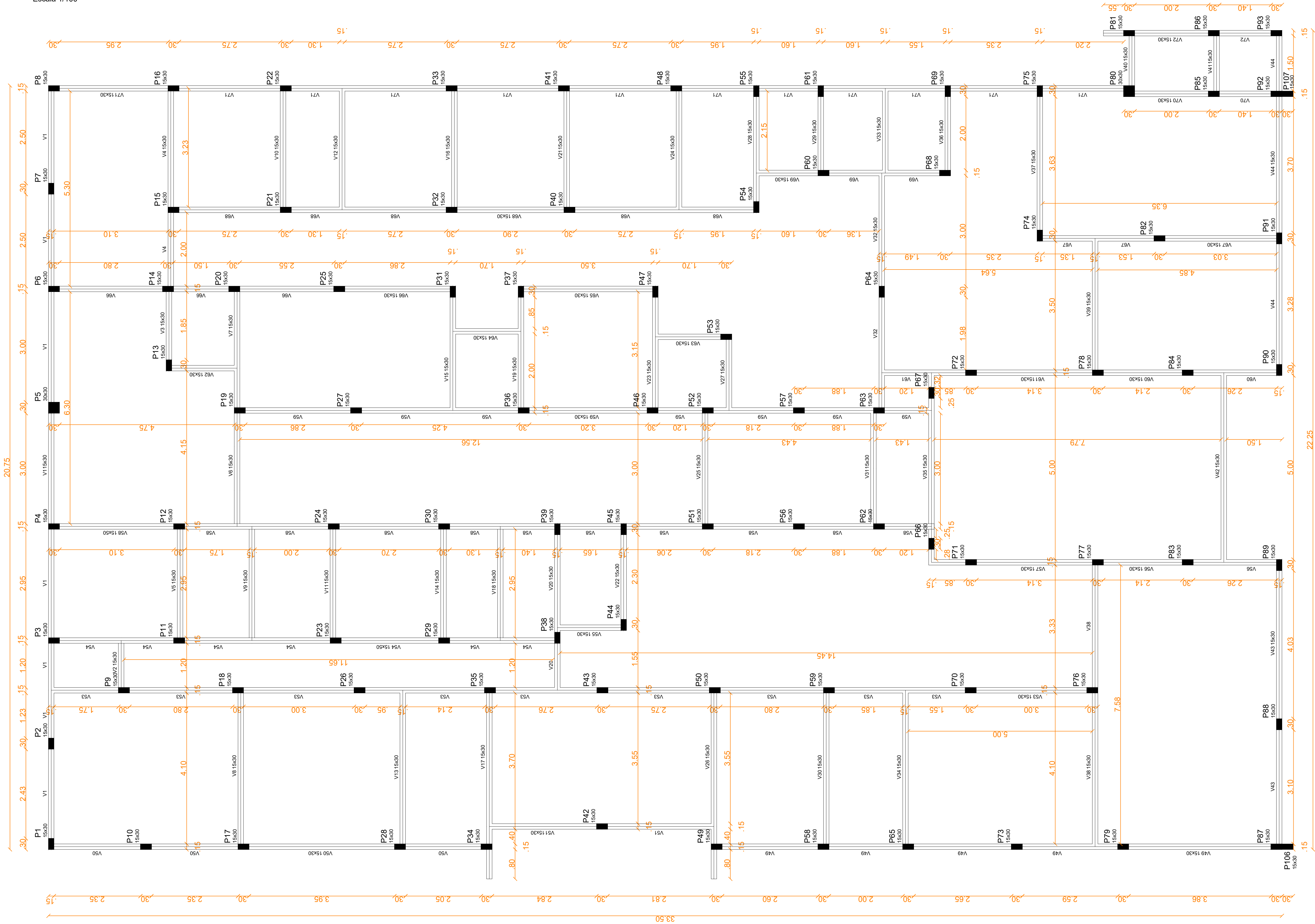
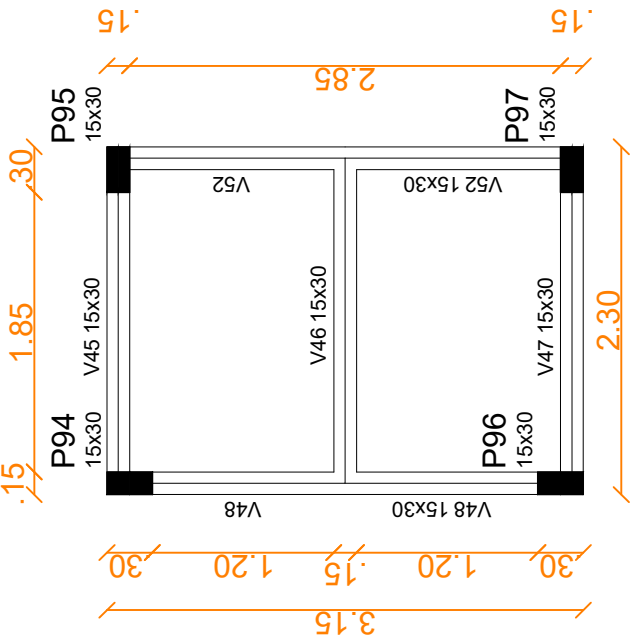
Direitos autoriais reservados Lei número 5194/66

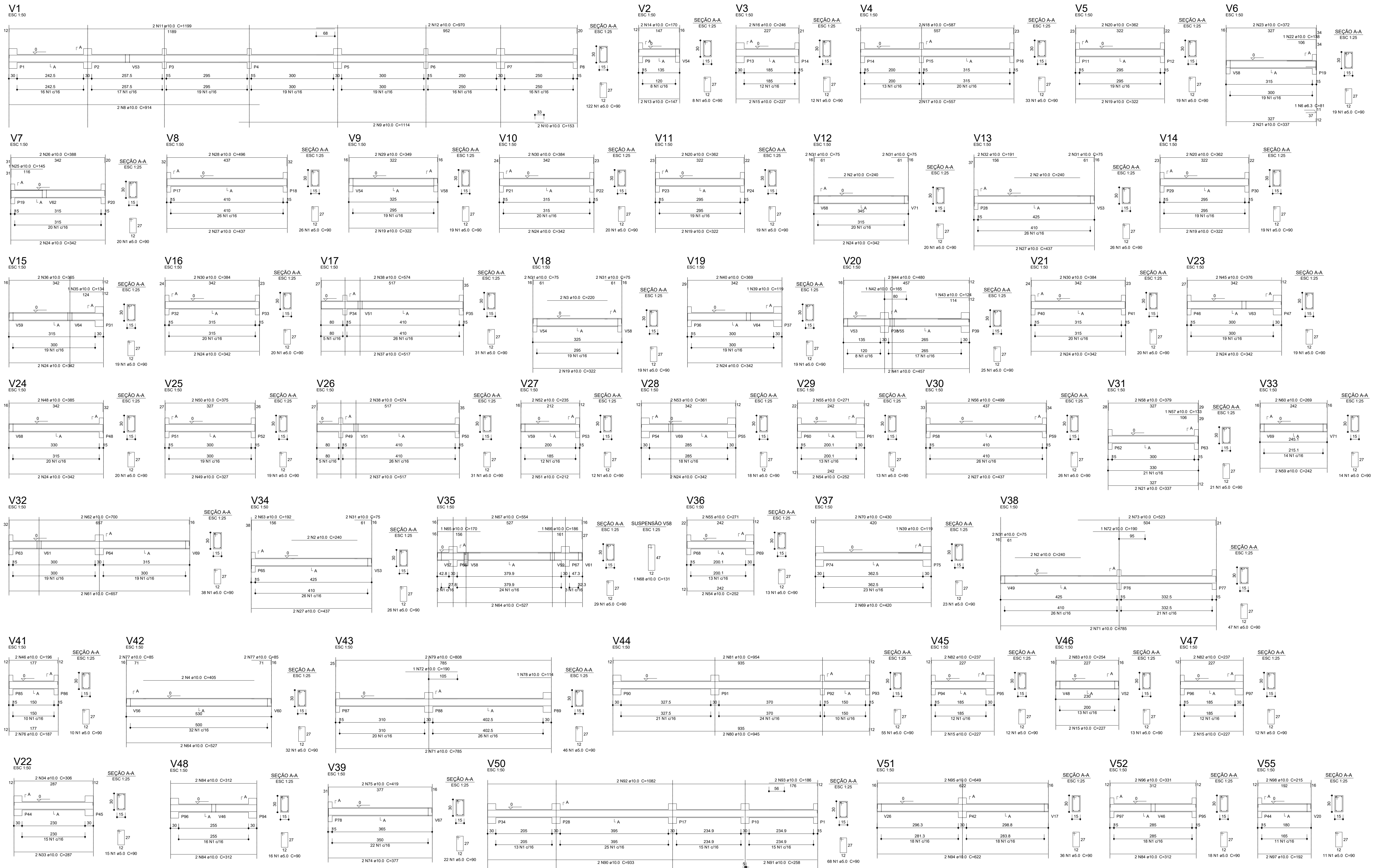


Características dos materiais		
fck	Ecs	
(kgf/cm²)	(kgf/cm²)	
250	238000	



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Obra: Unidade Básica de Saúde Paim Filho	
Prancha 02	
Escala indicada	

Detalhamento baldrame (01)
Escala 1/125



Guzzo e Guzzo engenharia

Obra: Unidade Básica de Saúde Paim Filho

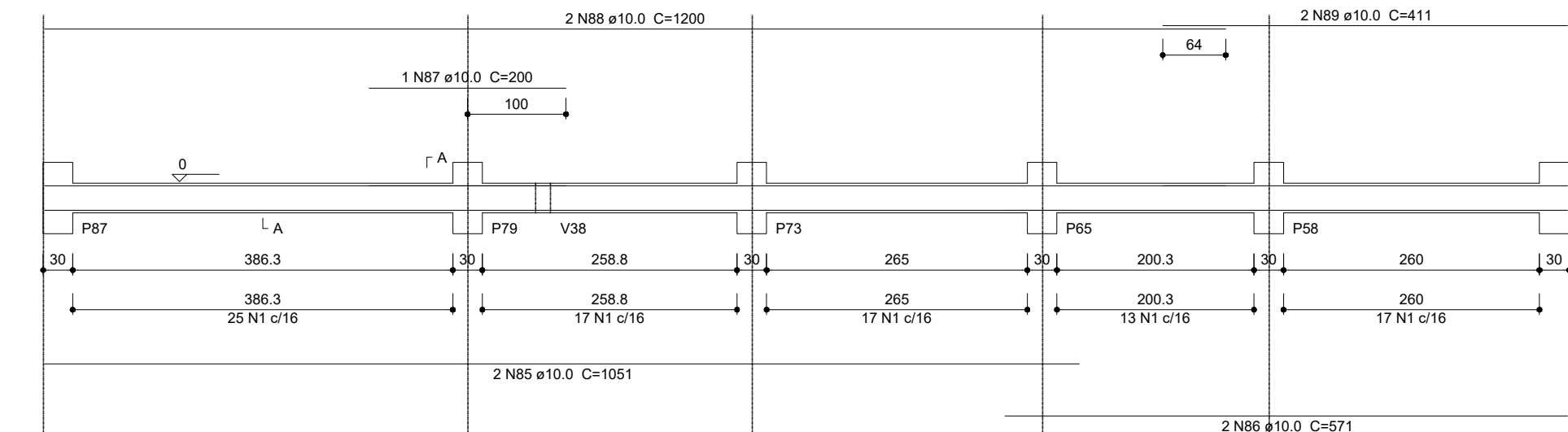
Prancha 03

Escala indicada



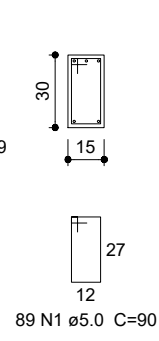
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V49
ESC 1:50

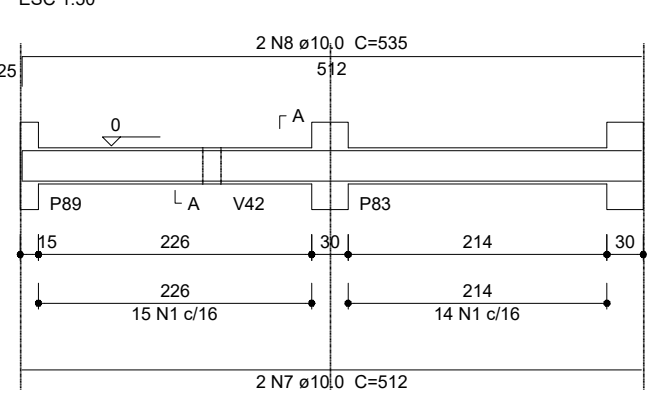


V54
ESC 1:50

SEÇÃO A-A
ESC 1:25

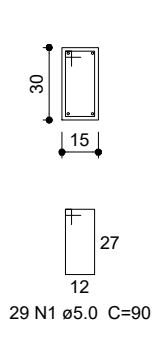


V56
ESC 1:50



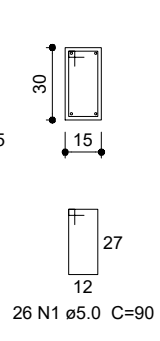
V57
ESC 1:50

SEÇÃO A-A
ESC 1:25

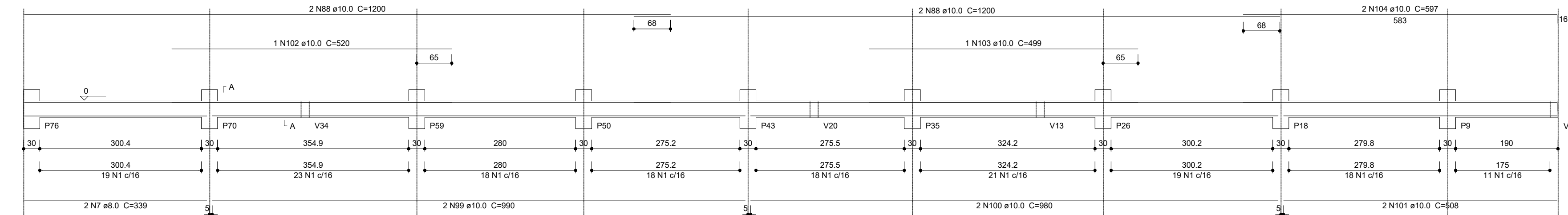


V62
ESC 1:50

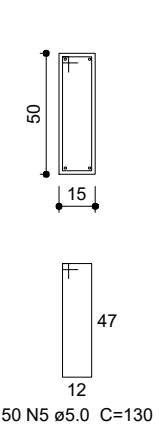
SEÇÃO A-A
ESC 1:25



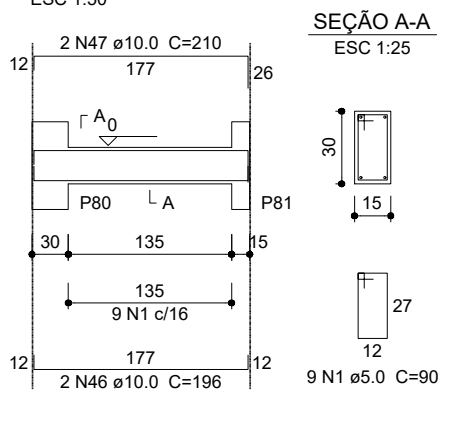
V53
ESC 1:50



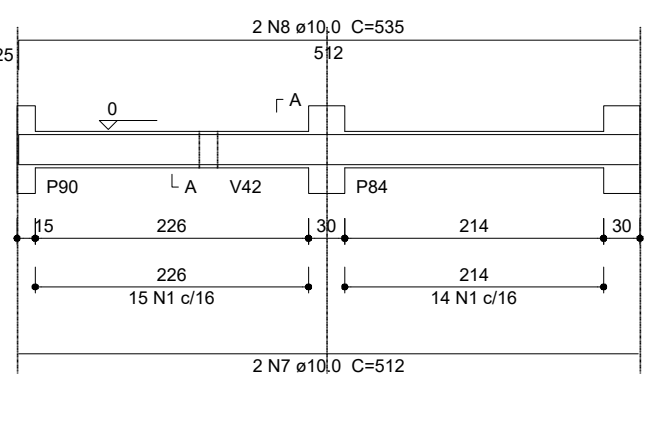
SEÇÃO A-A
ESC 1:25



V40
ESC 1:50

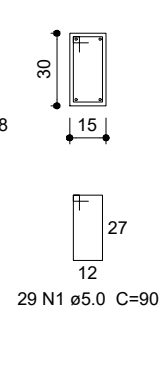


V60
ESC 1:50

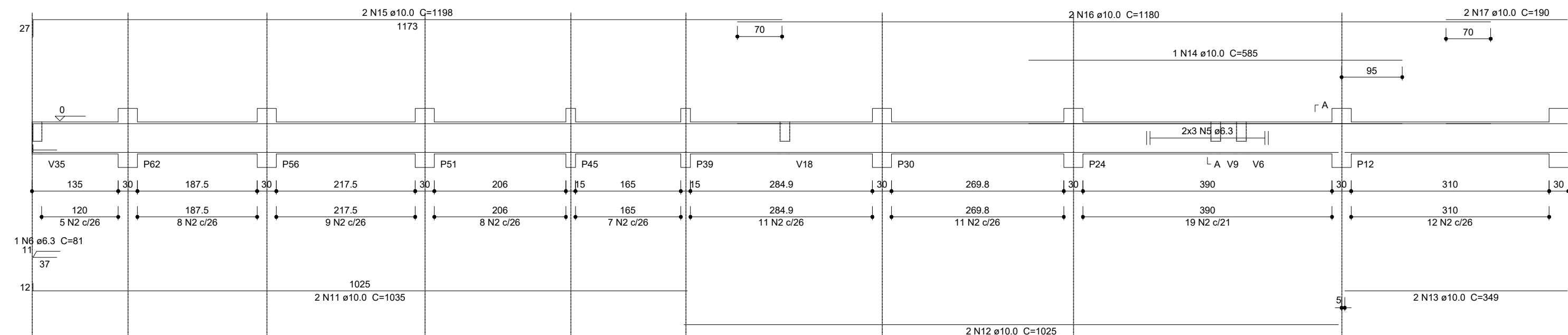


V63
ESC 1:50

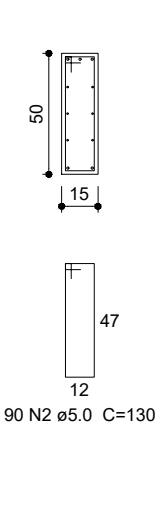
SEÇÃO A-A
ESC 1:25



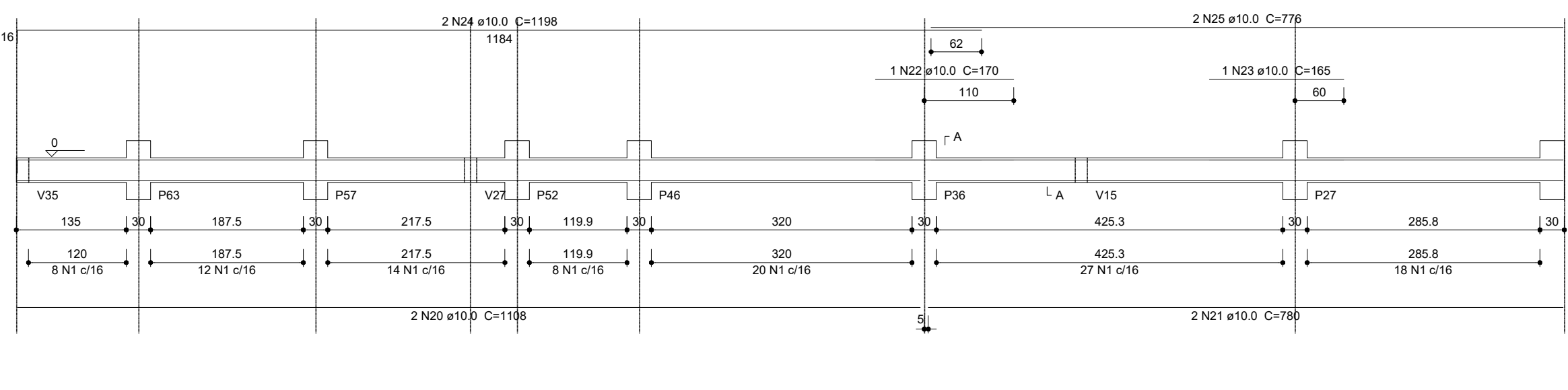
V58
ESC 1:50



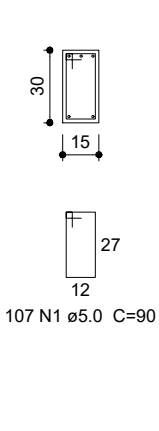
SEÇÃO A-A
ESC 1:25



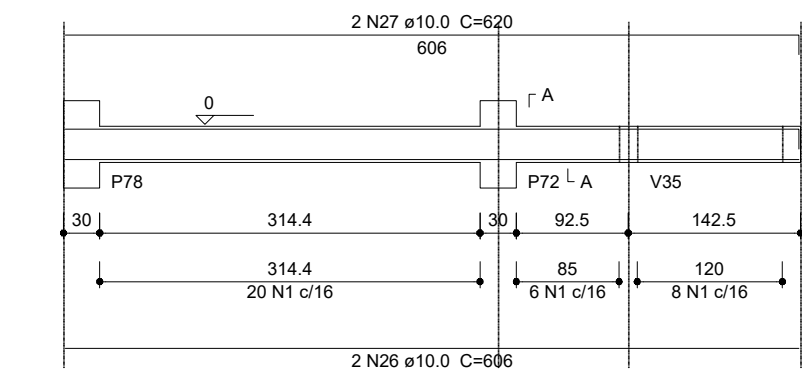
V59
ESC 1:50



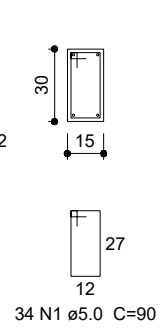
SEÇÃO A-A
ESC 1:25



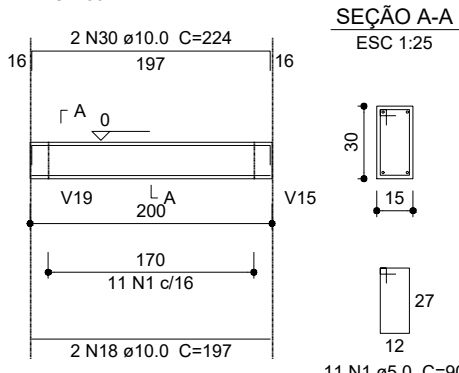
V61
ESC 1:50



SEÇÃO A-A
ESC 1:25



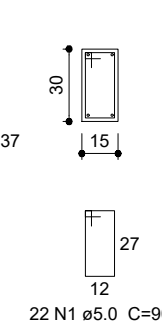
V64
ESC 1:50



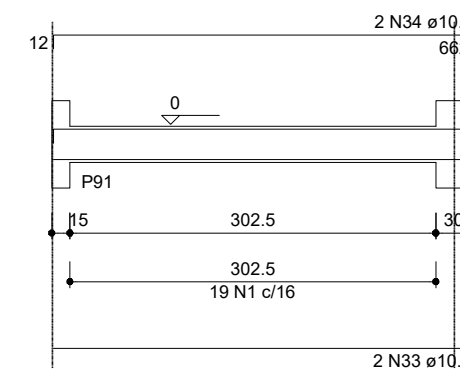
V65
ESC 1:50



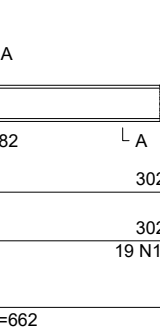
SEÇÃO A-A
ESC 1:25



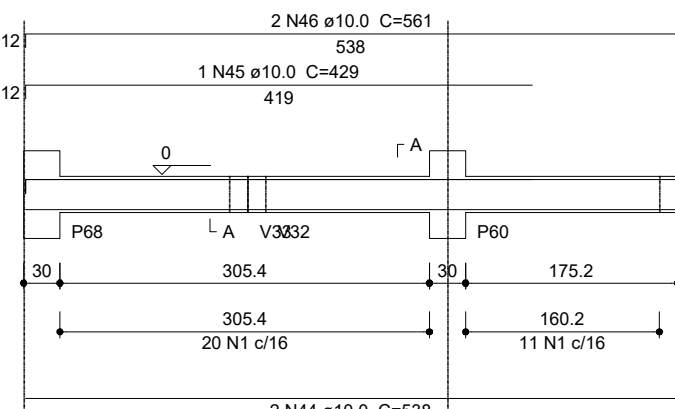
V67
ESC 1:50



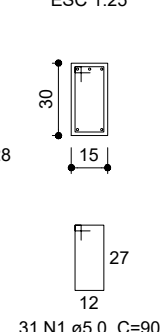
SEÇÃO A-A
ESC 1:25



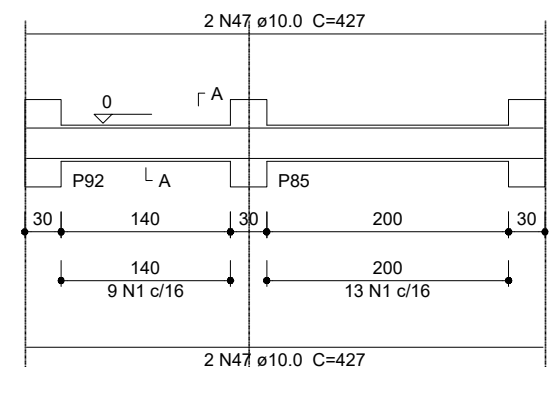
V69
ESC 1:50



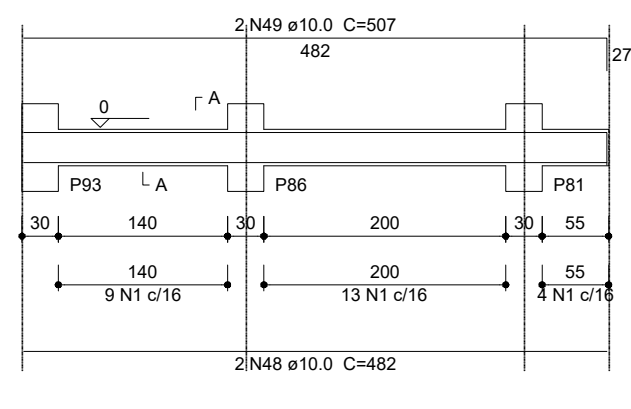
SEÇÃO A-A
ESC 1:25



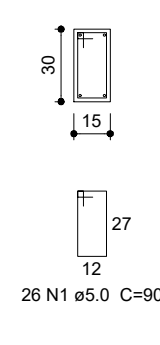
V70
ESC 1:50



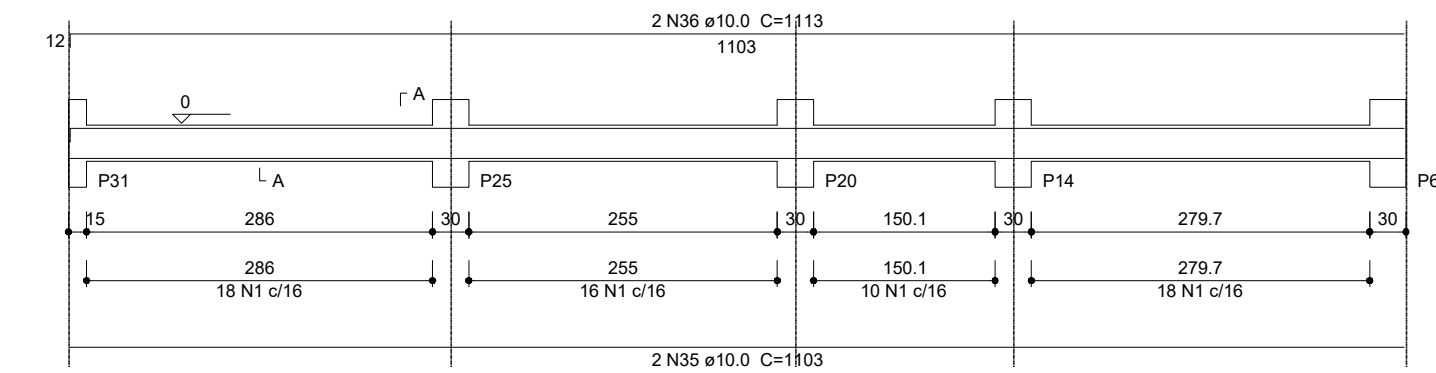
V72
ESC 1:50



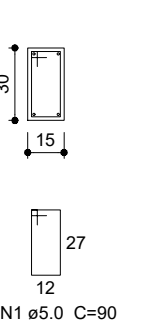
SEÇÃO A-A
ESC 1:25



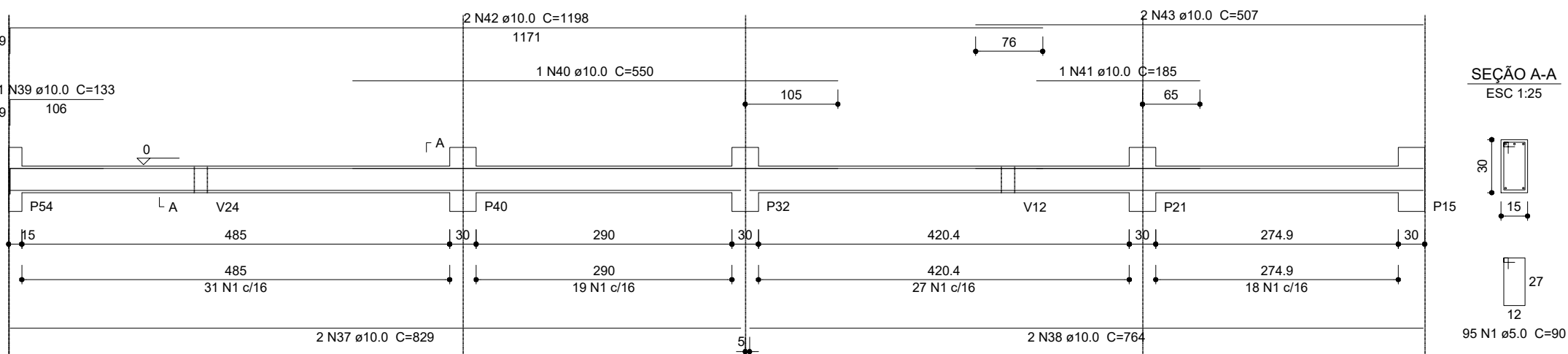
V66
ESC 1:50



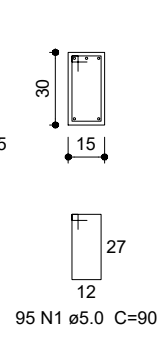
SEÇÃO A-A
ESC 1:25



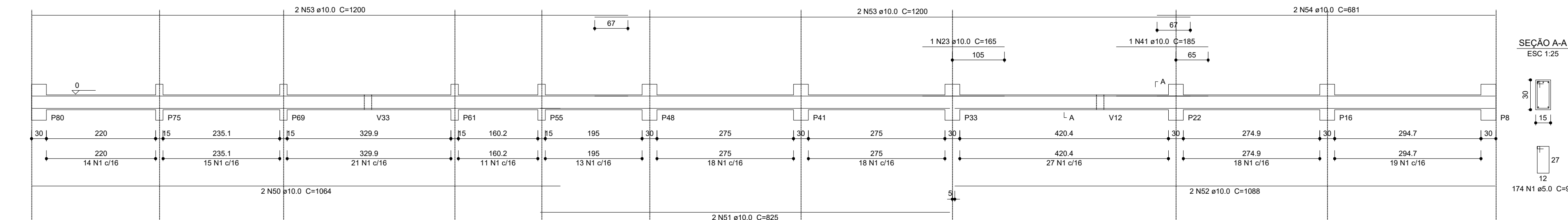
V68
ESC 1:50



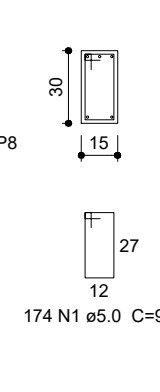
SEÇÃO A-A
ESC 1:25



V71
ESC 1:50



SEÇÃO A-A
ESC 1:25



Guzzo e Guzzo engenharia

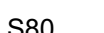
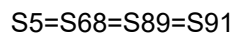
Obra: Unidade Básica de Saúde Paim Filho

Prancha 04

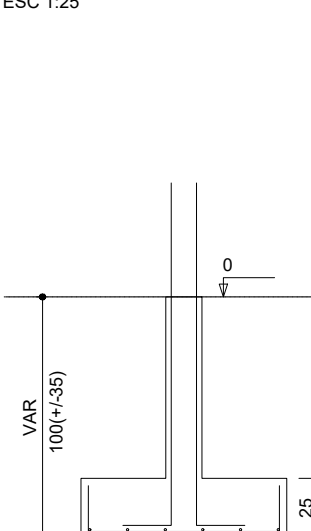
Escala indicada

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Engenheiro Civil

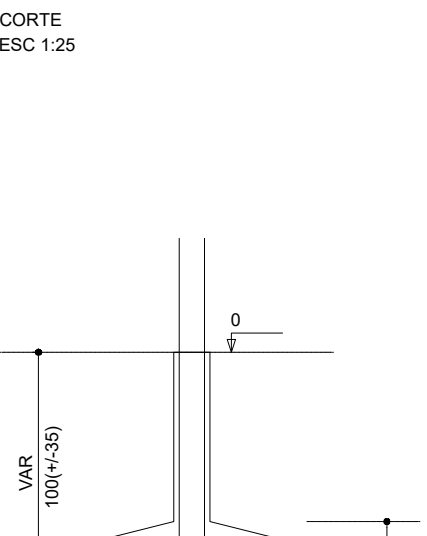
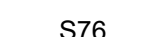
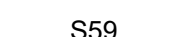
P58



P52



P26



V1	V2	V3
V4	V5	V6
V7	V8	V9
V10	V11	V12
V13	V14	V15
V16	V17	V18
V19	V20	V21
V22	V23	V24
V25	V26	V27
V28	V29	V30
V31	V32	V33
V34	V35	V36
V37	V38	V39
V40	V41	V42
V43	V44	V45
V46	V47	V48
V49	V50	V51
V52	V53	V54
V55		

AOQ	N	DIA (mm)	QUANT (Bars)	UNIT	C TOTAL
C450	1	5.0	1533	20	133970
	2	5.0	1533	20	133970
	3	5.0	1533	20	133970
	4	5.0	2	405	810
	5	5.0	50	100	6500
	6	5.0	50	100	6500
	7	8.0	2	339	678
	8	10.0	2	914	1828
	9	10.0	2	1114	2228
C450	10	10.0	2	1314	2628
	11	10.0	2	1514	3028
	12	10.0	2	1714	3428
	13	10.0	2	1914	3828
	14	10.0	2	2114	4228
	15	10.0	2	2314	4628
	16	10.0	2	2514	5028
	17	10.0	2	2714	5428
	18	10.0	2	2914	5828
	19	10.0	16	362	2172
	20	10.0	4	337	1348
	21	10.0	1	138	278
	22	10.0	2	158	318
	23	10.0	20	342	6840
	24	10.0	2	362	724
	25	10.0	1	145	145
	26	10.0	2	388	776
	27	10.0	2	408	816
	28	10.0	2	468	936
	29	10.0	2	698	1398
	30	10.0	6	384	2304
	31	10.0	2	457	915
	32	10.0	2	191	382
	33	10.0	2	287	574
	34	10.0	2	308	612
	35	10.0	1	124	924
	36	10.0	4	730	2868
	37	10.0	4	517	2068
38	10.0	4	574	2298	
39	10.0	2	638	2558	
40	10.0	2	369	730	
41	10.0	2	457	915	
42	10.0	1	165	165	
43	10.0	1	124	924	
44	10.0	2	176	352	
45	10.0	2	376	752	
46	10.0	4	166	784	
47	10.0	2	210	420	
48	10.0	2	230	460	
49	10.0	2	327	654	
50	10.0	2	375	750	
51	10.0	2	212	424	
52	10.0	2	232	464	
53	10.0	2	381	722	
54	10.0	4	252	1008	
55	10.0	4	271	1084	
56	10.0	4	313	1252	
57	10.0	4	133	133	
58	10.0	2	379	758	
59	10.0	2	242	484	
60	10.0	2	262	524	
61	10.0	2	657	1318	
62	10.0	2	700	1400	
63	10.0	2	192	384	
64	10.0	4	527	2108	
65	10.0	4	547	2148	
66	10.0	1	168	168	
67	10.0	2	554	1108	
68	10.0	1	434	868	
69	10.0	2	430	860	
70	10.0	4	3140	3140	
71	10.0	4	785	3140	
72	10.0	2	190	380	
73	10.0	2	210	420	
74	10.0	2	377	754	
75	10.0	2	419	838	
76	10.0	2	487	974	
77	10.0	1	114	114	
78	10.0	4	808	1616	
79	10.0	2	845	1690	
80	10.0	2	945	1890	
81	10.0	2	948	1896	
82	10.0	4	237	948	
83	10.0	2	254	508	
84	10.0	6	312	1872	
85	10.0	2	1051	2102	
86	10.0	1	200	200	
87	10.0	1	200	200	
88	10.0	6	1200	7200	
89	10.0	2	411	822	
90	10.0	2	411	822	
91	10.0	2	268	516	
92	10.0	2	1082	2164	
93	10.0	2	168	336	
94	10.0	2	168	336	
95	10	2	649	1298	
96	10.0	2	331	662	
97	10.0	2	384	768	
98	10.0	2	457	914	
99	10.0	2	517	1034	
100	10.0	2	580	1160	
101	10.0	2	649	1298	
102	10.0	1	469	469	
103	10.0	2	597	1194	
104	10.0	2	597	1194	
105	10.0	2	1028	2056	
106	10.0	2	1028	2056	
107	10.0	2	1028	2056	
108	10.0	2	268	536	
109	10.0	2	268	536	

S5	S10	S18
S40	S59	S76
S80	S82	V56
V57	V58	V59
V60	V61	V62
V63	V64	V65
V66	V67	V68
V69	V70	V71
V72		

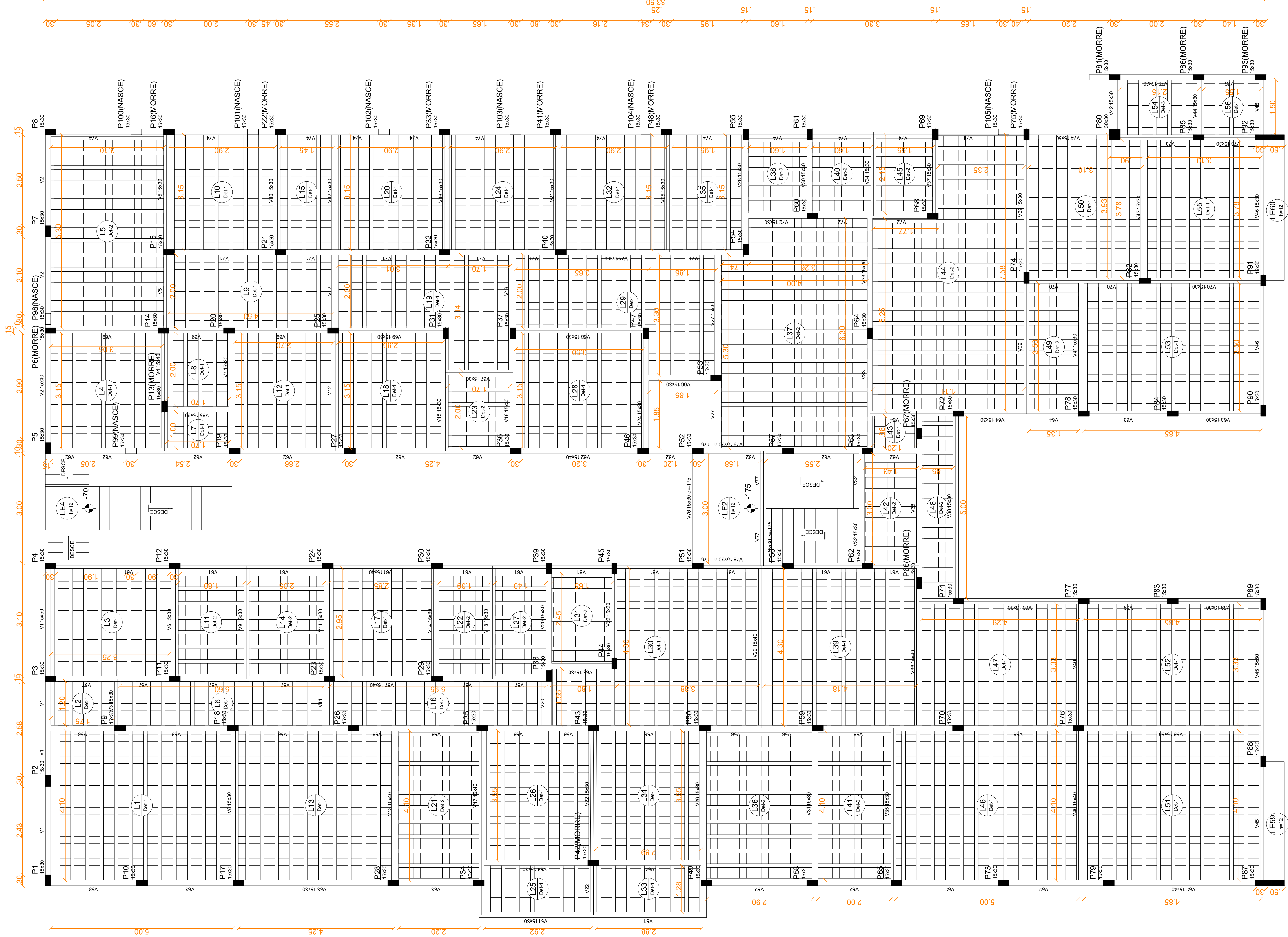
[illegible]

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	27.7	7.4
	10.0	1855.4	1259.3
	12.5	671.4	711.4
CA60	5.0	1393.2	236.2

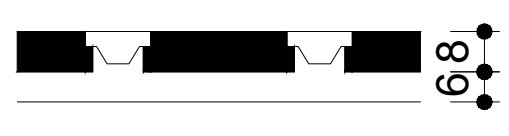
Volume de concreto (C-25) = 26.45 m³
Área de forma = 285.94 m²

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	0.9	0.2
	8.0	6.8	2.9
	10.0	1160.3	786.9
CA60	5.0	1476.4	250.3
PESO TOTAL (kg)			
CA50	790		
CA60	250.3		

Volume de concreto (C-25) = 13.07 m³
Área de forma = 216.38 m²



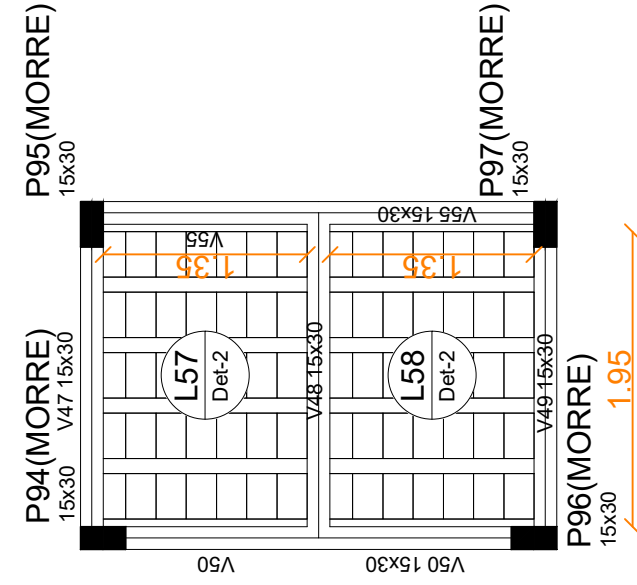
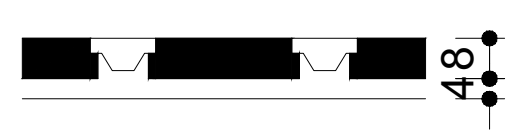
Detalhe 3



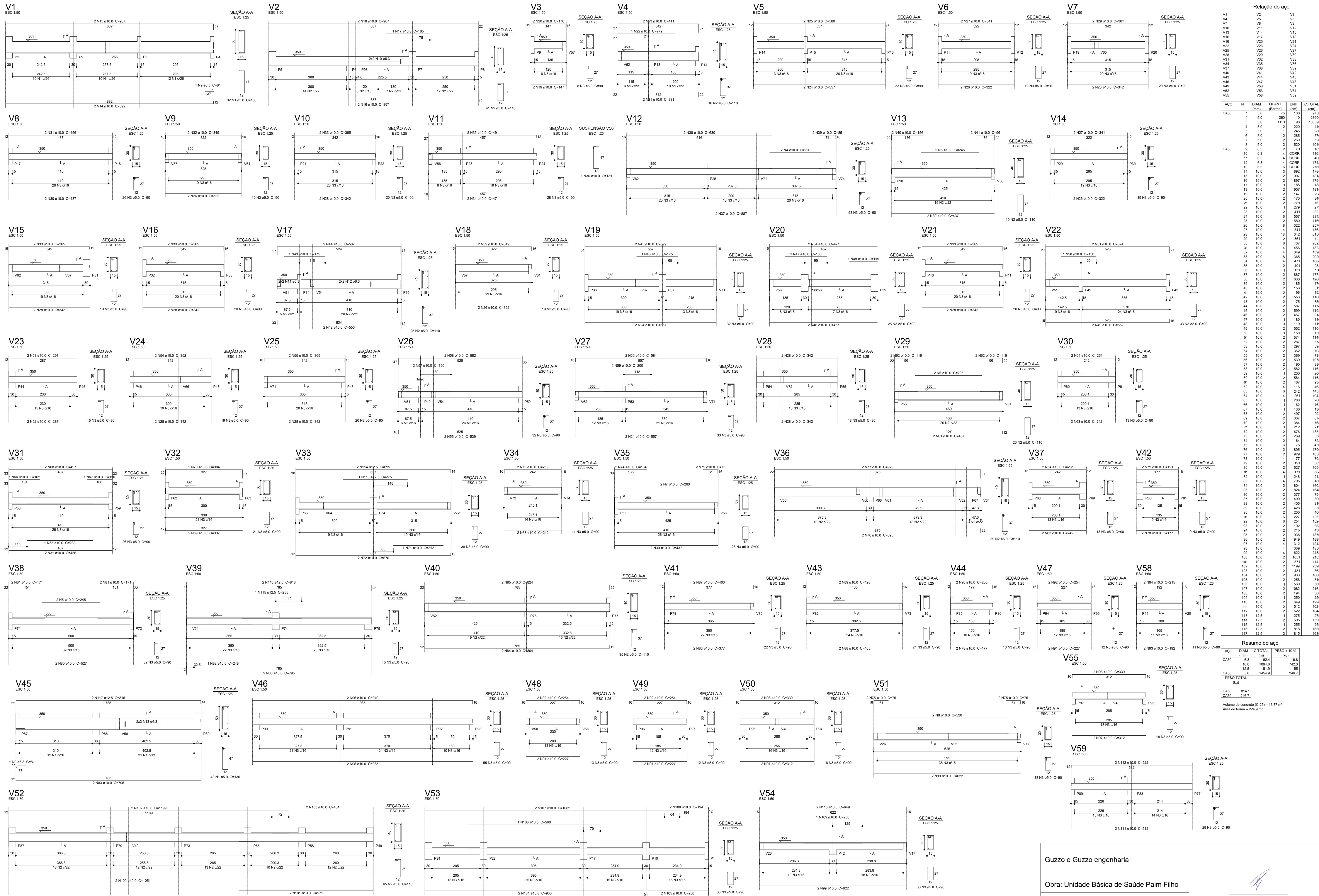
Detalhe 2



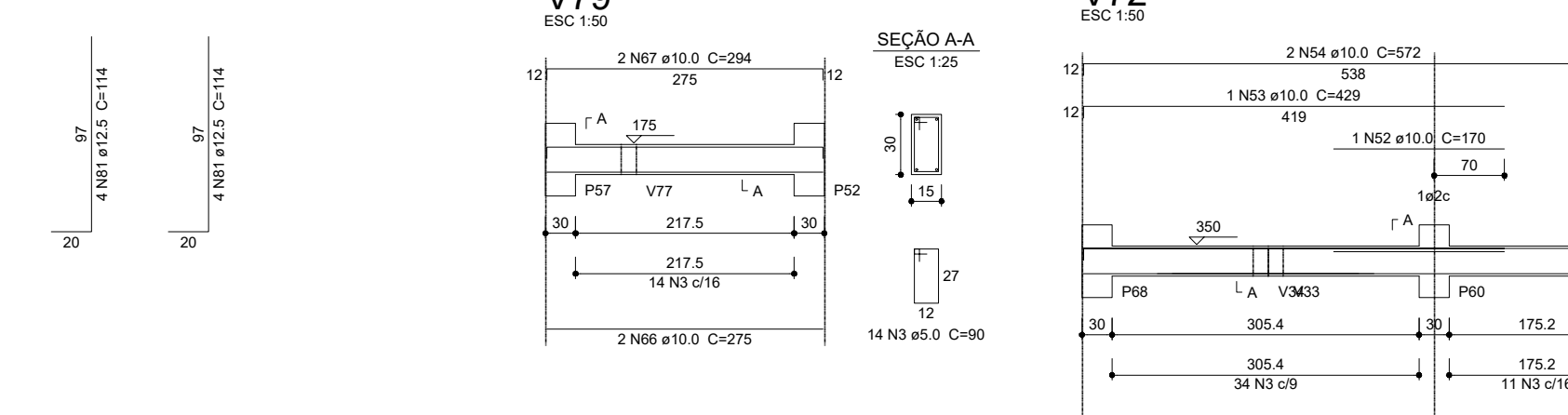
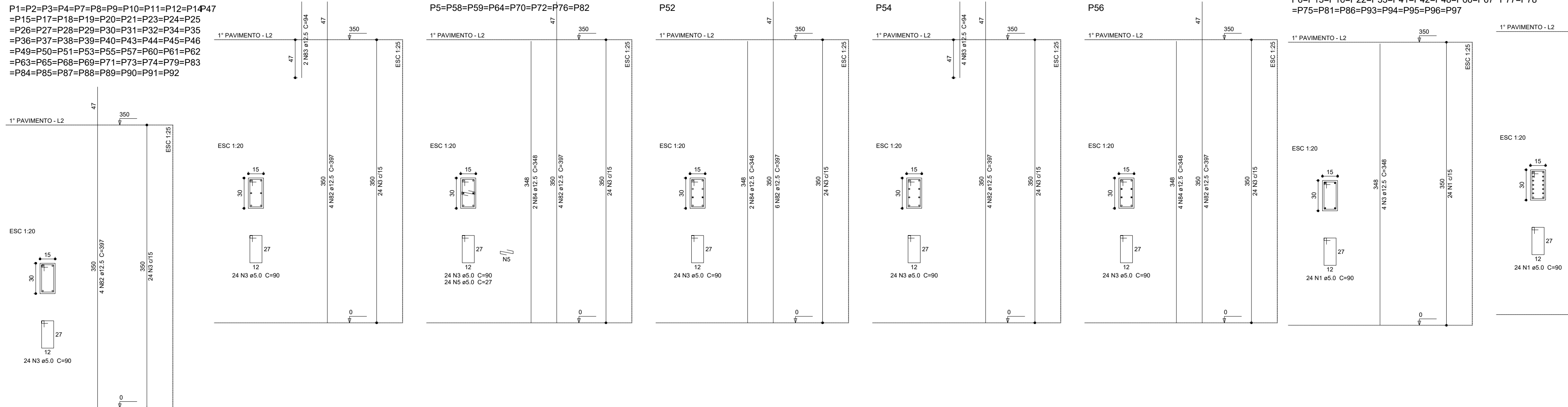
Detalhe 1



Detalhamento do 1º pavimento (01)
Escala 1/125



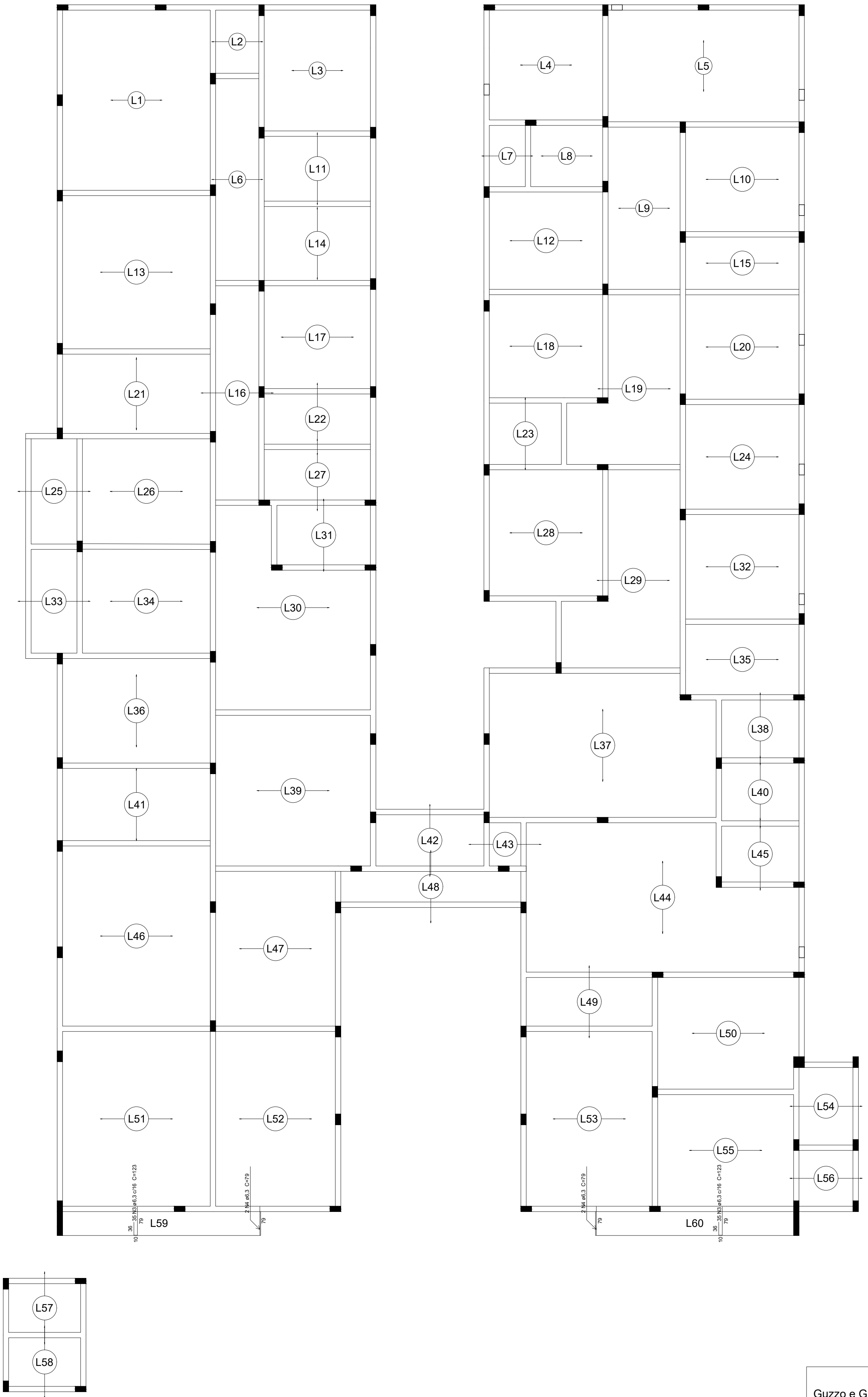
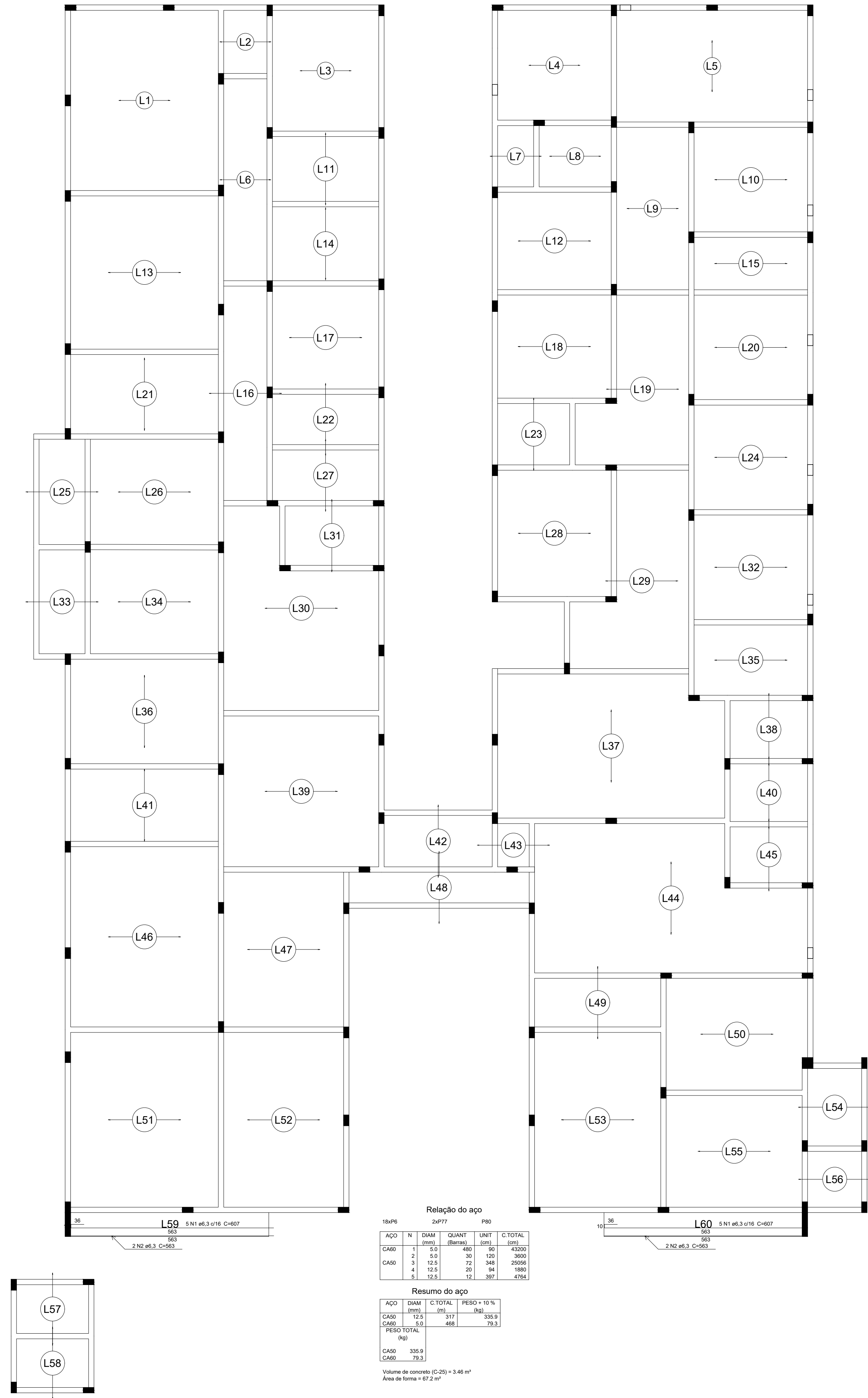
Escala 1/125



AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	136.8	36.8
	8.0	20.2	8.7
	10.0	706.9	479.4
	12.5	1527.8	1618.9
CA60	5.0	2747.7	465.9
PESO TOTAL (kg)			
CA50	2143.9		
CA60	465.9		

Volume de concreto (C-25) = 24.79 m³
Área de forma = 441.98 m²

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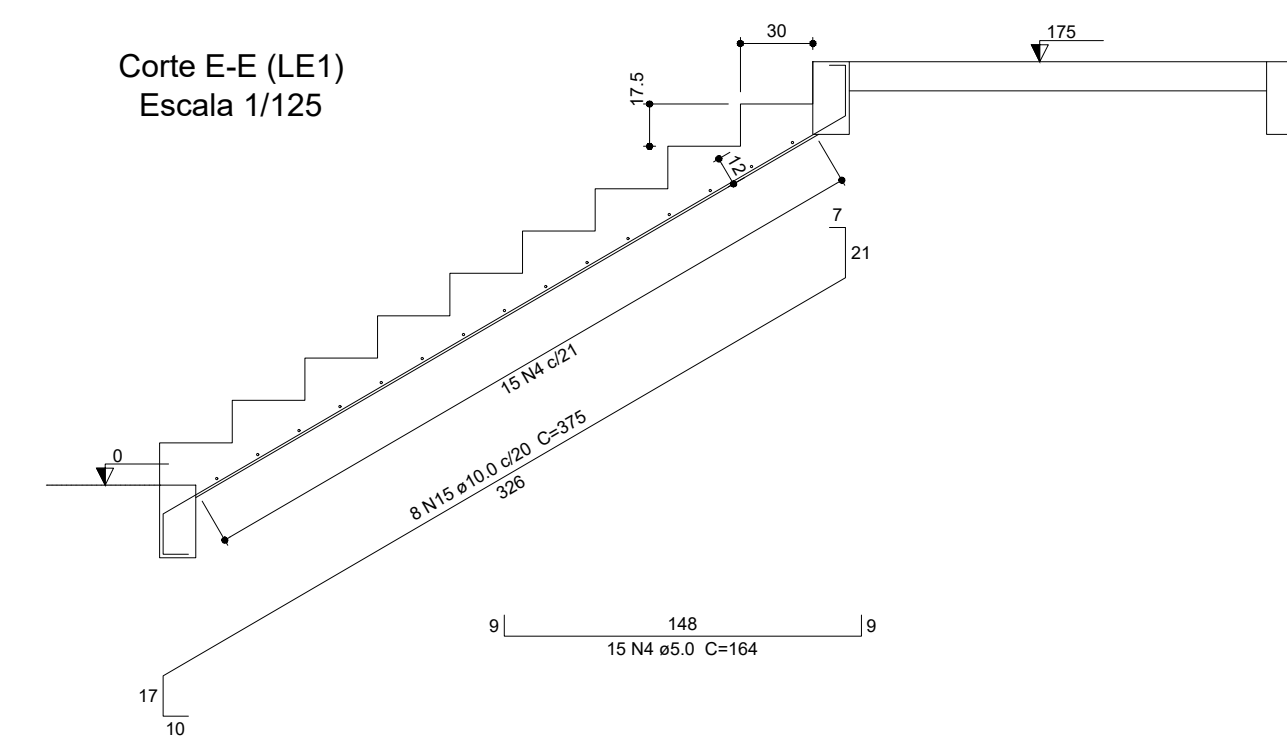
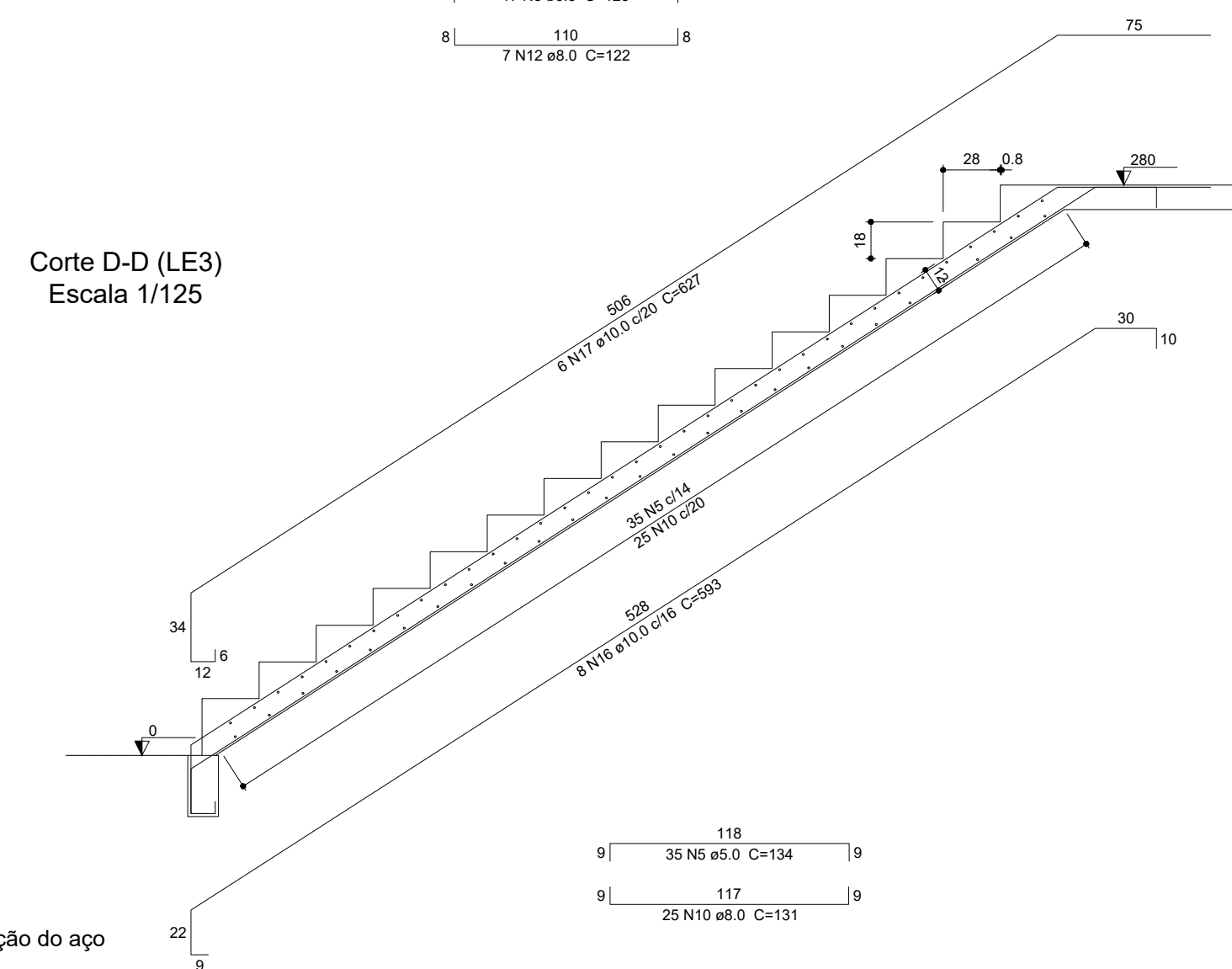
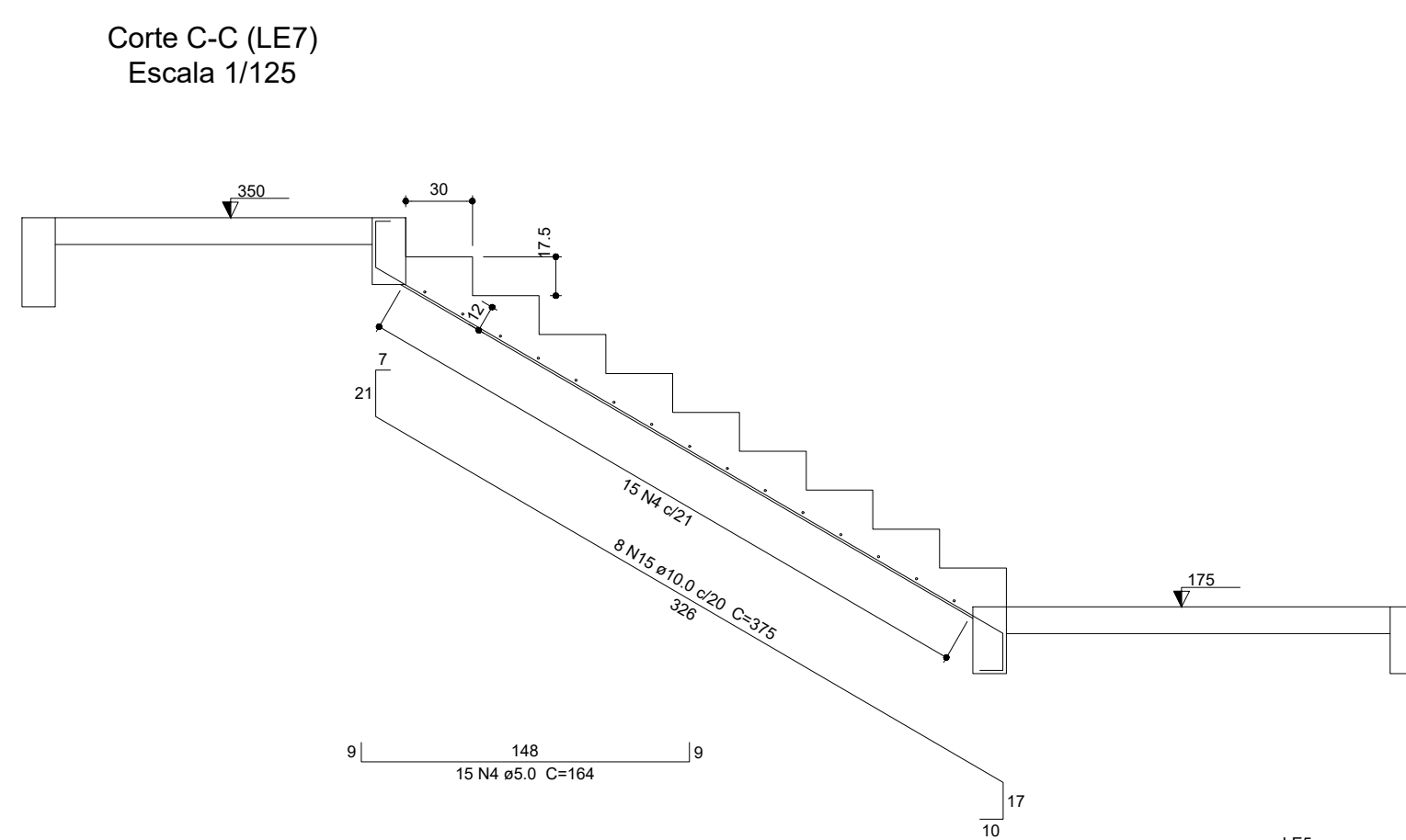
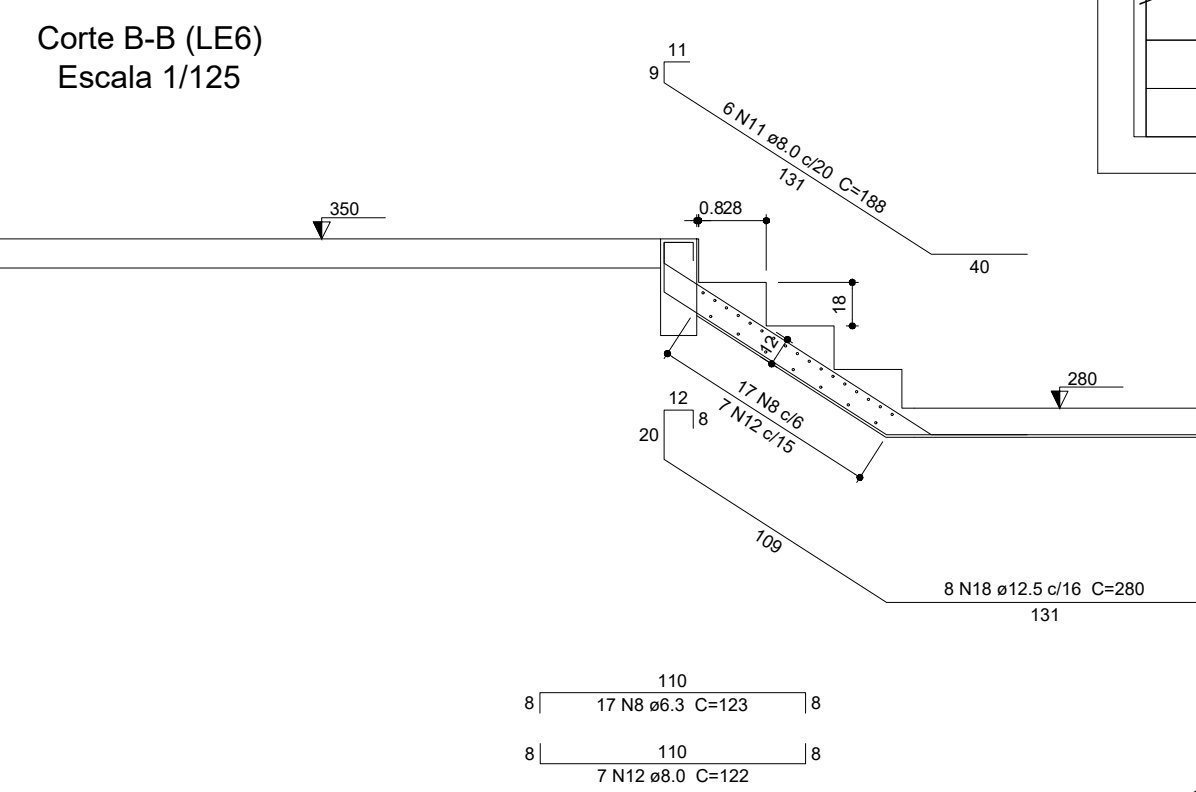
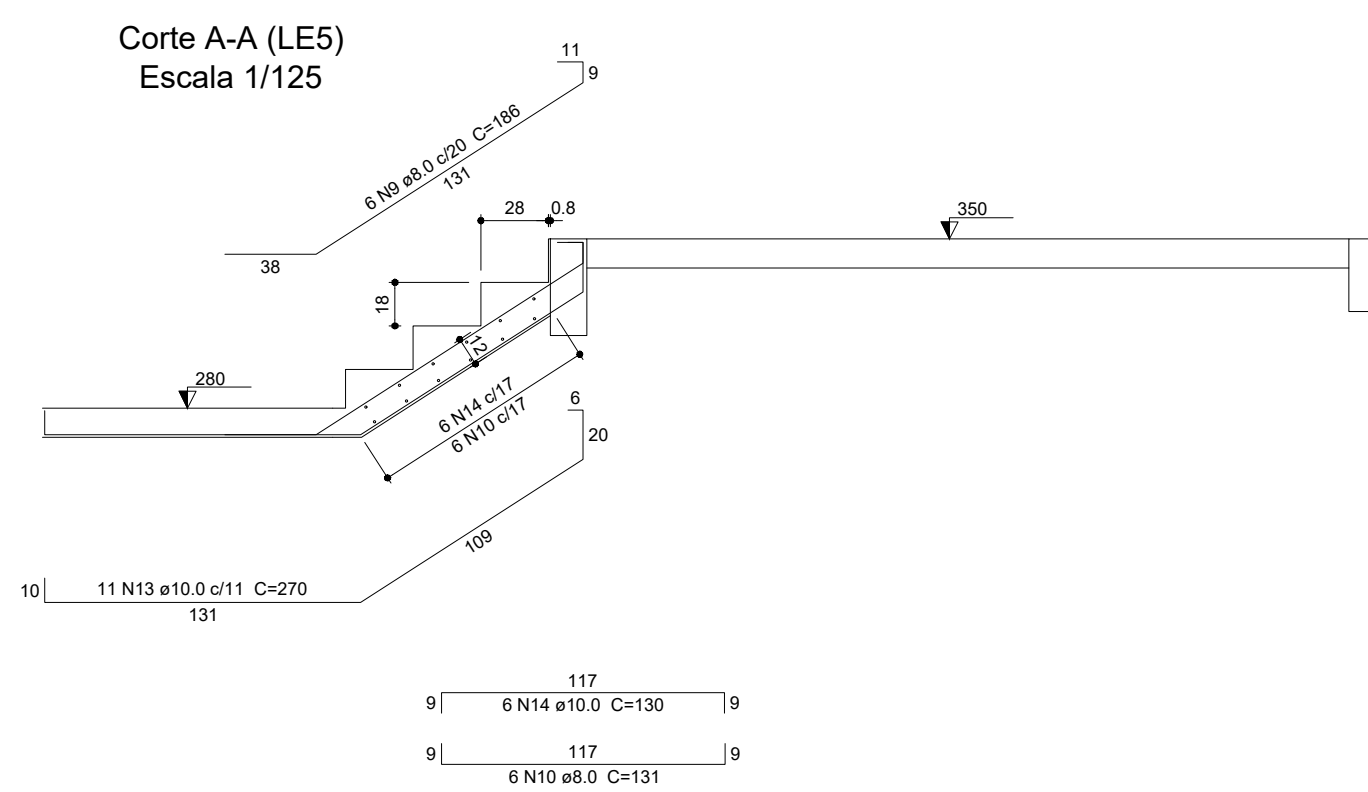
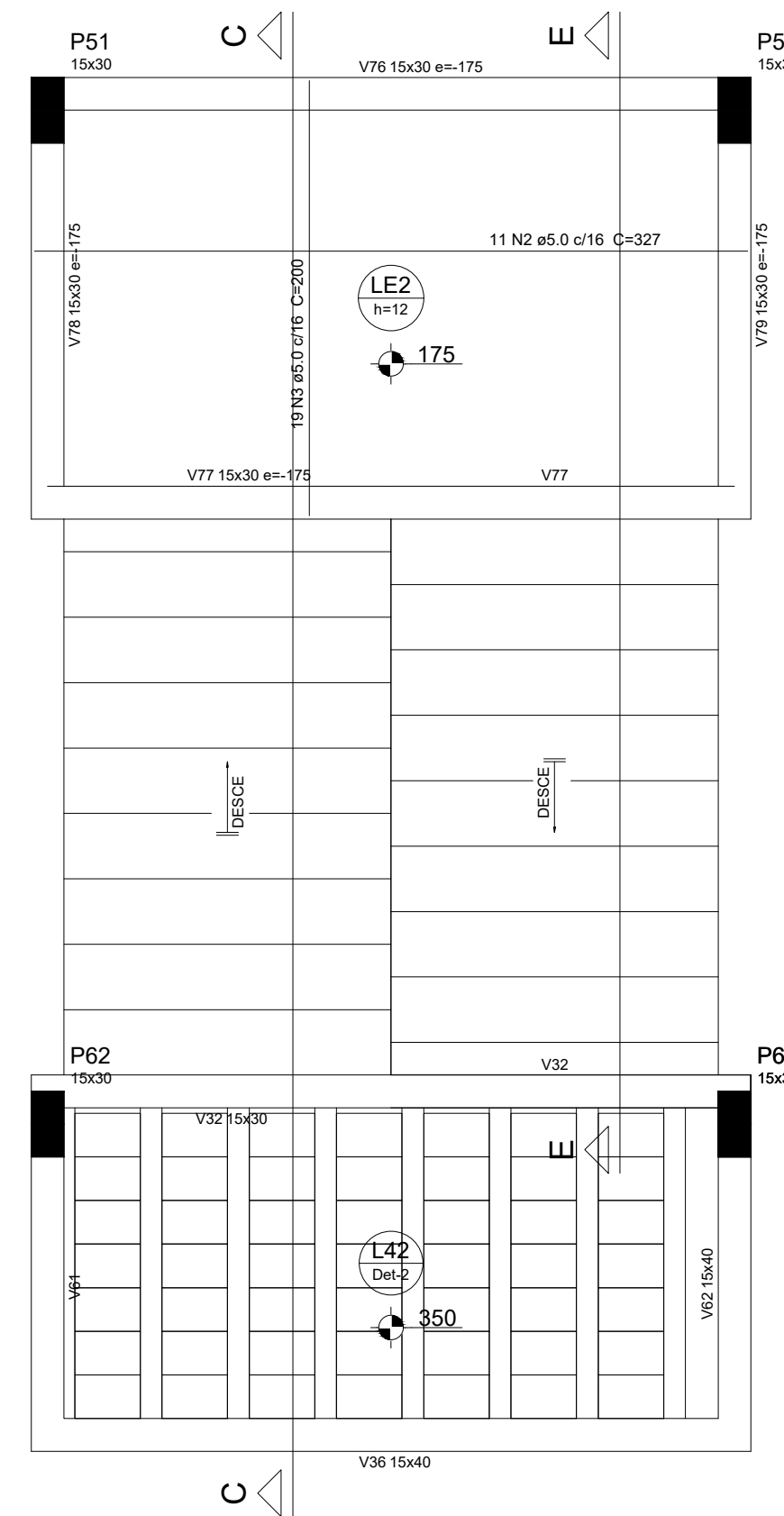
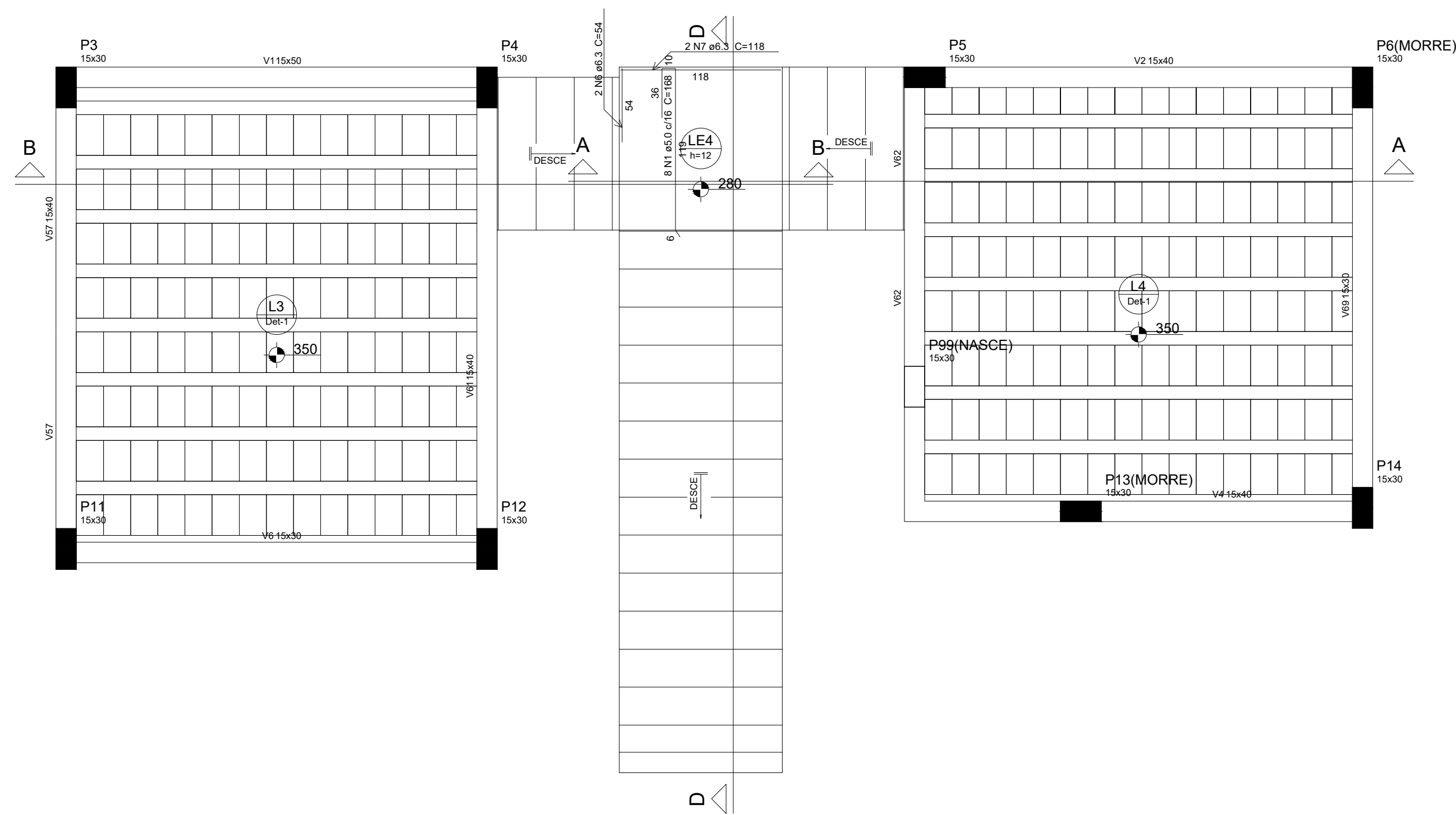
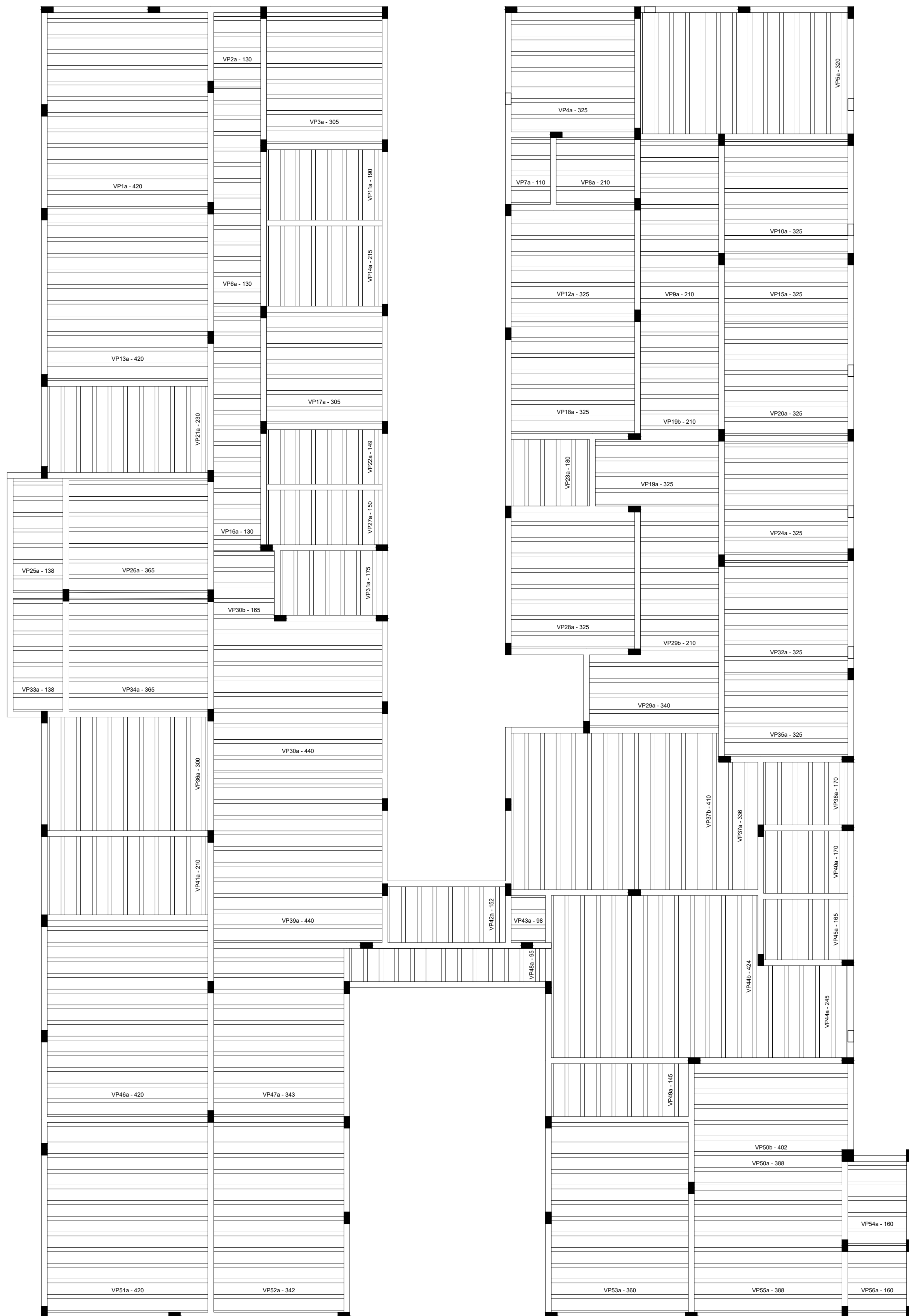
Guzzo e Guzzo engenharia

Obra: Unidade Básica de Saúde Paim Filho

Prancha 09

Escala indicada

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CREA/RS 235.921
Engenheiro Civil



Relação do aço						22
LES						9
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)	
CA50	1	5,0	8	188	1547	
	2	5,0	11	327	3684	
	3	5,0	20	380	7600	
	4	5,0	30	164	4920	
CA50	5	5,0	35	134	4690	
	6	6,3	4	108	432	
	7	6,3	2	118	236	
	8	6,3	11	128	1408	
	9	6,3	17	186	3162	
	10	8,0	31	131	4061	
	11	8,0	6	188	1128	
	12	8,0	12	284	3408	
	13	10,0	11	270	2970	
	14	10,0	6	130	780	
	15	10,0	10	100	1000	
	16	10,0	8	593	4744	
	17	10,0	6	627	3762	
	18	12,5	2	280	560	
	19	12,5	2	280	560	

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	24.4	6.6
	8.0	71.6	31.1
	10.0	182.6	123.8
	12.5	22.4	23.7
CA60	5.0	183.6	31.1
PESO TOTAL (kg)			
CA50		185.2	
CA60		31.1	

Volume de concreto (C-25) = 4.22 m³
Área de forma = 41.76 m²

Guzzo e Guzzo engenharia

Obra: Unidade Básica de Saúde Paim Filho

Prancha 10

Escala indicada

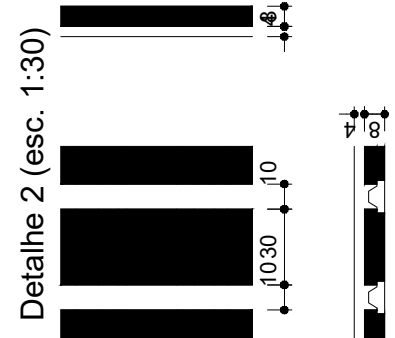
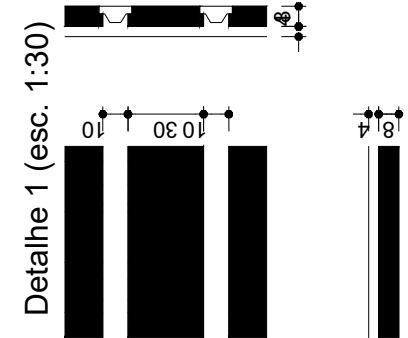

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Engenheiro Civil

Nível	Nome	Stação	Altitude (m)	Velocidade (km/h)
700	V1	15320	0	700
700	V2	15320	0	700
700	V3	15320	0	700
700	V4	15320	0	700
700	V5	15320	0	700
700	V6	15320	0	700
700	V7	15320	0	700
700	V8	15320	0	700
700	V9	15320	0	700
700	V10	15320	0	700
700	V11	15320	0	700
700	V12	15320	0	700
700	V13	15320	0	700
700	V14	15320	0	700
700	V15	15350	0	700
700	V16	15350	0	700
700	V17	15350	0	700
700	V18	15350	0	700
700	V19	15350	0	700
700	V20	15350	0	700
700	V21	15350	0	700
700	V22	15350	0	700
700	V23	15350	0	700
700	V24	15320	0	700
700	V25	15320	0	700
700	V26	15320	0	700
700	V27	15320	0	700
700	V28	15320	0	700
700	V29	15320	0	700
700	V30	15320	0	700
700	V31	15320	0	700
700	V32	15320	0	700
700	V33	15350	0	700
700	V34	15350	0	700
700	V35	15320	0	700
700	V36	15320	0	700
700	V37	15320	0	700
700	V38	15320	0	700
700	V39	15320	0	700
700	V40	15350	0	700
700	V41	15350	0	700
700	V42	15350	0	700
700	V43	15350	0	700
700	V44	15320	0	700
700	V45	15320	0	700
700	V46	15320	0	700
700	V47	15320	0	700
700	V48	15320	0	700
700	V49	15340	0	700
700	V50	15320	0	700
700	V51	15320	0	700
700	V52	15320	0	700

Nome	Tipo	Altura (cm)	Largura (cm)	Nível	Scorecard (kg/m ³)
L1	Pre-moldada	12	0	700	250
L2	Pre-moldada	12	0	700	250
L3	Pre-moldada	12	0	700	250
L4	Pre-moldada	12	0	700	250
L5	Pre-moldada	12	0	700	250
L6	Pre-moldada	12	0	700	250
L7	Pre-moldada	12	0	700	250
L8	Pre-moldada	12	0	700	250
L9	Pre-moldada	12	0	700	250
L10	Pre-moldada	12	0	700	250
L11	Pre-moldada	12	0	700	250
L12	Pre-moldada	12	0	700	250
L13	Pre-moldada	12	0	700	250
L14	Pre-moldada	12	0	700	250
L15	Pre-moldada	12	0	700	250
L16	Pre-moldada	12	0	700	250
L17	Pre-moldada	12	0	700	250
L18	Pre-moldada	12	0	700	250
L19	Pre-moldada	12	0	700	250
L20	Pre-moldada	12	0	700	250
L21	Pre-moldada	12	0	700	250
L22	Pre-moldada	12	0	700	250
L23	Pre-moldada	12	0	700	250
L24	Pre-moldada	12	0	700	250
L25	Pre-moldada	12	0	700	250
L26	Pre-moldada	12	0	700	250
L27	Pre-moldada	12	0	700	250
L28	Pre-moldada	12	0	700	250
L29	Pre-moldada	12	0	700	250
L30	Pre-moldada	12	0	700	250
L31	Pre-moldada	12	0	700	250
L32	Pre-moldada	12	0	700	250
L33	Pre-moldada	12	0	700	250
L34	Pre-moldada	12	0	700	250
L35	Pre-moldada	12	0	700	250
L36	Pre-moldada	12	0	700	250
L37	Pre-moldada	12	0	700	250
L38	Pre-moldada	12	0	700	250
L39	Pre-moldada	12	0	700	250
L40	Pre-moldada	12	0	700	250
L41	Pre-moldada	12	0	700	250
L42	Pre-moldada	12	0	700	250
L43	Pre-moldada	12	0	700	250
L44	Pre-moldada	12	0	700	250
L45	Pre-moldada	12	0	700	250
L46	Pre-moldada	12	0	700	250
L47	Pre-moldada	12	0	700	250
L48	Pre-moldada	12	0	700	250
L49	Pre-moldada	12	0	700	250
L50	Pre-moldada	12	0	700	250
L51	Pre-moldada	12	0	700	250

Blocos de enchimento					
Detalhe	Tipo	Nome	Dimensões(cm)		Quantidade
			hb	bx by	
1/2	Lajota cerâmica	B8/30/20	8	30 20	6829

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



Guzzo e Guzzo engenharia

Obra: Unidade Básica de Saúde Paim Filho

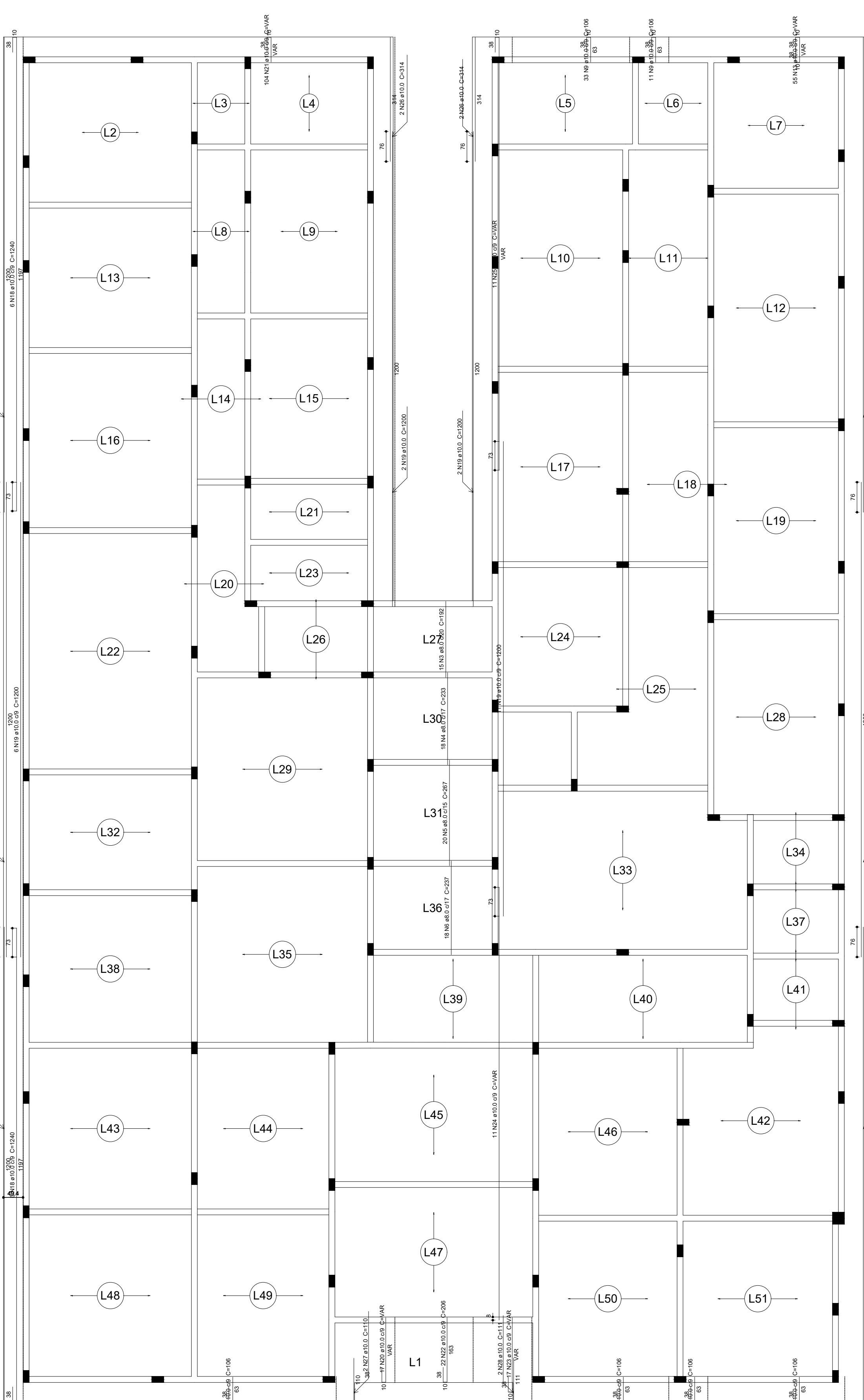
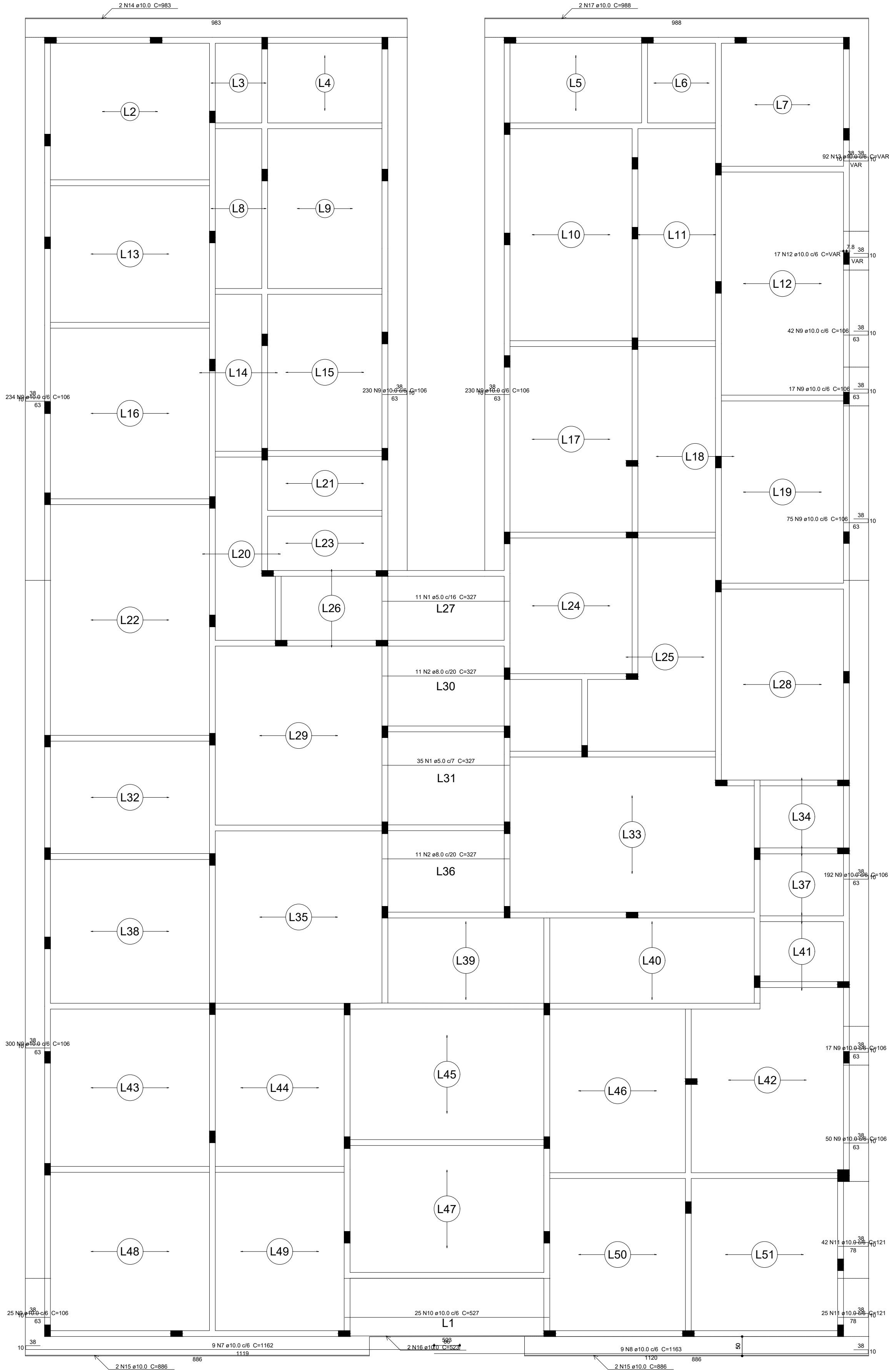
Prancha 11

Escala indicada



Armação positiva das lajes do pavimento Cobertura (Eixo X)
Escala 1/150

Armação positiva das lajes do pavimento Cobertura (Eixo Y)
Escala 1/150



Relação do aço

Positivos X						Positivos Y					
AÇO	N	DIAM (mm)	QUANT (Barra)	UNIT (cm)	C TOTAL (cm)	AÇO	N	DIAM (mm)	QUANT (Barra)	UNIT (cm)	C TOTAL (cm)
CASO	1	8.0	46	327	15042	CASO	1	8.0	22	327	7184
	2	8.0	18	192	2880		2	8.0	15	192	2880
	3	8.0	18	233	4194		3	8.0	18	233	4194
	4	8.0	20	267	5340		4	8.0	20	267	5340
	5	8.0	18	237	4266		5	8.0	18	237	4266
	6	8.0	9	1162	10458		6	8.0	9	1162	10458
	7	10.0	9	1163	10467		7	10.0	9	1163	10467
	8	10.0	106	17308	106		17308	8	10.0	106	17308
	9	10.0	25	527	13175		9	10.0	25	527	13175
	10	10.0	67	121	8107		10	10.0	67	121	8107
	11	10.0	17	VAR	VAR		11	10.0	17	VAR	VAR
	12	10.0	147	VAR	VAR		12	10.0	147	VAR	VAR
	13	10.0	2	963	1966		13	10.0	2	963	1966
	14	10.0	4	896	3544		14	10.0	4	896	3544
	15	10.0	2	523	1046		15	10.0	2	523	1046
	16	10.0	2	988	1976		16	10.0	2	988	1976
17	10.0	12	1240	14880	17	10.0	12	1240	14880		
18	10.0	33	1200	39600	18	10.0	33	1200	39600		
19	10.0	17	VAR	VAR	19	10.0	17	VAR	VAR		
20	10.0	104	VAR	VAR	20	10.0	104	VAR	VAR		
21	10.0	22	206	4532	21	10.0	22	206	4532		
22	10.0	17	VAR	VAR	22	10.0	17	VAR	VAR		
23	10.0	11	VAR	VAR	23	10.0	11	VAR	VAR		
24	10.0	4	314	1256	24	10.0	4	314	1256		
25	10.0	2	110	220	25	10.0	2	110	220		
26	10.0	2	111	222	26	10.0	2	111	222		

Resumo do aço

AÇO	DIAM (mm)	C TOTAL (m)	PESO + 10% (kg)
CASO	8.0	228.8	103.6
CASO	10.0	3512.8	2382.3
CASO	8.0	150.5	25.5
PESO TOTAL (kg)			
CASO	2485.9		
CASO	25.5		

Volume de concreto (C-25) = 34.15 m³
Área de forma = 116.13 m²

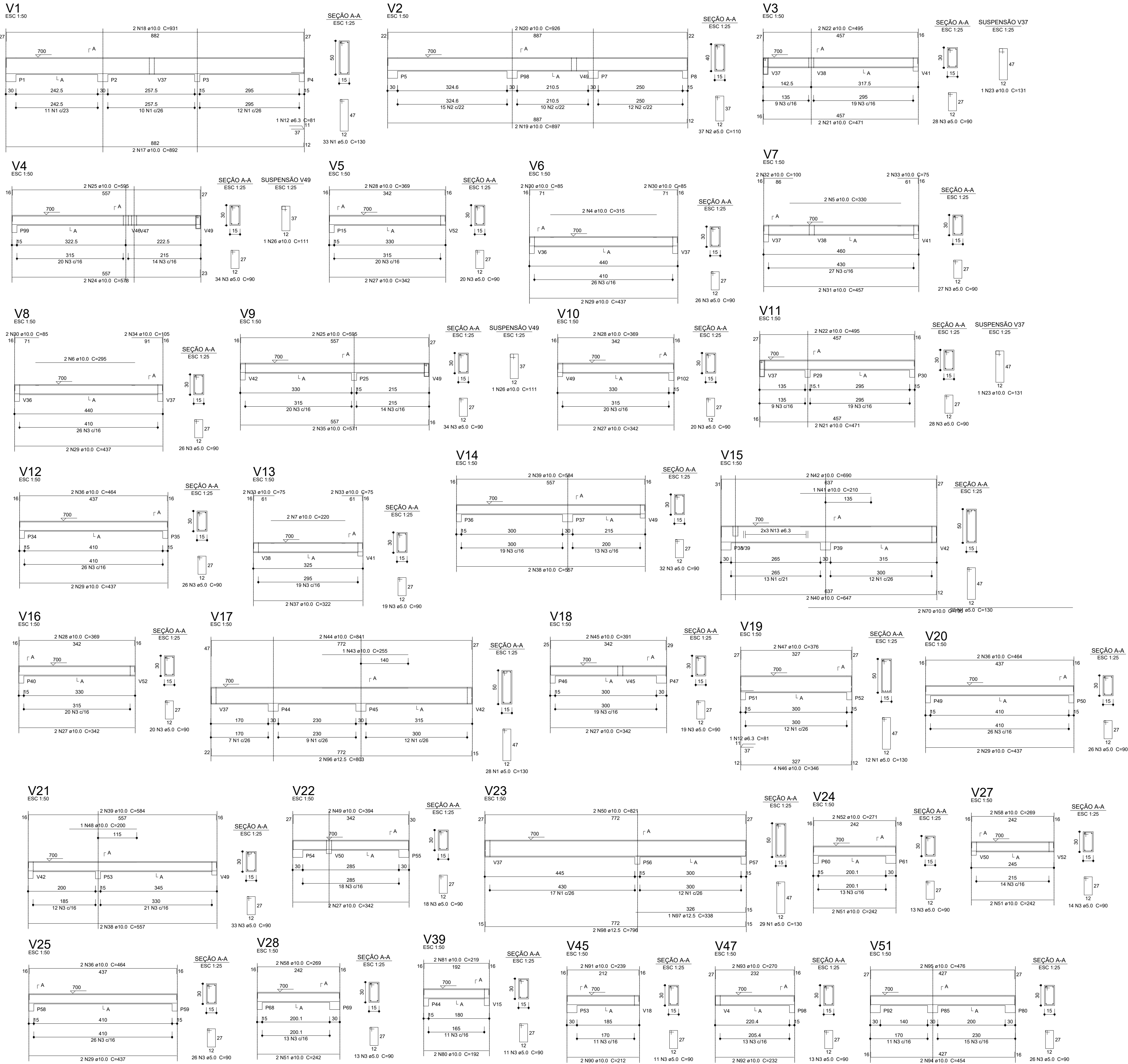
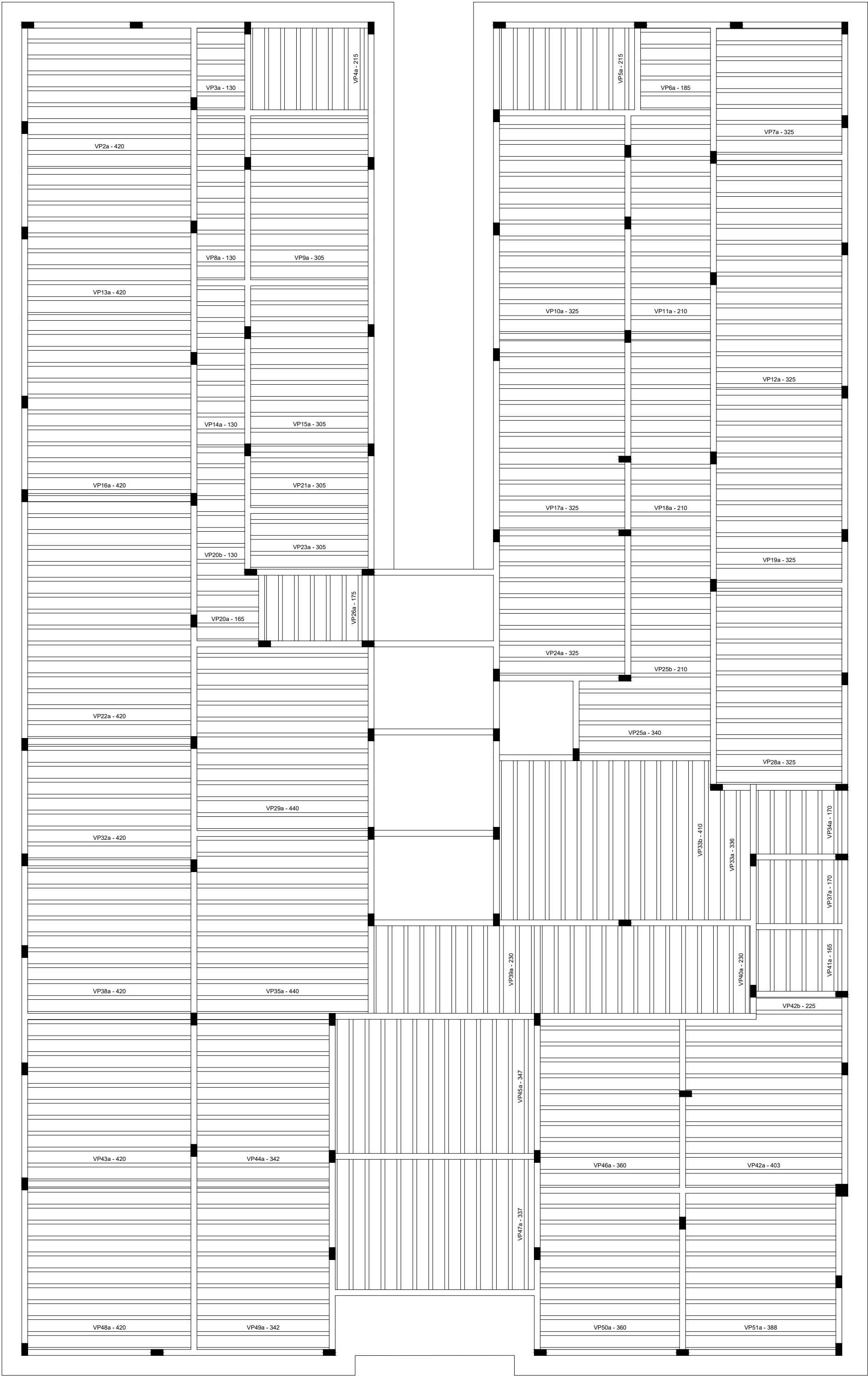
Guzzo e Guzzo engenharia

Obra: Unidade Básica de Saúde Paim Filho

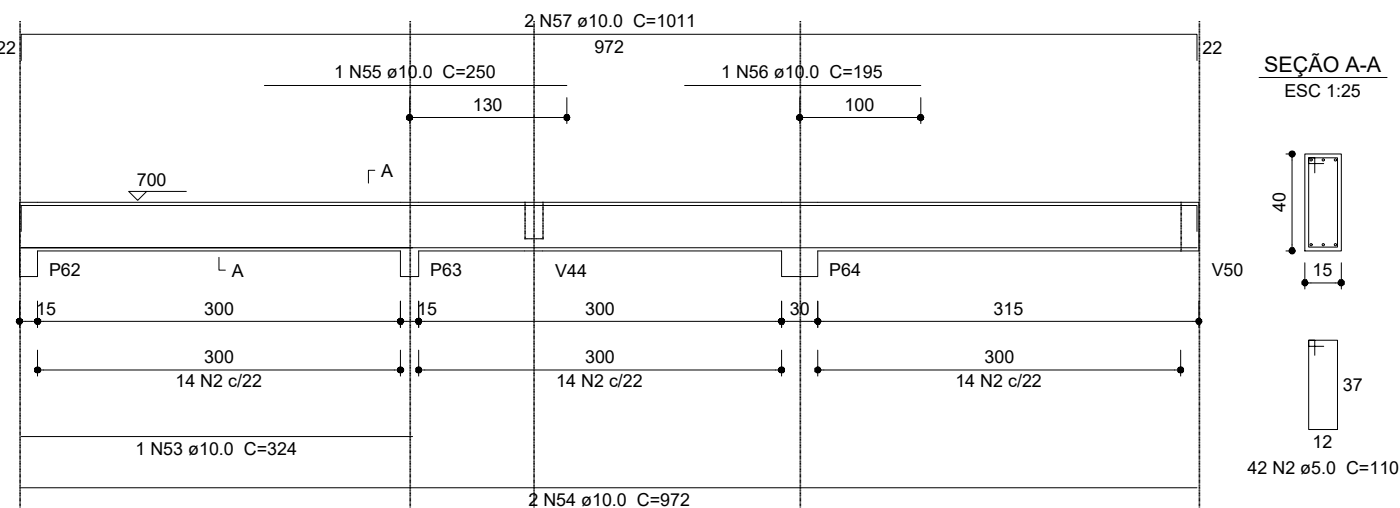
Prancha 12

Escala indicada

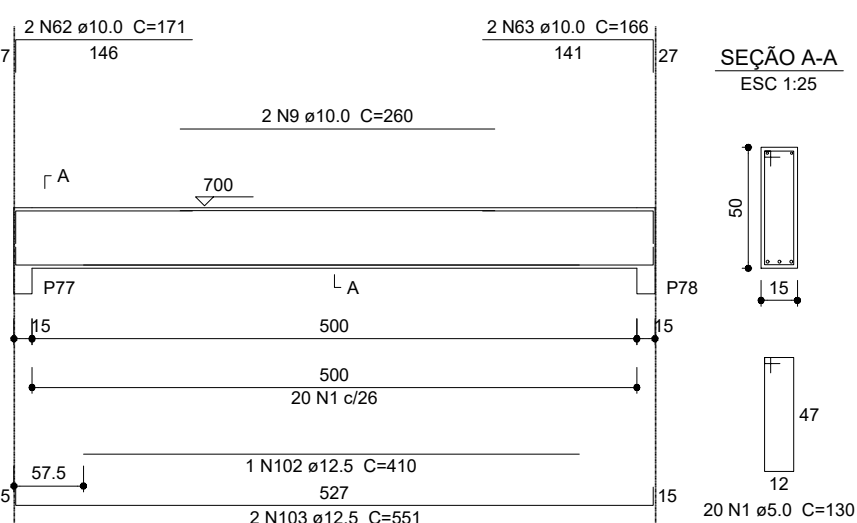
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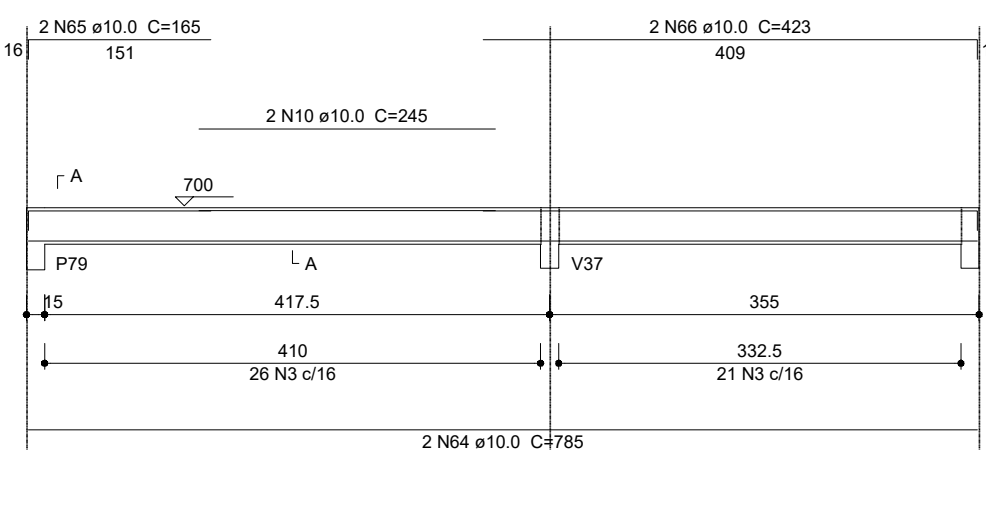
V26



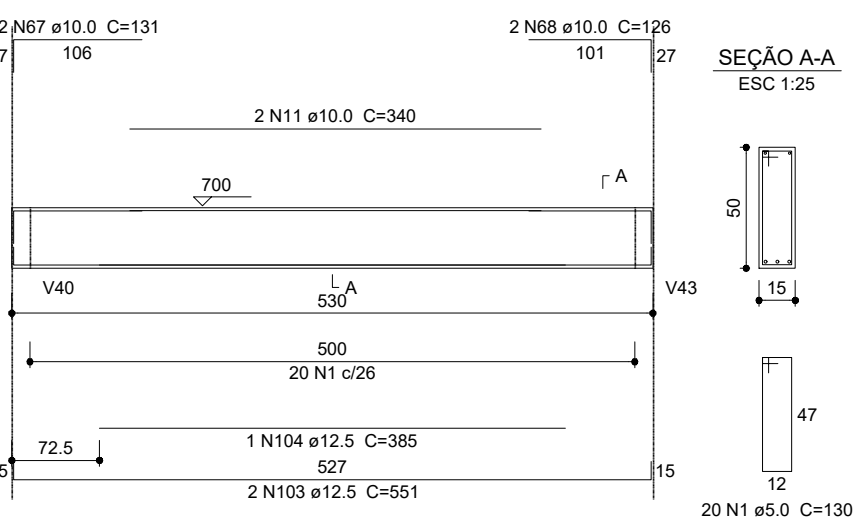
V30



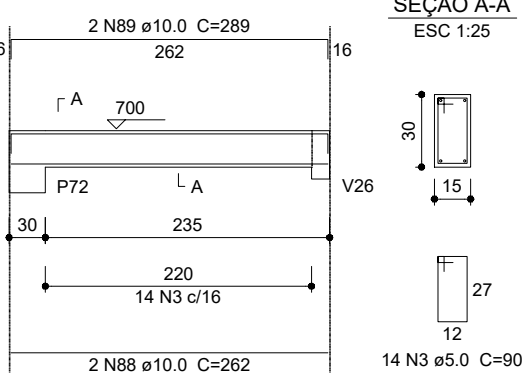
V31



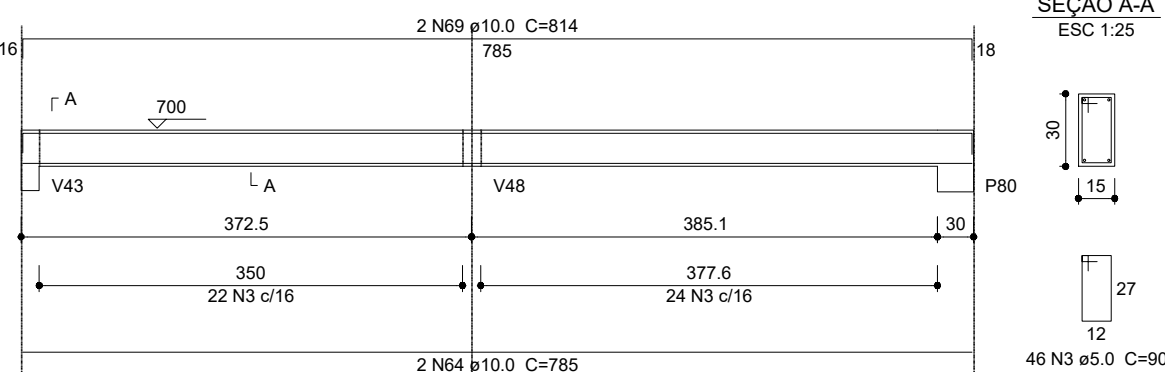
V33



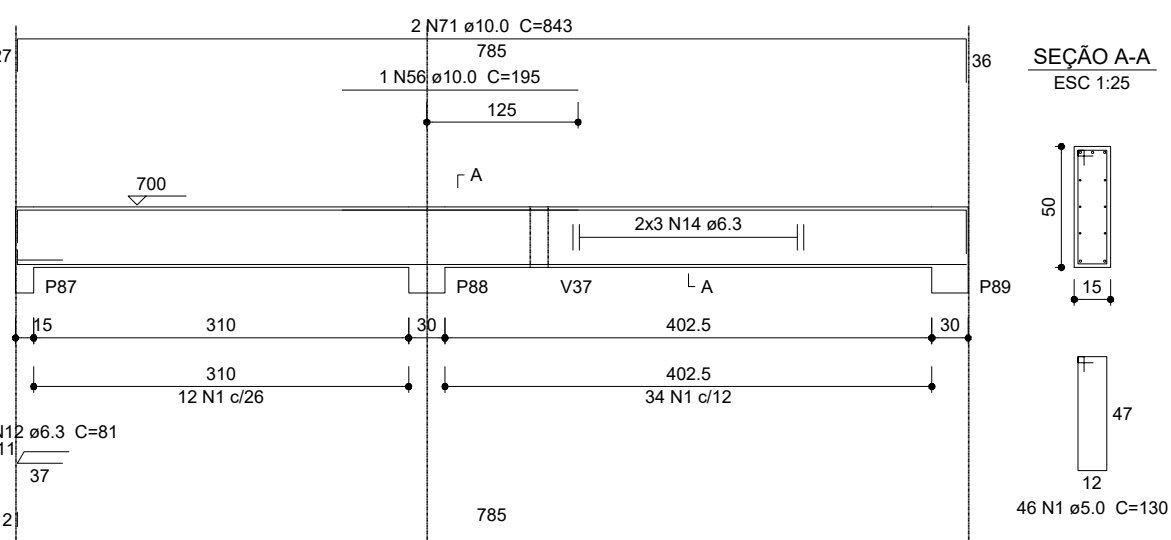
V44



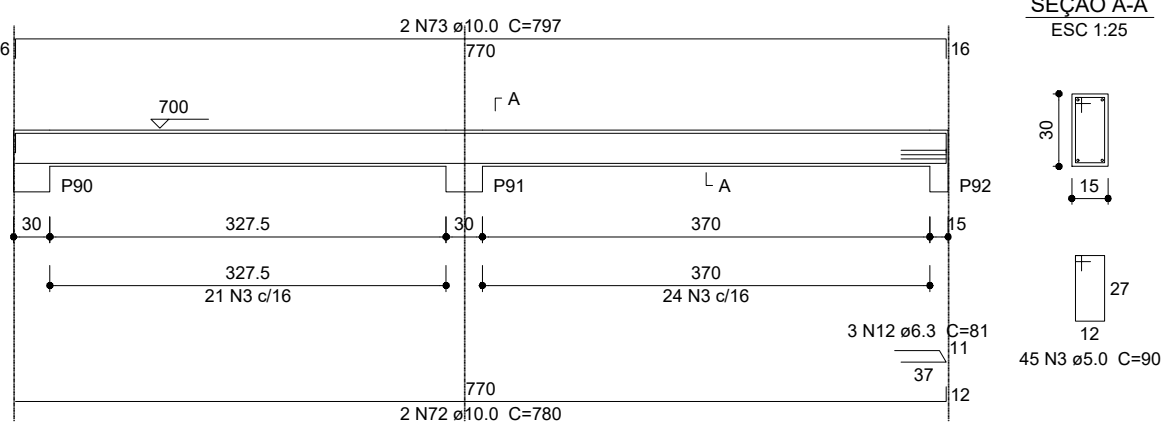
V32



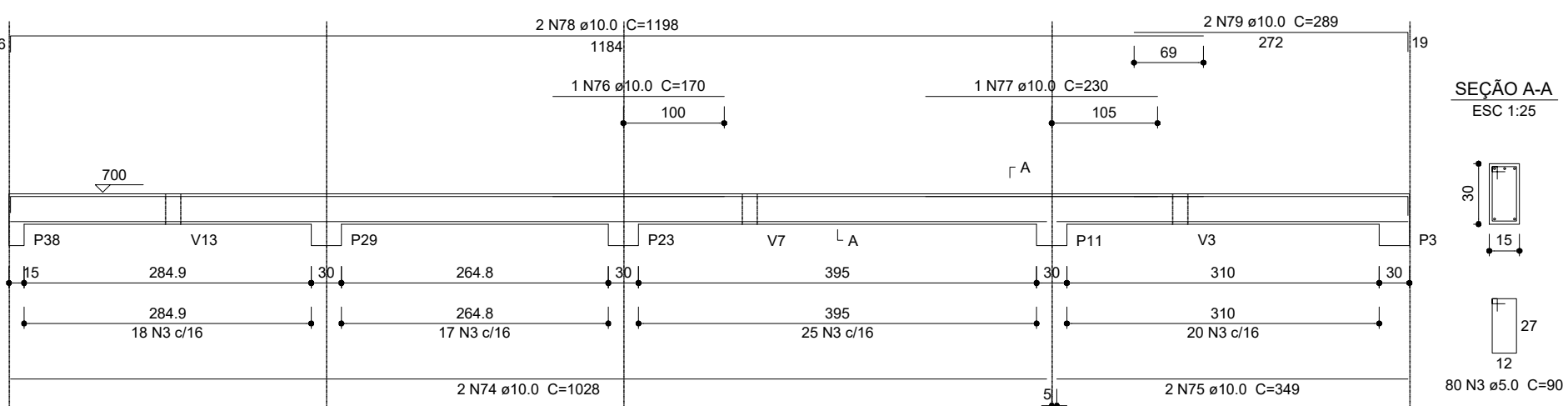
V34



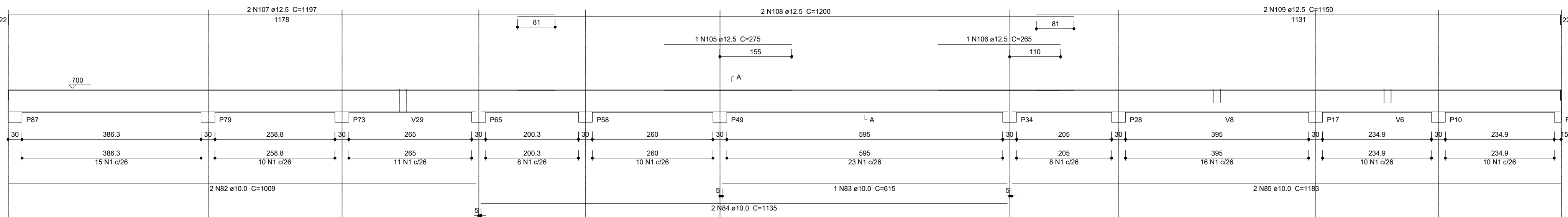
V35



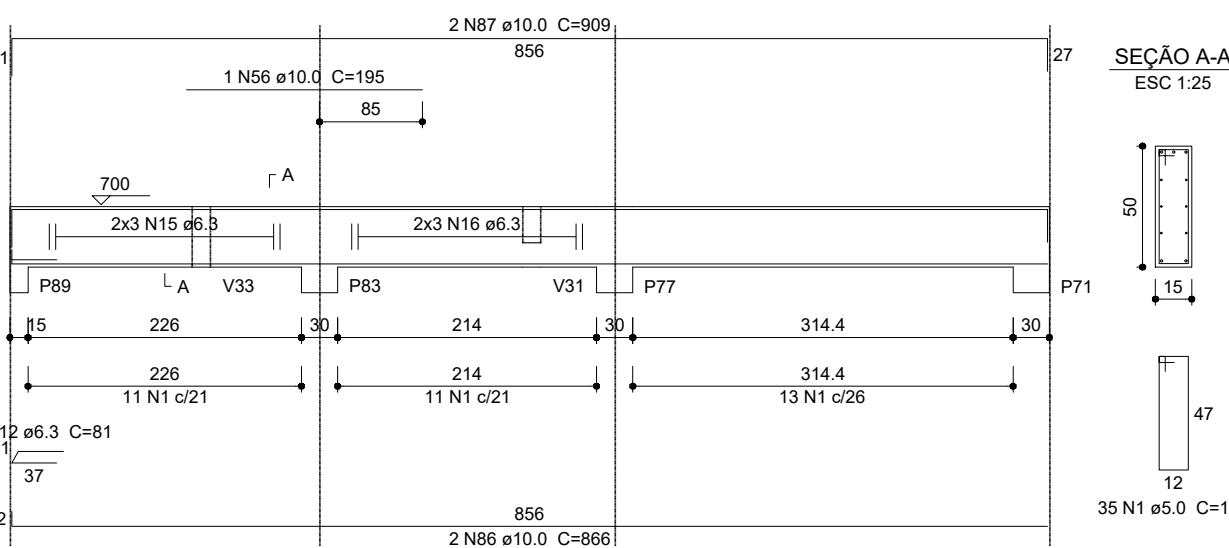
V38



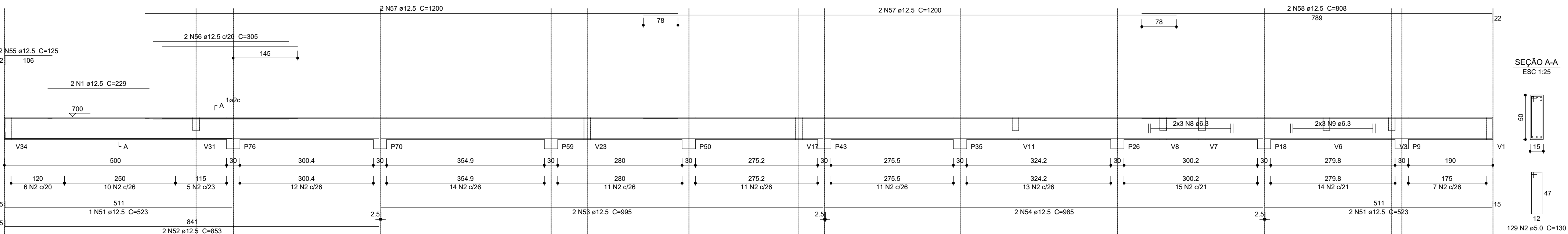
V36



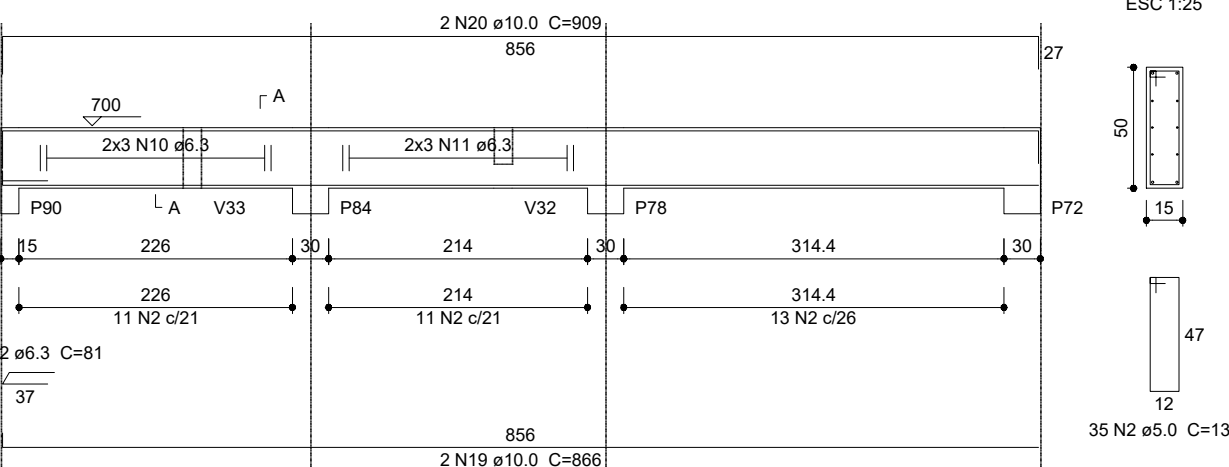
V40



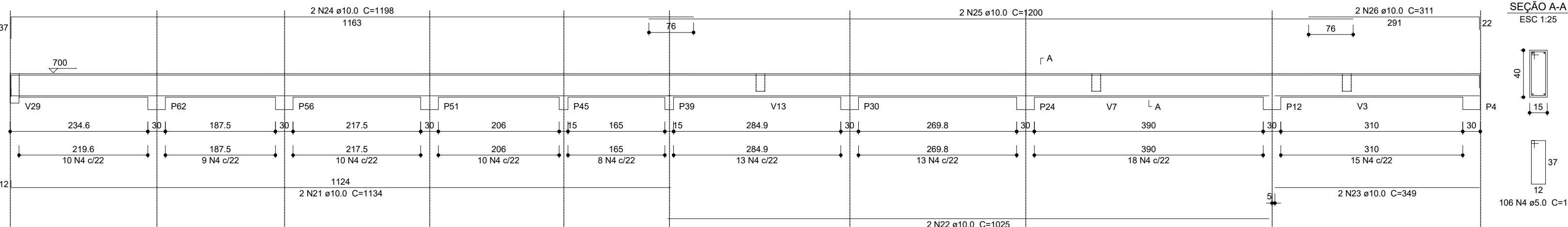
V37



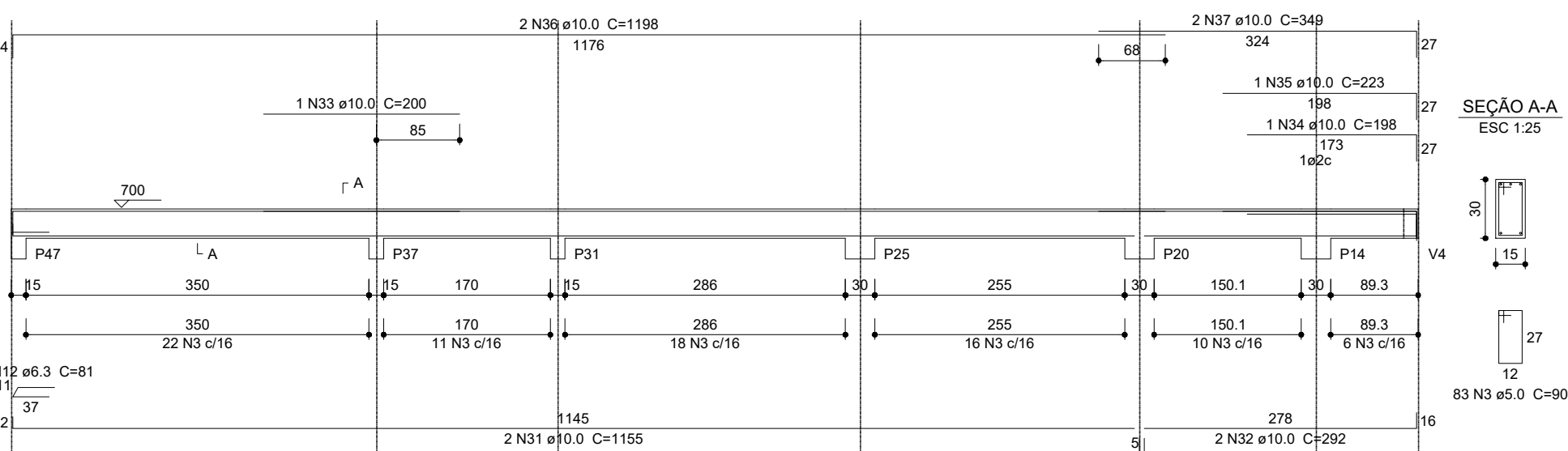
V43



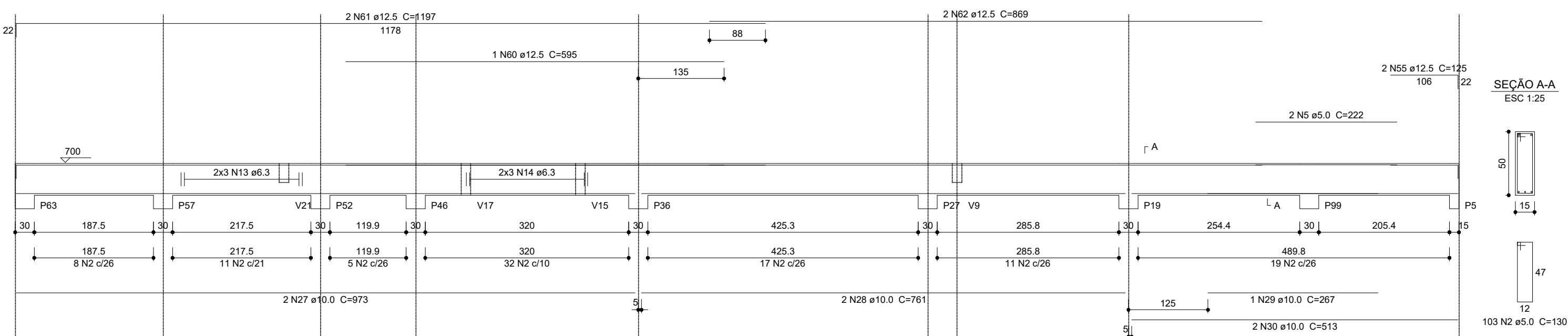
V41



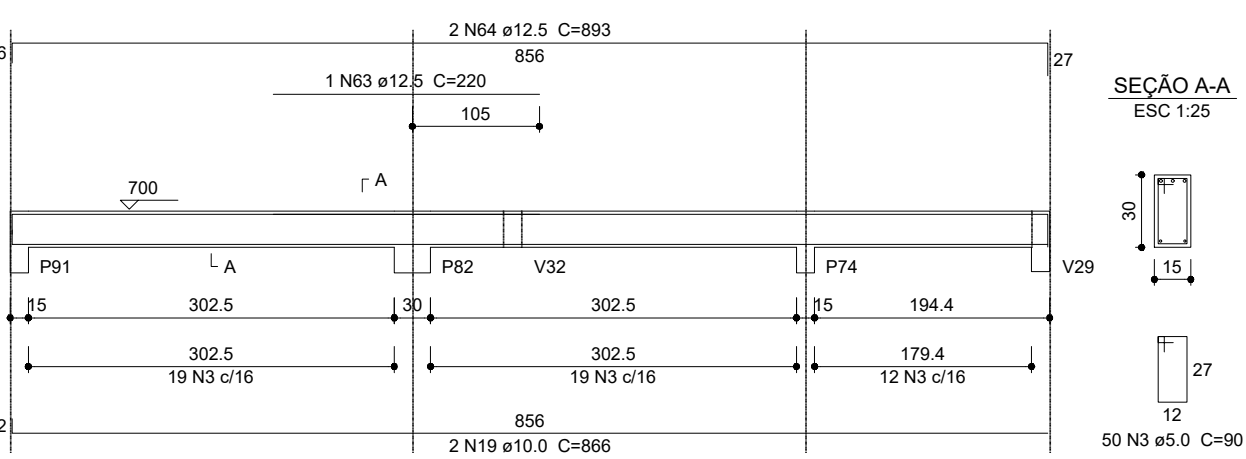
V46



V42

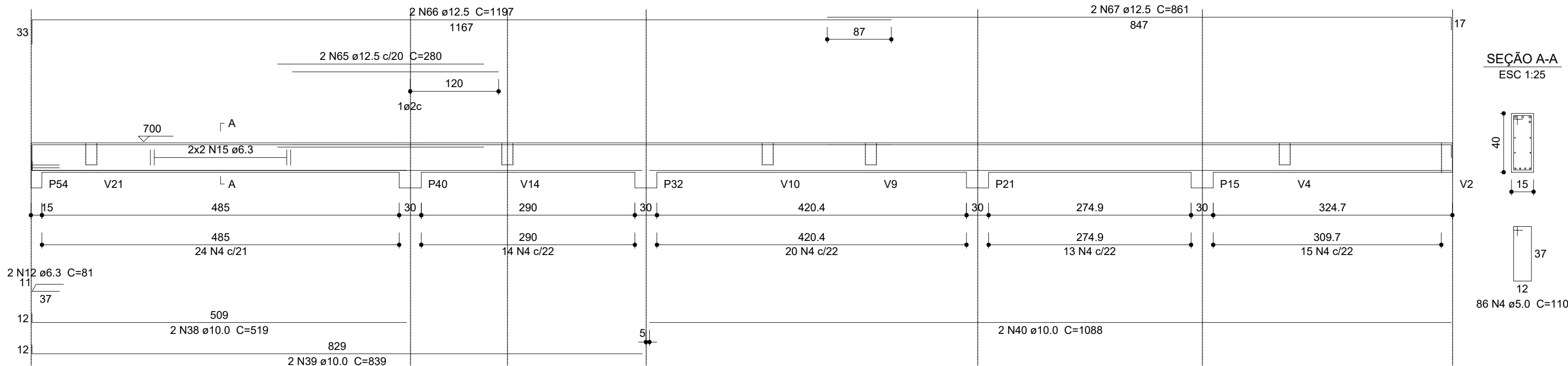


V48



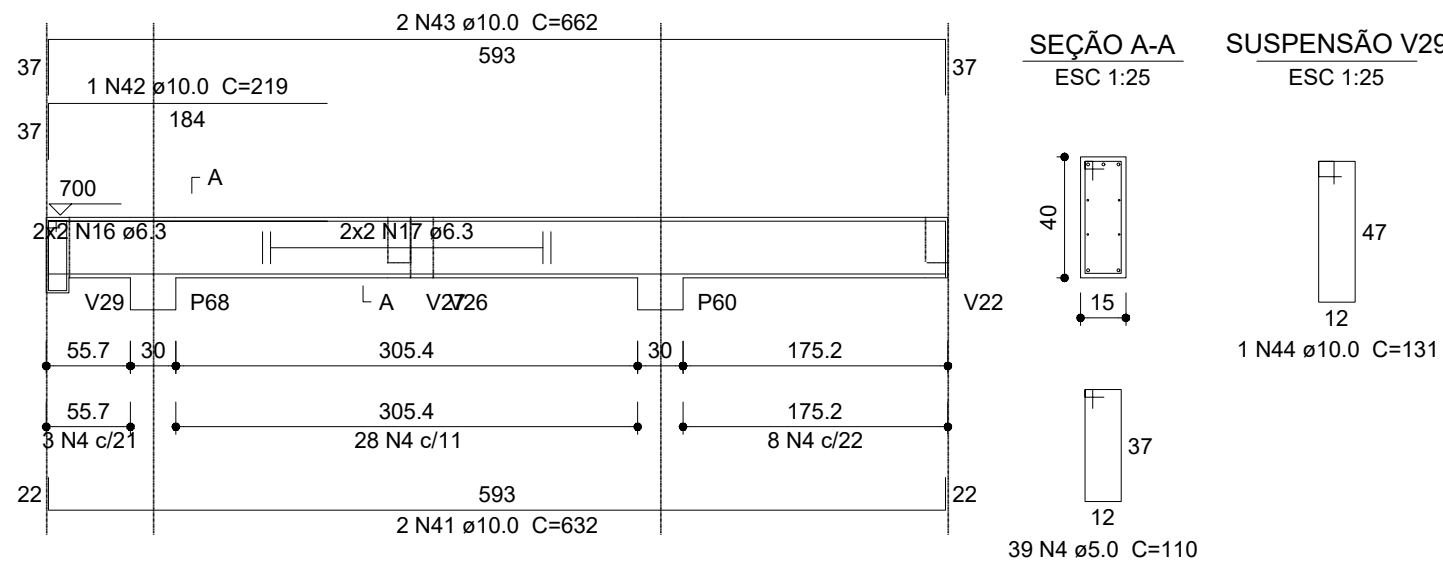
V49

ESC 1:50



V50

ESC 1:50

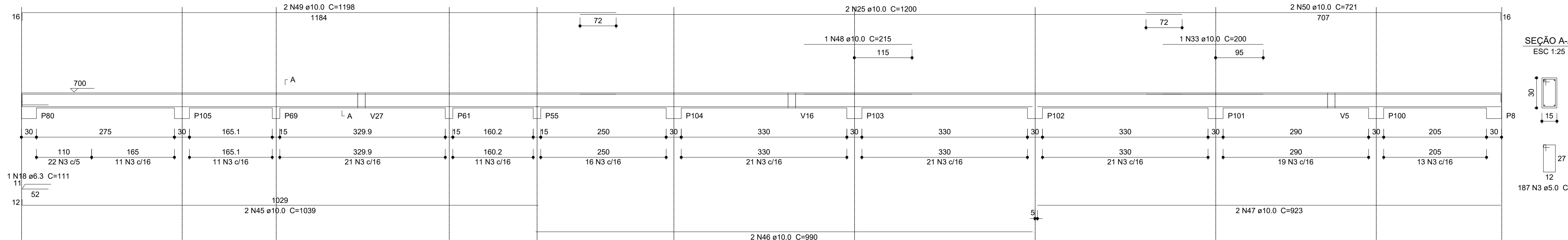


Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	2	229	458
	2	5.0	267	130	34710
	3	5.0	2384	90	214560
	4	5.0	231	110	25410
	5	5.0	2	222	444
	6	5.0	96	27	2592
	7	5.0	30	120	3600
	8	6.3	6	CORR	2142
	9	6.3	6	CORR	2022
	10	6.3	6	CORR	1608
	11	6.3	6	CORR	1626
	12	6.3	4	81	324
	13	6.3	6	CORR	1650
	14	6.3	6	CORR	2262
	15	6.3	4	CORR	2108
	16	6.3	4	CORR	332
	17	6.3	4	CORR	1448
	18	6.3	1	111	111
	19	10.0	4	866	3464
	20	10.0	2	909	1818
	21	10.0	2	1134	2268
	22	10.0	2	1025	2050
	23	10.0	2	349	698
	24	10.0	2	1198	2396
	25	10.0	4	1200	4800
	26	10.0	2	311	622
	27	10.0	2	973	1946
	28	10.0	2	761	1522
	29	10.0	1	267	267
	30	10.0	2	513	1026
	31	10.0	2	1155	2310
	32	10.0	2	292	584
	33	10.0	2	200	400
	34	10.0	1	198	198
	35	10.0	1	223	223
	36	10.0	2	1198	2396
	37	10.0	2	349	698
	38	10.0	2	519	1038
	39	10.0	2	839	1678
	40	10.0	2	1068	2136
	41	10.0	2	632	1264
	42	10.0	1	219	219
	43	10.0	2	662	1324
	44	10.0	1	131	131
	45	10.0	2	1039	2078
	46	10.0	2	990	1980
	47	10.0	2	923	1846
	48	10.0	1	215	215
	49	10.0	2	1198	2396
	50	10.0	2	721	1442
	51	12.5	3	523	1569
	52	12.5	2	853	1706
	53	12.5	2	995	1990
	54	12.5	2	985	1970
	55	12.5	4	125	500
	56	12.5	2	305	610
	57	12.5	4	1200	4800
	58	12.5	2	808	1616
	59	12.5	376	348	130848
	60	12.5	1	595	595
	61	12.5	2	1197	2394
	62	12.5	2	869	1738
	63	12.5	1	220	220
	64	12.5	2	893	1786
	65	12.5	2	280	560
	66	12.5	2	1197	2394
	67	12.5	2	851	1722

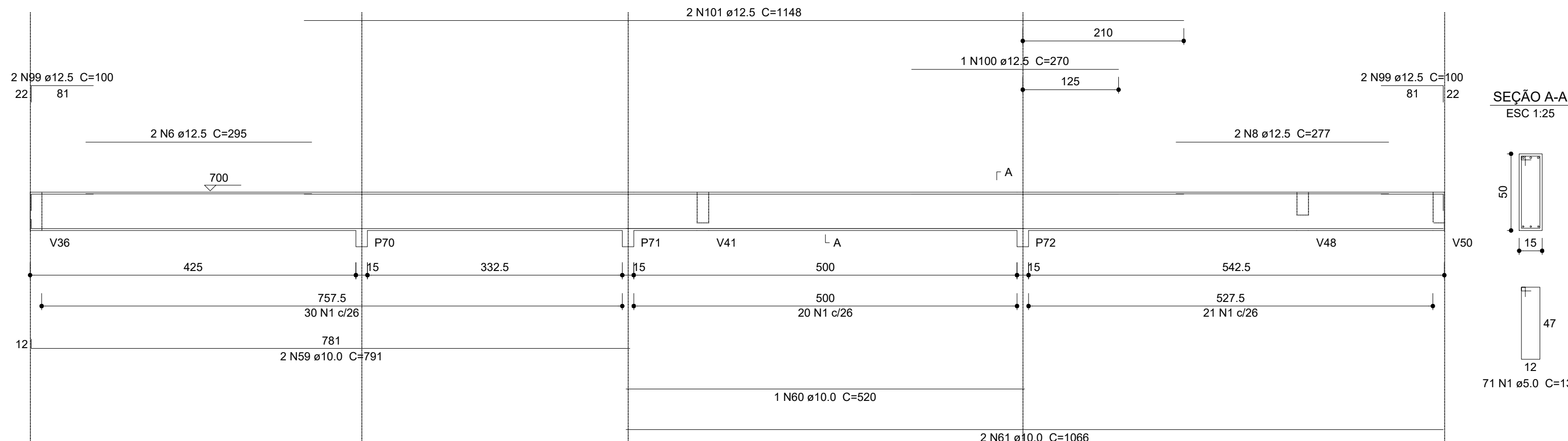
V52

ESC 1:50

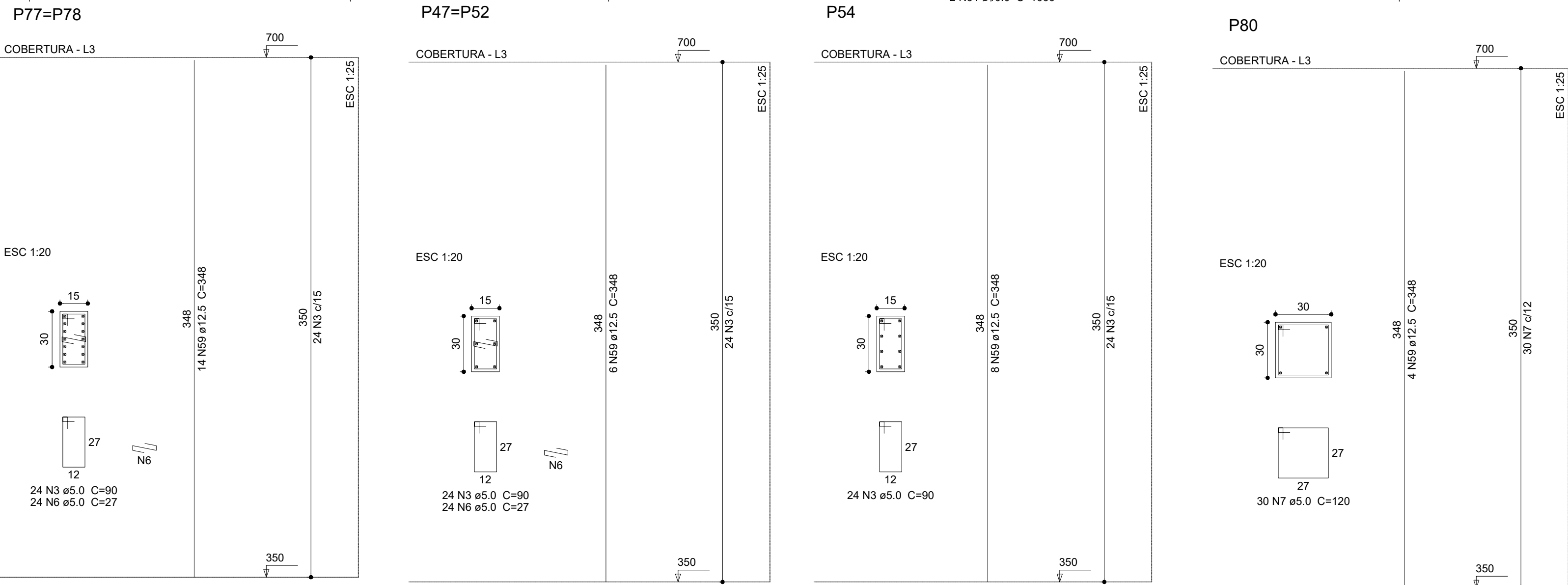
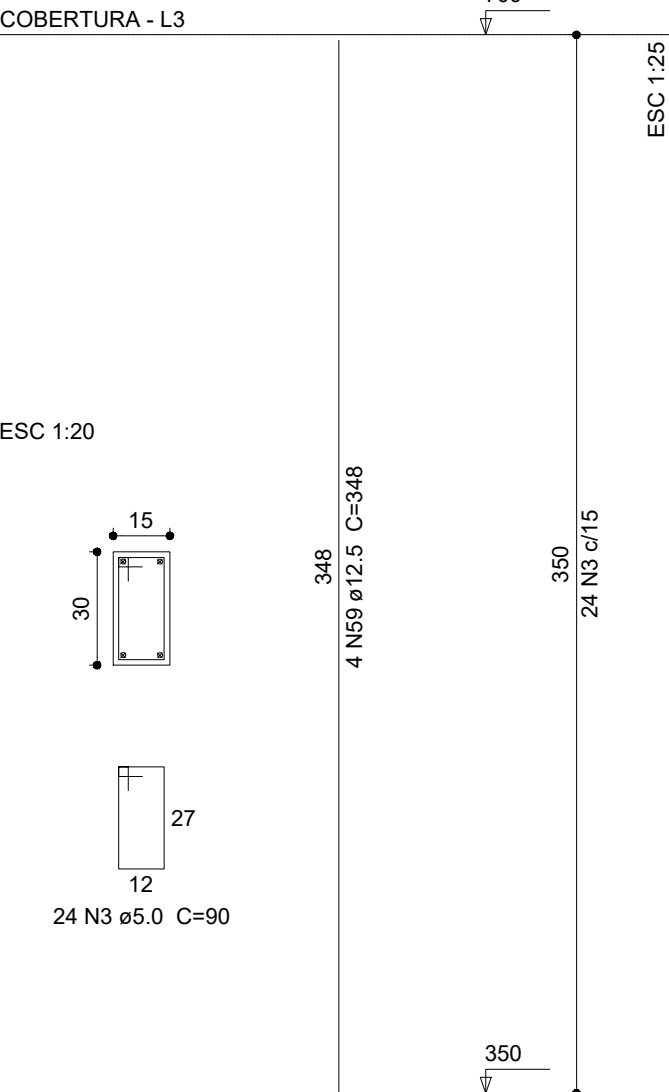


V29

ESC 1:50



P1=P2=P3=P4=P5=P6=P7=P8=P9=P10=P11=P12=P14
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=P26=P27=P28=P29=P30=P31=P32=P34=P35
=P36=P37=P38=P39=P40=P43=P44=P45=P46
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=P85=P87=P88=P89=P90=P91=P92=P98=P99
=P100=P101=P102=P103=P104=P105



Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	156.4	42.1
	10.0	474.8	322
	12.5	1570.2	1663.9
CA60	5.0	2817.8	477.7
PESO TOTAL (kg)			
CA50	2027.9		
CA60	477.7		

Volume de concreto (C-25) = 24.1 m³
Área de forma = 436.75 m²

Guzzo e Guzzo engenharia

Obra: Unidade Básica de Saúde Paim Filho

Prancha 15

Escala indicada

Ricardo Picinin
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