA:	V1	V2
	V3	V4
	V5	V6
	V7	V8
	V9	

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	813	78	63414
CA50	2	5.0	48	138	6624
	3	6.3	6	1164	6984
	4	8.0	2	834	1668
	5	8.0	4	424	1696
	6	8.0	2	1150	2300
	7	8.0	6	177	1062
	8	8.0	2	832	1664
	9	8.0	2	1148	2296
	10	8.0	2	1044	2088
	11	8.0	2	203	406
	12	8.0	2	1140	2280
	13	8.0	2	277	554
	14	8.0	1	195	195
	15	8.0	2	303	606
	16	8.0	2	905	1810
	17	8.0	2	931	1862
	18	8.0	4	821	3284
	19	8.0	8	831	6648
	20	8.0	8	1198	9584
	21	8.0	4	529	2116
	22	8.0	4	802	3208
	23	8.0	4	414	1656
	24	8.0	4	937	3748
	25	8.0	3	1180	3540
	26	8.0	3	1095	3285
	27	8.0	3	219	657
	28	8.0	2	432	864
	29	8.0	2	458	916
	30	10.0	2	652	1304
	31	12.5	2	706	1412

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	69.9	18.8
	8.0	600	280.4
	10.0	13.1	8.8
	12.5	14.2	15
CA60	5.0	700.4	118.7
PESO TOTAL (kg)			
CA50	303		
CA60	118.7		

Volume de concreto (C-30) = 7.09 m³
Área de forma = 116.4 m²



AUTOR DO PROJETO:
Engº. Fredrico Damasceno Pinheiro
CREA 270082778-3



ENDEREÇO:
Rua Dom José Thomaz, 194 - Bairro São José - Aracaju/SE
dipop@ifs.edu.br
TEL: (79)3711-3139

PROJETO ESTRUTURAL
CAMPUS JAPARATUBA/SE

CLIENTE:
INSTITUTO FEDERAL DE SERGIPE - CAMPUS JAPARATUBA

ENDEREÇO:
ROD. DEP. REINALDO MOURA, S/N - JAPARATUBA/SE

ESCALA: 1:100

PLANTA:
BLOCO ADMINISTRATIVO
ARMAÇÃO VIGAS PAV. COBERTURA E PLATIBANDA

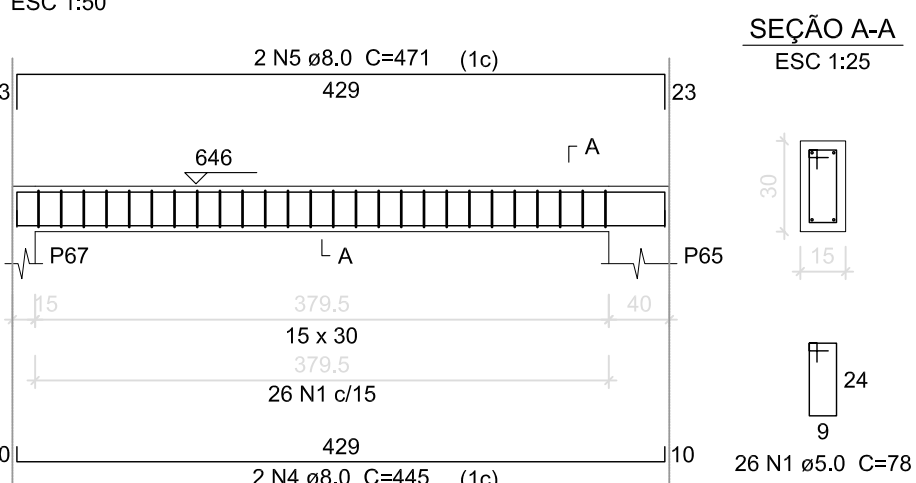
DATA: MAIO/2025

PRANCHA:

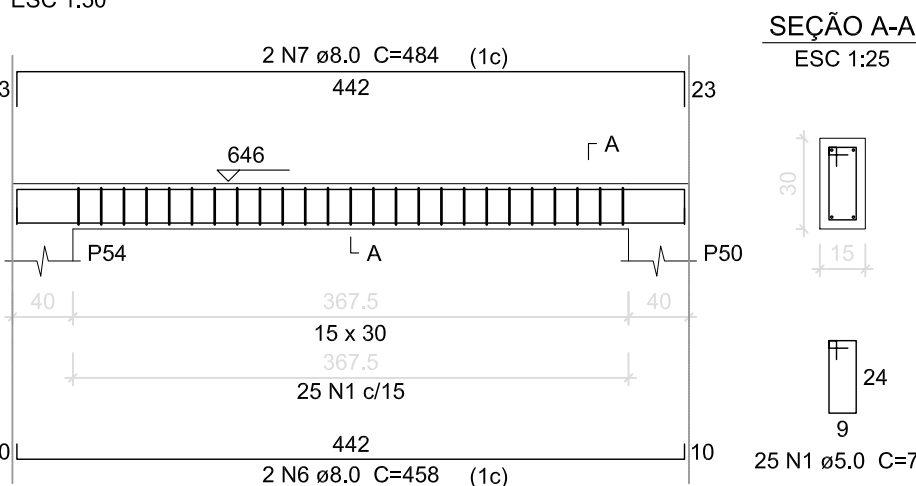
CAMPO: J A P C A M E S T P E Q 1 3 Q 1 4 R 0 1

13/14

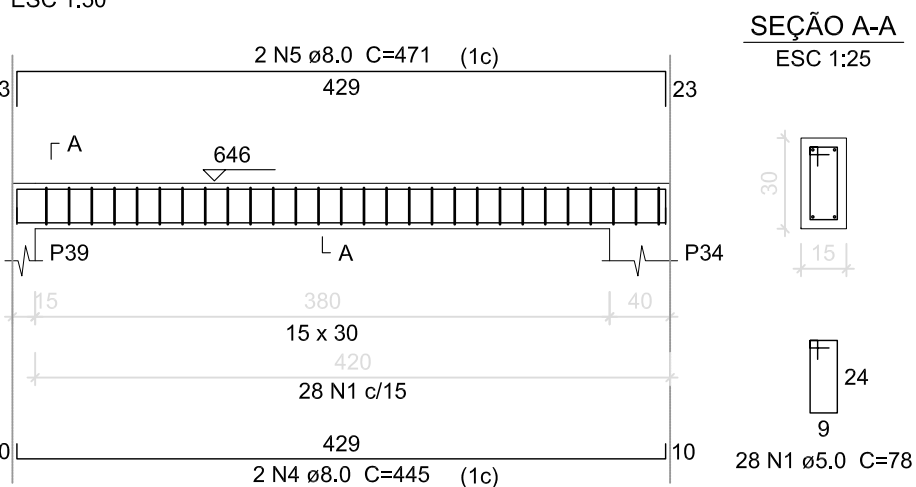
V10 (15 x 30)



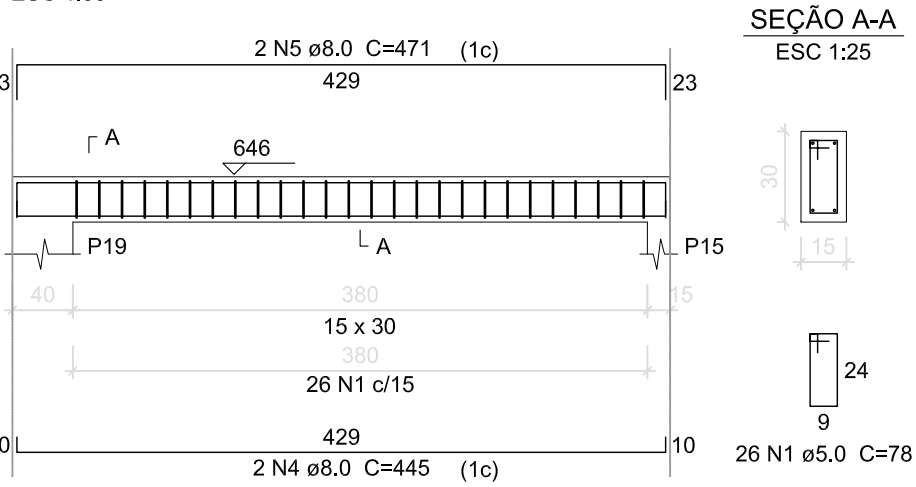
V15 (15 x 30)



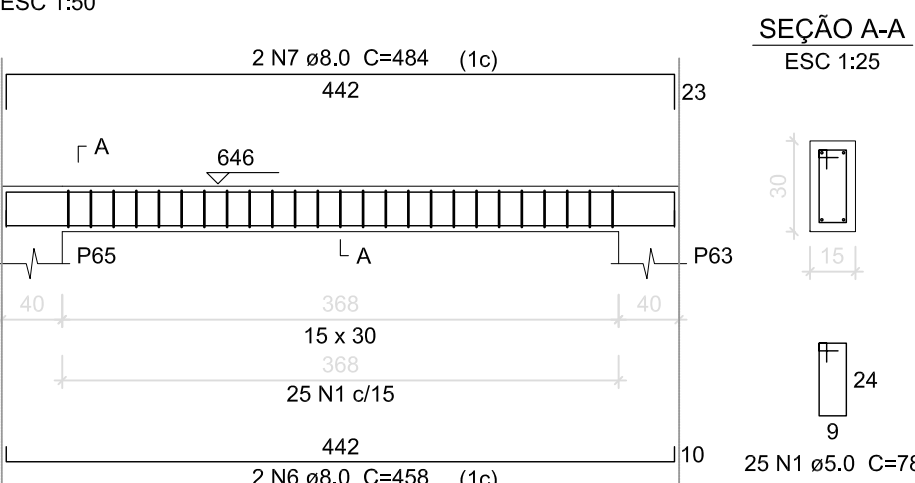
V19 (15 x 30)



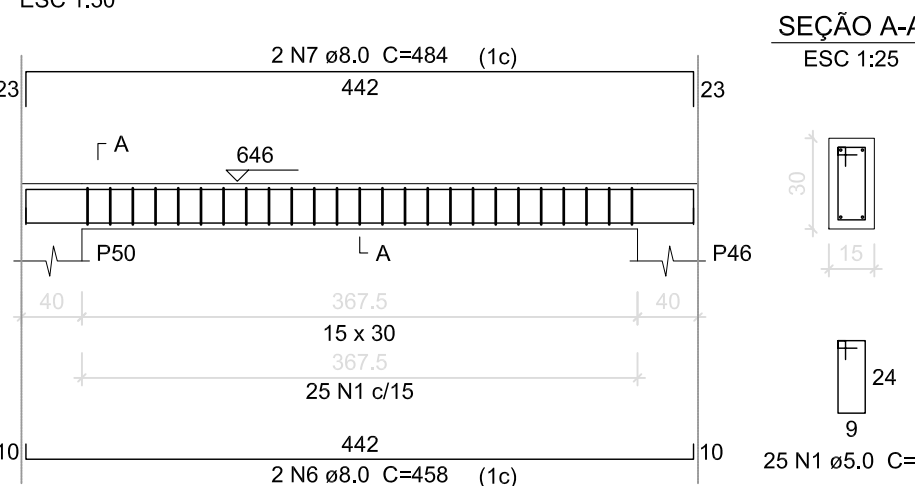
V24 (15 x 30)



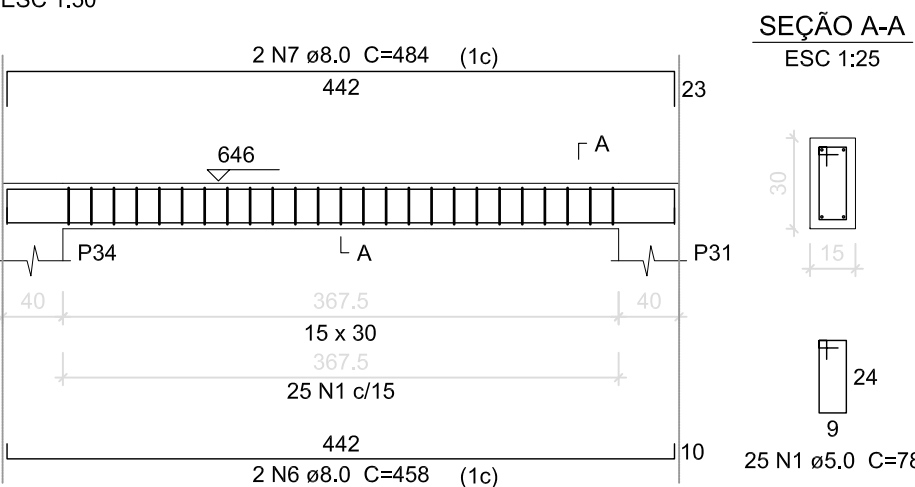
V11 (15 x 30)



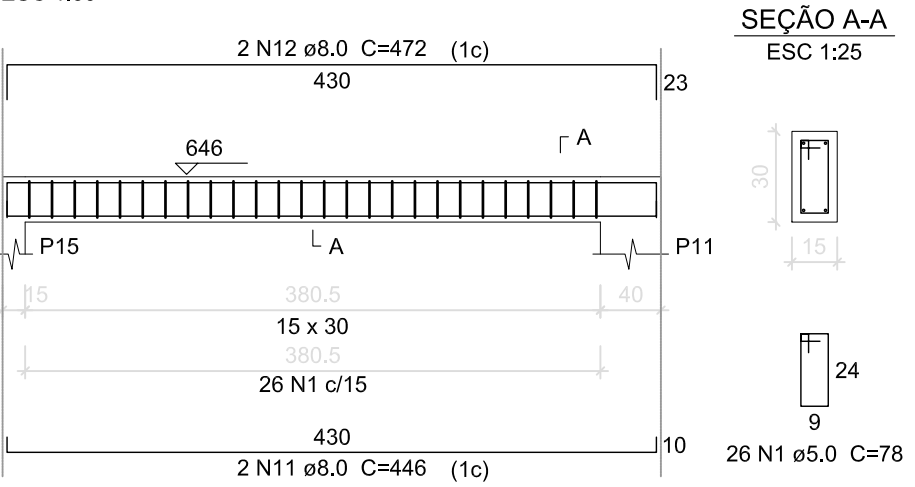
V16 (15 x 30)



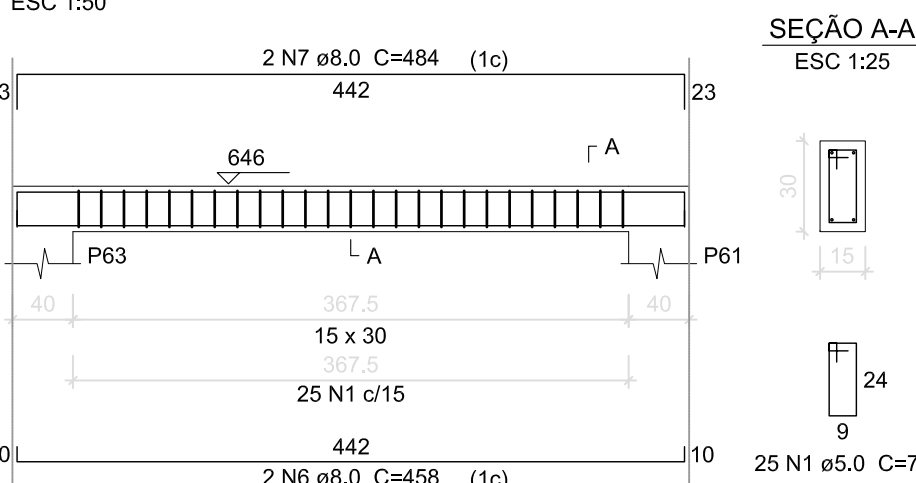
V20 (15 x 30)



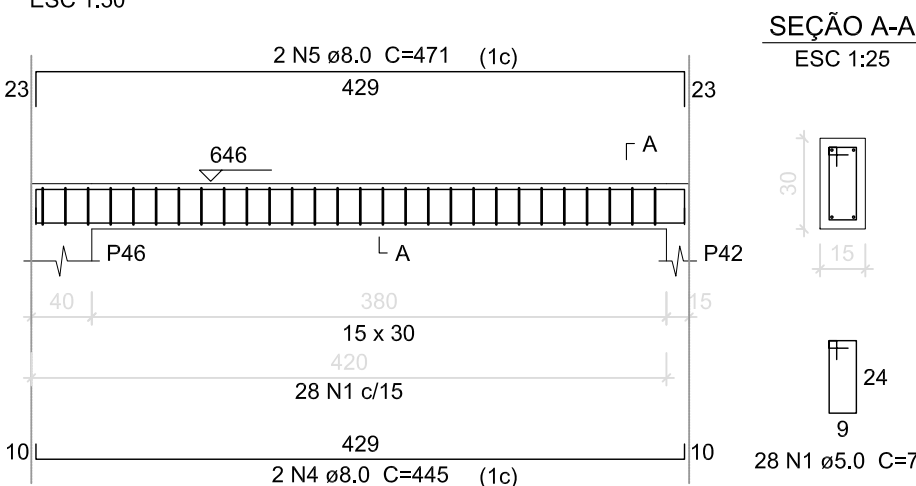
V25 (15 x 30)



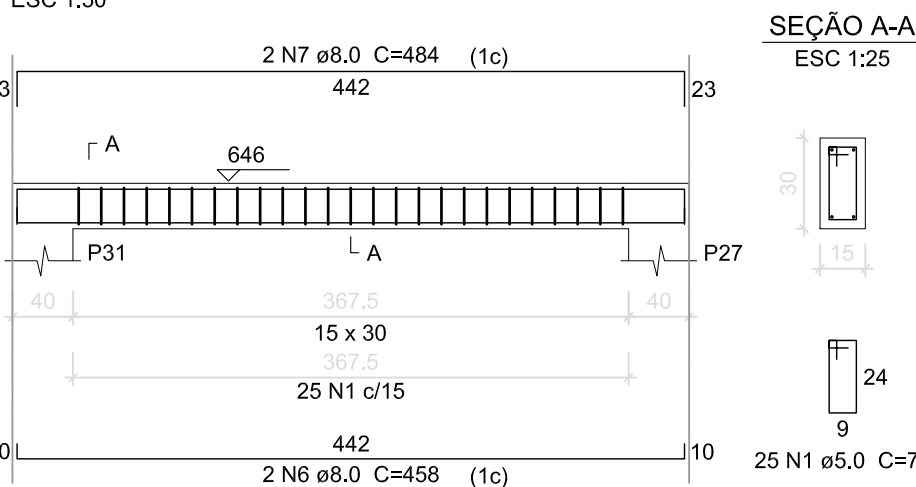
V12 (15 x 30)



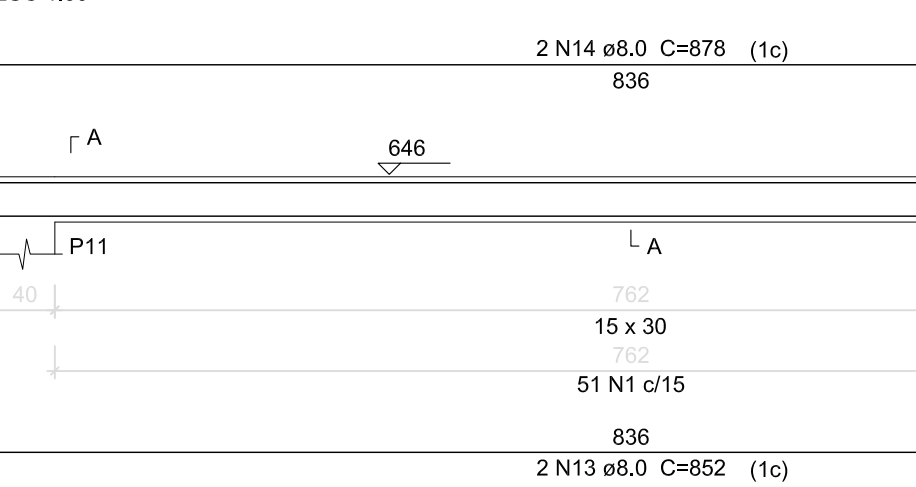
V17 (15 x 30)



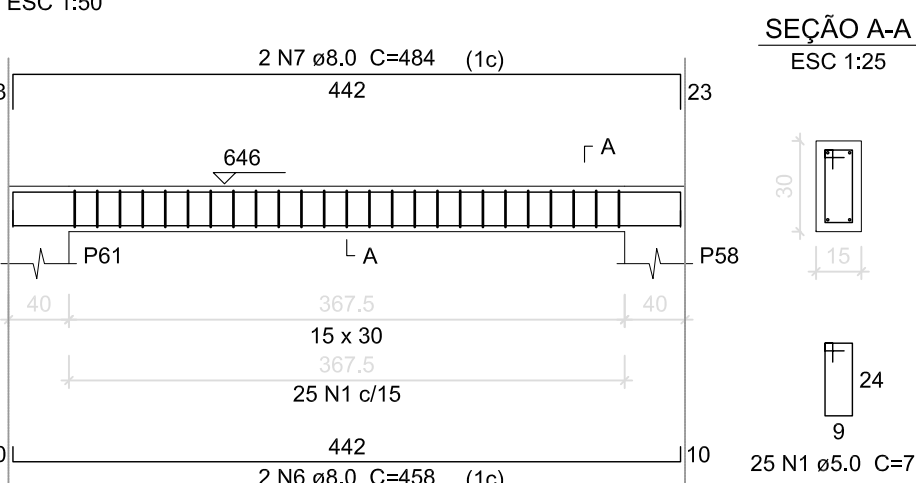
V21 (15 x 30)



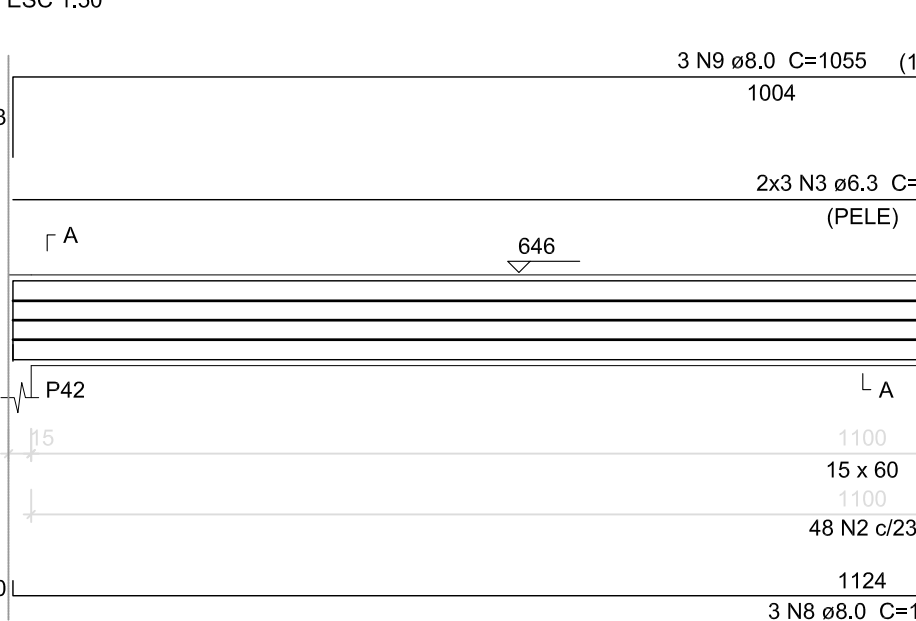
V26 (15 x 30)



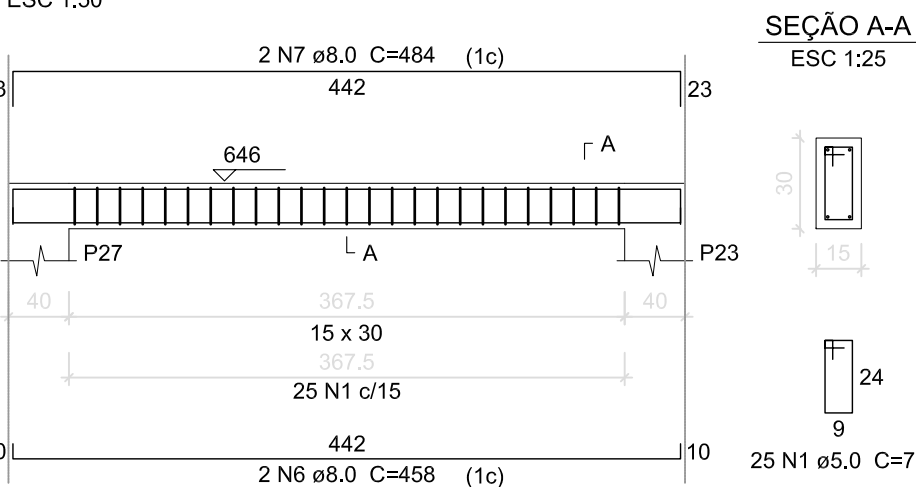
V13 (15 x 30)



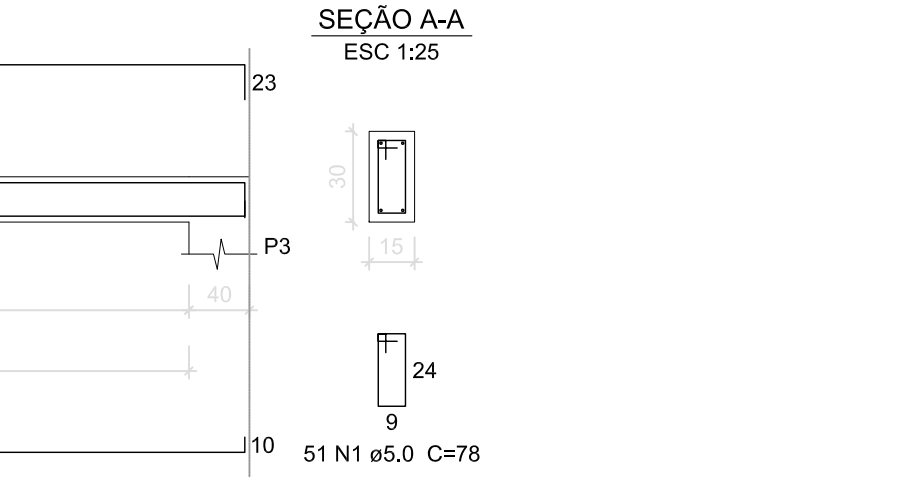
V18 (15 x 60)



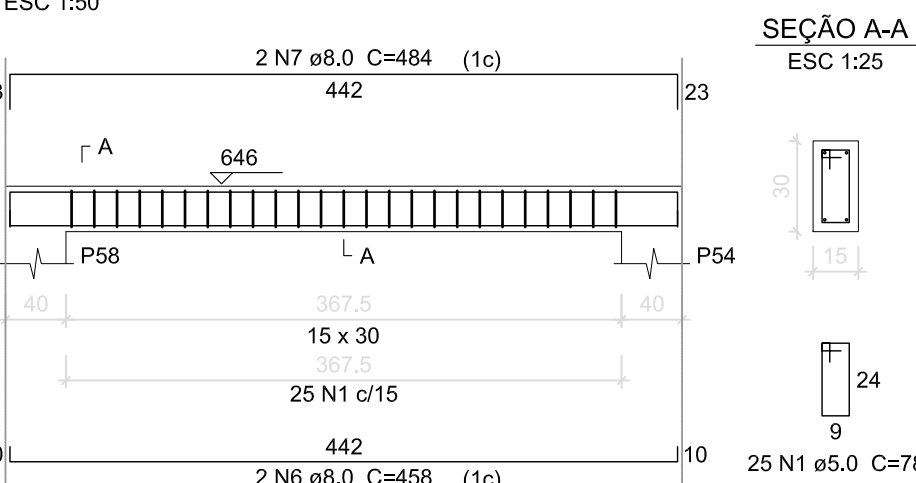
V22 (15 x 30)



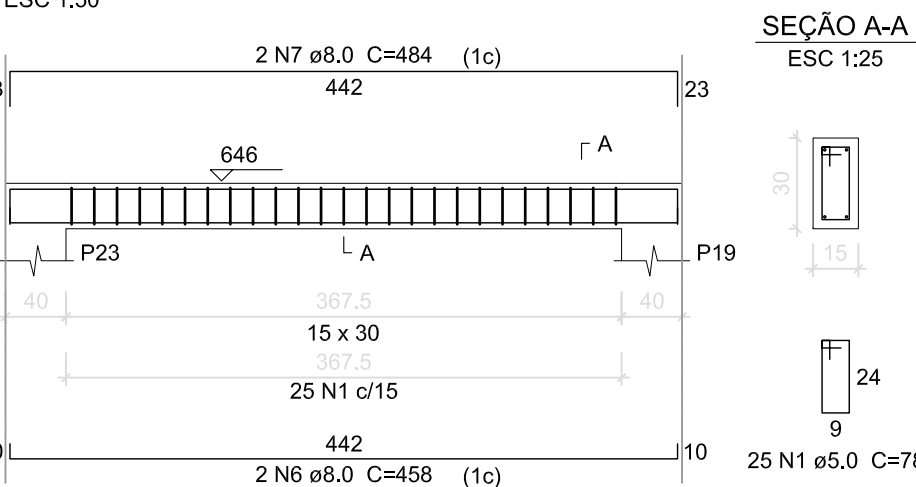
V23 (15 x 30)



V14 (15 x 30)



V23 (15 x 30)



Relação do aço					
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
V10	1	5.0	435	78	33930
V13	2	5.0	48	138	6624
V16	3	6.3	6	1124	6744
V19	4	8.0	8	445	3560
V22	5	8.0	8	471	3768
V25	6	8.0	20	458	9160
	7	8.0	20	484	9680
	8	8.0	3	1140	3420
	9	8.0	3	1055	3165
	10	8.0	3	219	657
	11	8.0	2	446	892
	12	8.0	2	472	944
	13	8.0	2	852	1704
	14	8.0	2	878	1756

Resumo do aço			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.3	67.5	18.2
CA60	5.0	387.1	168
PESO TOTAL (kg)			
CA50	186.2		
CA60	68.8		

Volume de concreto (C-30) = 4.39 m³
Área de forma = 71.45 m²

Características dos materiais			
fck (kgf/cm²)	Ecs (kgf/cm²)	ftct (kgf/cm²)	Abatimento (cm)
30.0	280716	29	5.00

Dimensão máxima do agregado = 19 mm

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	35 x 35	0	646
P2	15 x 30	0	646
P3	15 x 40	0	646
P6	35 x 35	0	646
P9	35 x 35	0	646
P11	15 x 40	0	646
P13	35 x 35	0	646
P15	15 x 40	0	646
P17	35 x 35	0	646
P19	15 x 40	0	646
P21	35 x 35	0	646
P23	15 x 40	0	646
P25	35 x 35	0	646
P27	15 x 40	0	646
P29	35 x 35	0	646
P31	15 x 40	0	646
P33	35 x 35	0	646
P34	15 x 40	0	646
P36	35 x 35	0	646
P39	15 x 40	0	646
P40	35 x 35	0	646
P42	15 x 40	0	646
P44	35 x 35	0	646
P46	15 x 40	0	646
P48	35 x 35	0	646
P50	15 x 40	0	646
P52	35 x 35	0	646
P54	15 x 40	0	646
P56	35 x 35	0	646
P58	15 x 40	0	646
P59	35 x 35	0	646
P61	15 x 40	0	646
P62	35 x 35	0	646
P63	15 x 40	0	646
P64	35 x 35	0	646
P65	15 x 40	0	646
P66	35 x 35	0	646
P67	15 x 40	0	646
P69	35 x 35	0	646
P70	15 x 30	0	646
P71	15 x 40	0	646

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

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	646
V2	15x30	0	646
V3	15x30	0	646
V4	15x30	0	646
V5	15x30	0	646
V6	15x40	0	646
V7	15x30	0	646
V8	15x30	0	646
V9	15x30	0	646
V10	15x30	0	646
V11	15x30	0	646
V12	15x30	0	646
V13	15x30	0	646
V14	15x30	0	646
V15	15x30	0	646
V16	15x30	0	646
V17	15x30	0	646
V18	15x60	0	646
V19	15x30	0	646
V20	15x30	0	646
V21	15x30	0	646
V22	15x30	0	646
V23	15x30	0	646
V24	15x30	0	646
V25	15x30	0	646
V26	15x30	0	646

INSTITUTO FEDERAL
SERGIPE

AUTOR DO PROJETO:

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CREA 270082778-3

ENDEREÇO:

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AD

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Nº

ALTERAÇÃO/REVISÕES

REVISADO POR

DATA

PROJETO ESTRUTURAL
CAMPUS JAPARATUBA/SE

CLIENTE:

INSTITUTO FEDERAL DE SERGIPE - CAMPUS JAPARATUBA

ENDEREÇO:

ROD. DEP. REINALDO MOURA, S/N - JAPARATUBA/SE

ESCALA:

1:100

DATA:

MAIO/2025

PRANCHA:

14/14

PLANTA:

BLOCO ADMINISTRATIVO
ARMAÇÃO VIGAS PLATIBANDA

CAMPO:

JAPCAM

OPERAÇÃO:

EST

ESPECIALIDADE:

PE

FASE:

013

SERIAL:

014

QUANTITATIVO:

014

REVISÃO:

014

