

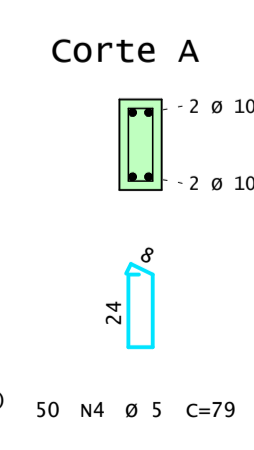
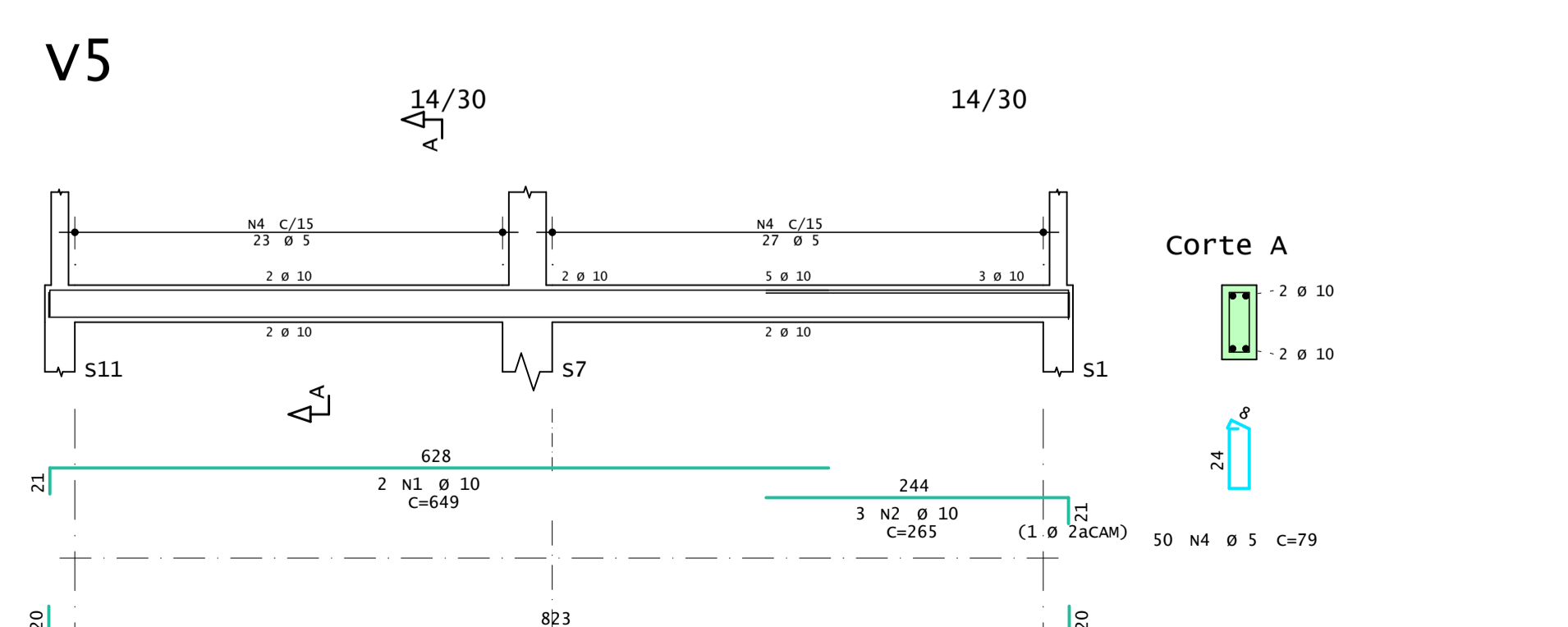
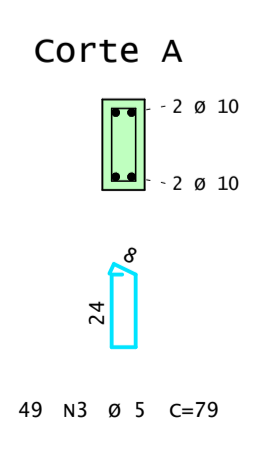
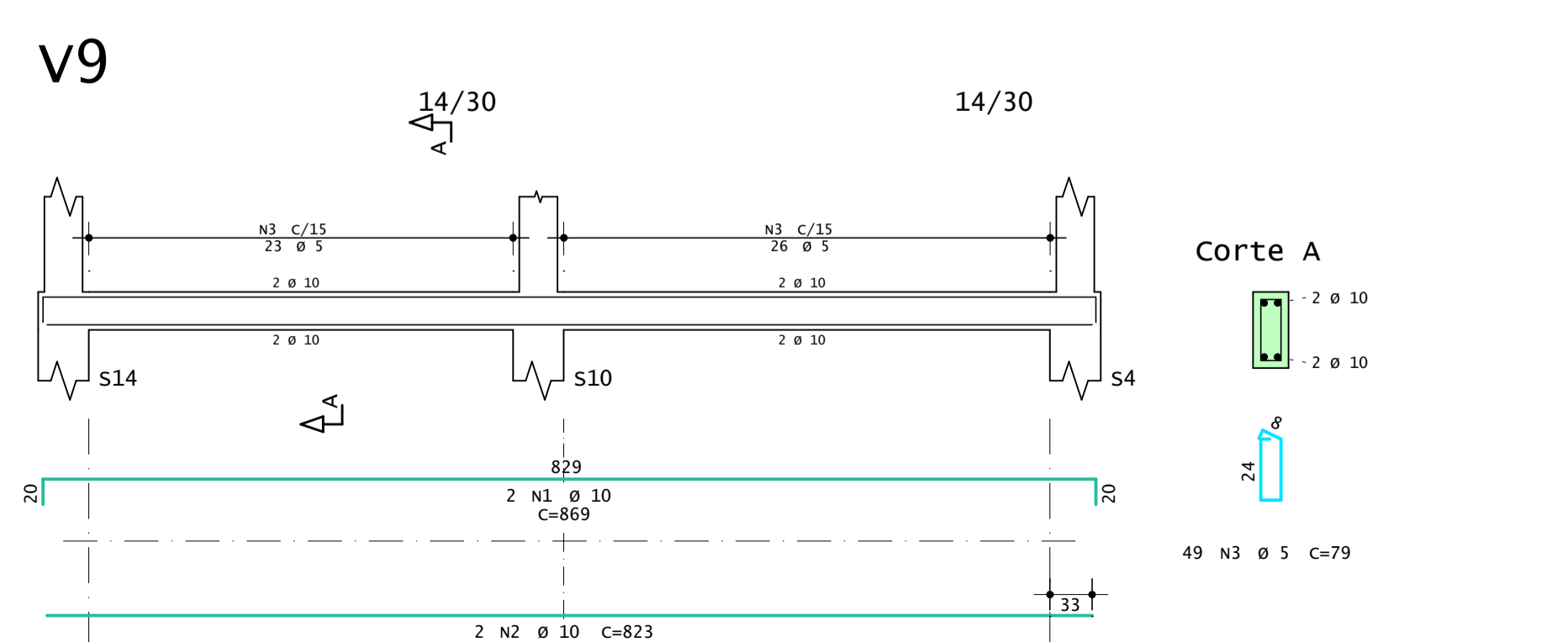
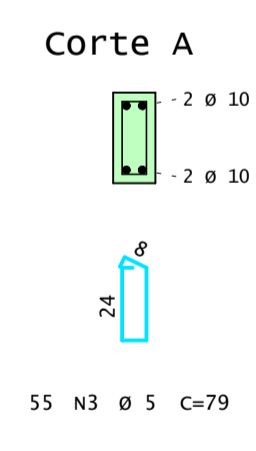
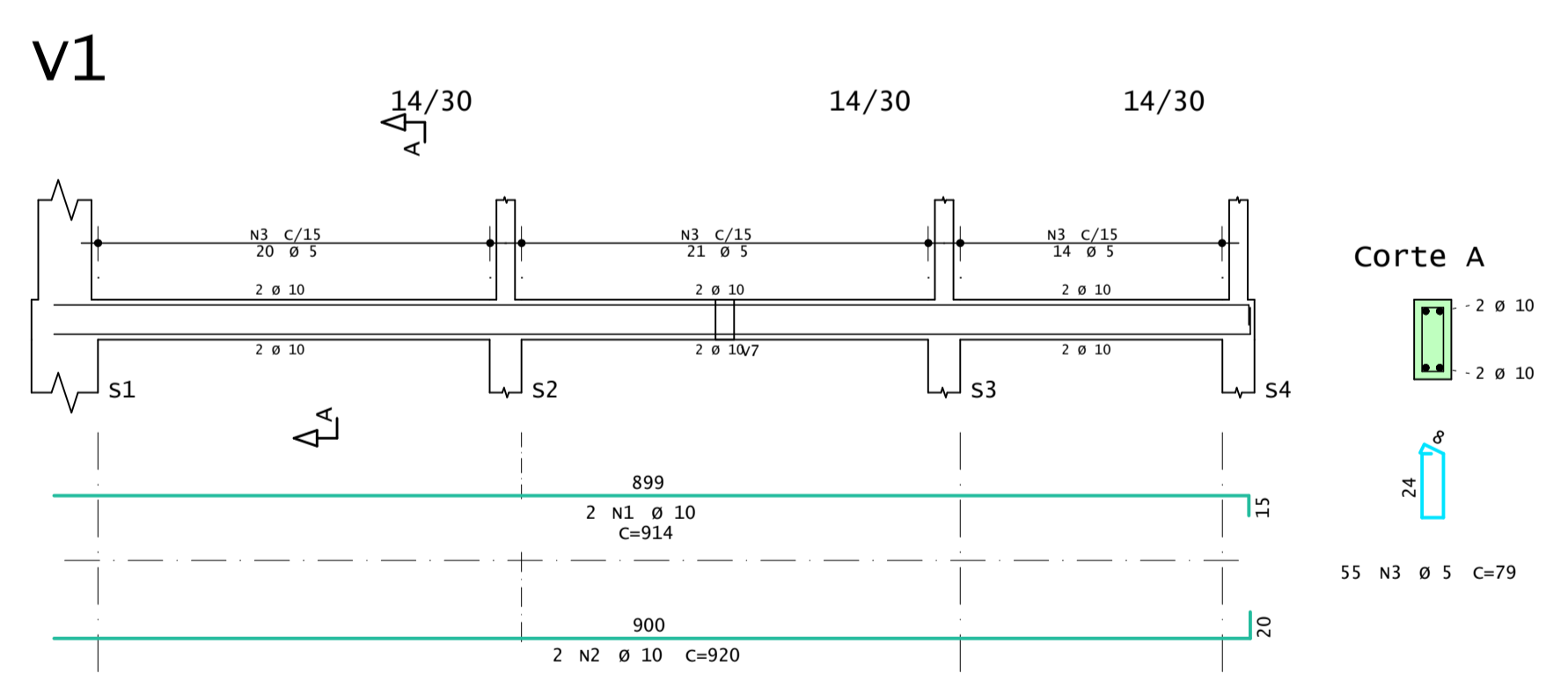
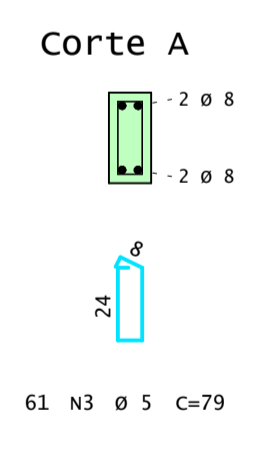
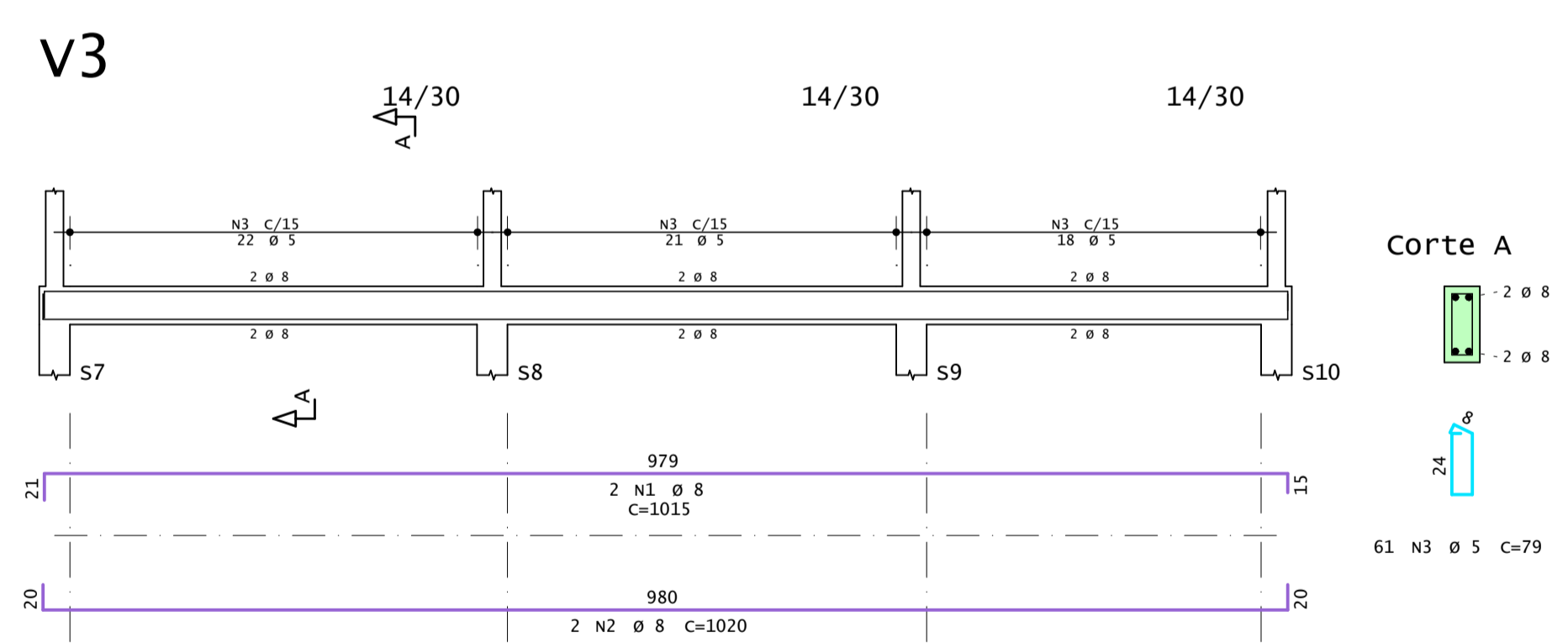
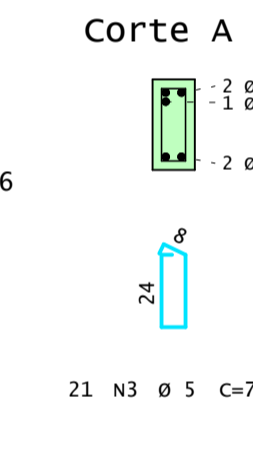
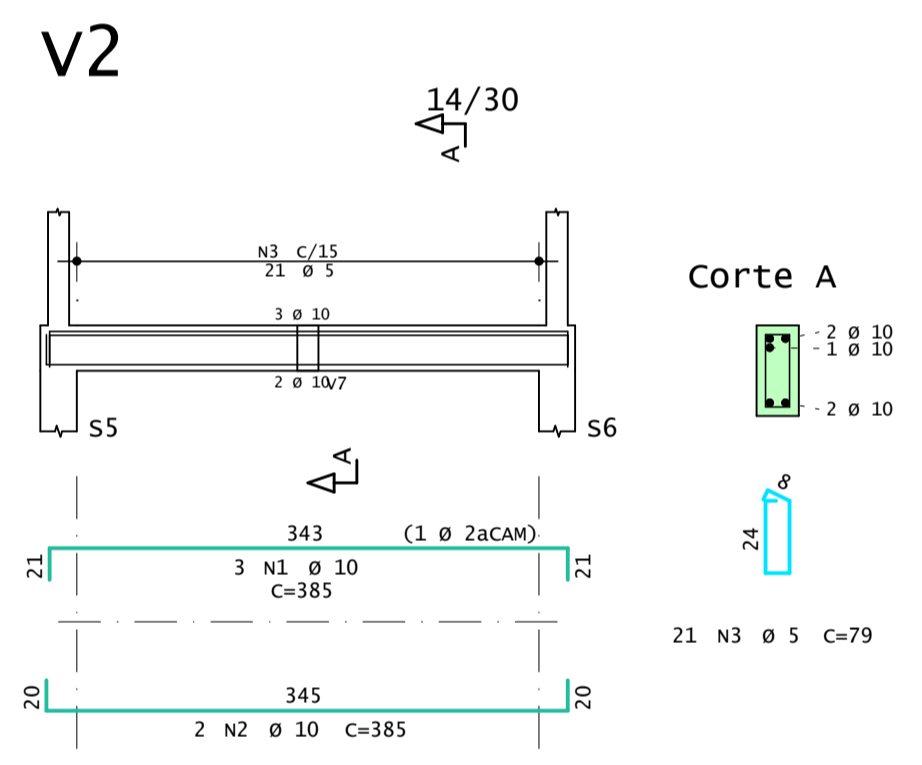
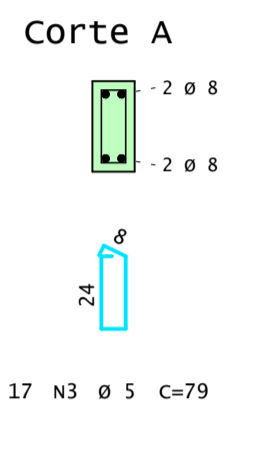
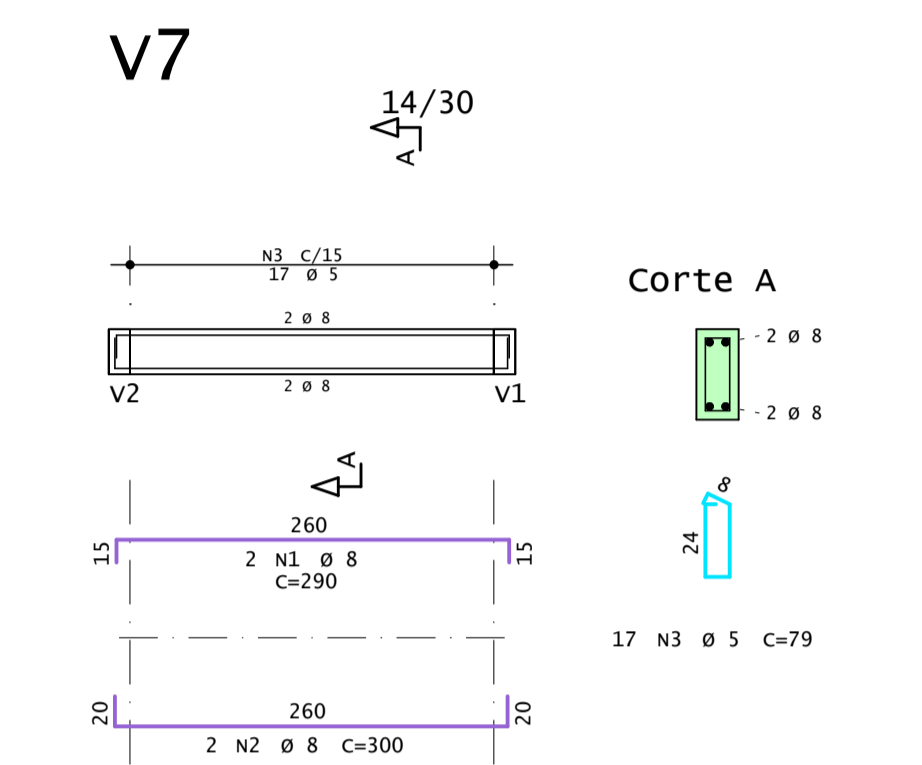
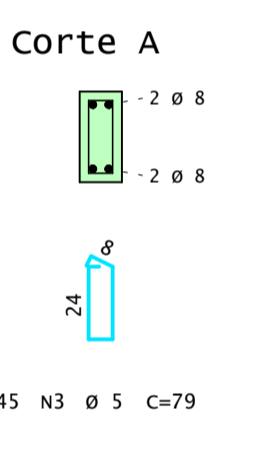
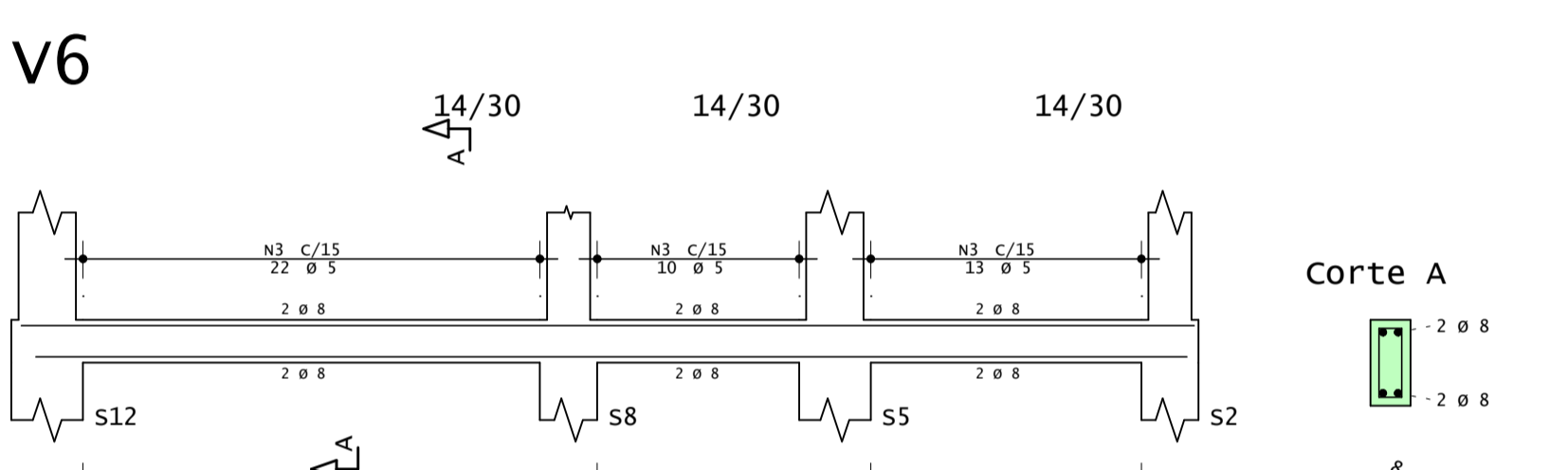
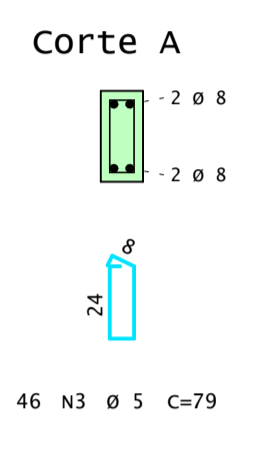
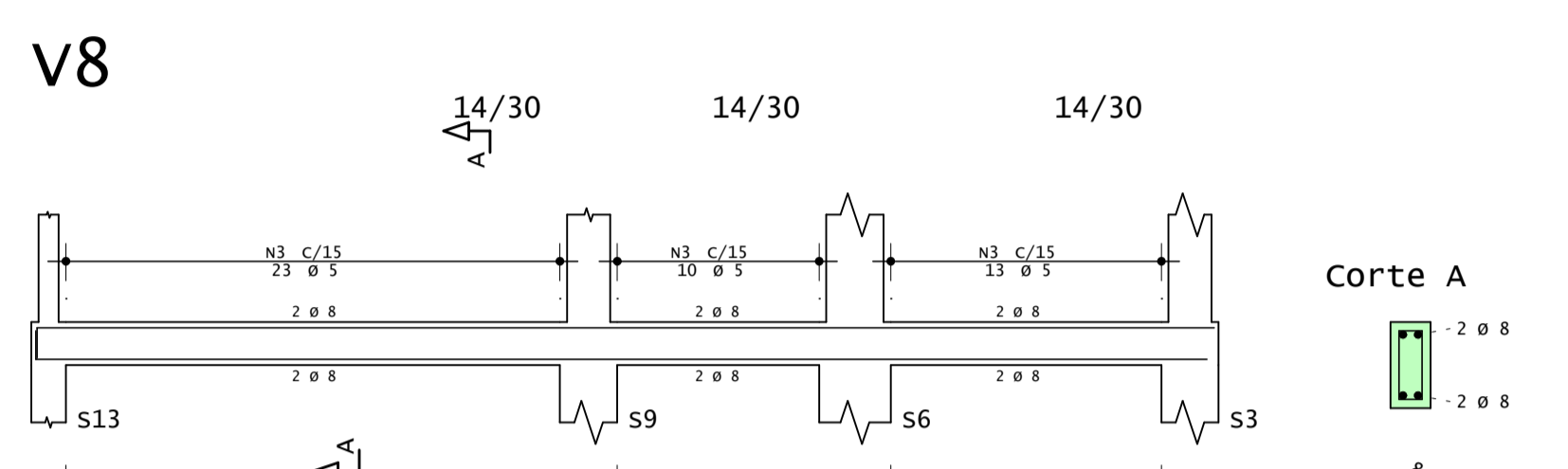
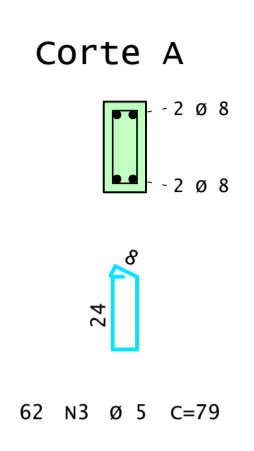
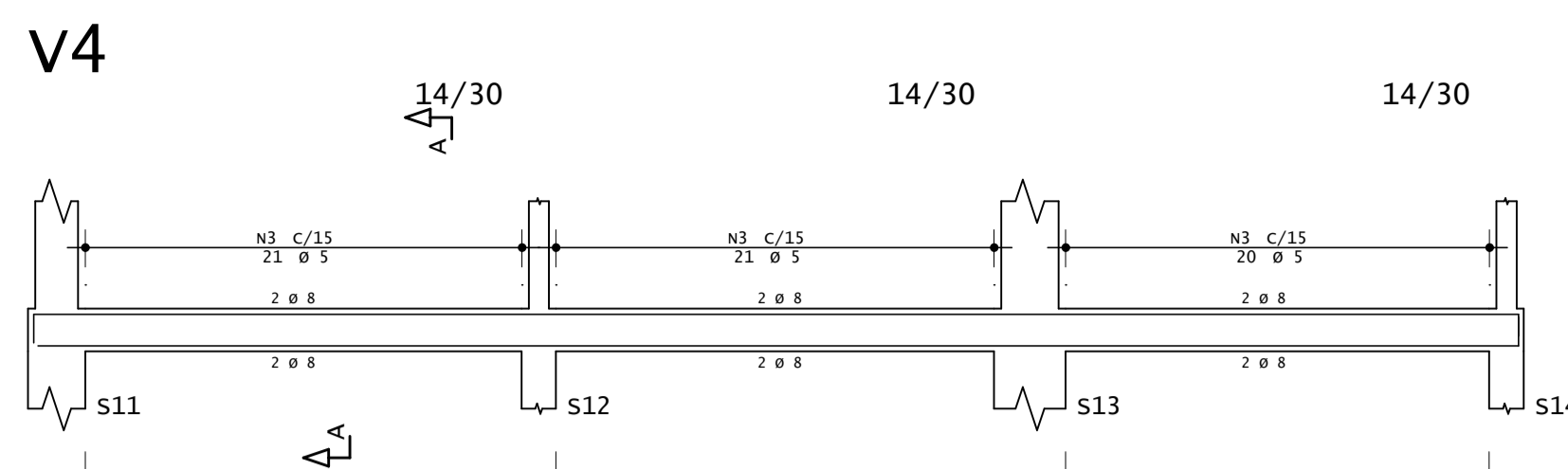
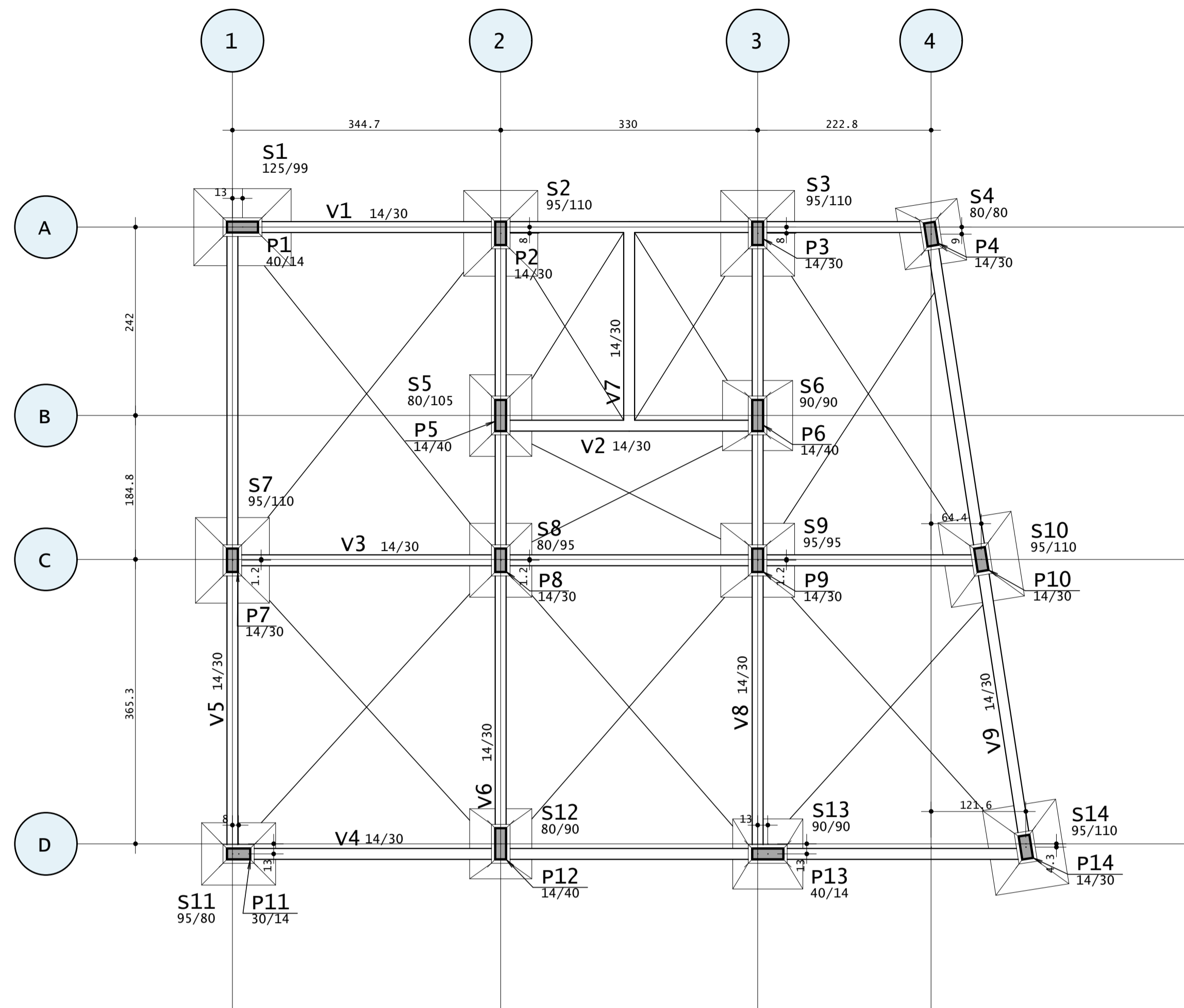
AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
		mm		cm	cm
S1	50A	1	10	147	1176
	50A	2	10	119	1190
S2	50A	1	10	115	1035
	50A	2	10	132	924
S3	50A	1	10	117	1053
	50A	2	10	130	910
S4	50A	1	10	102	714
	50A	2	10	100	700
S5	50A	1	10	100	800
	50A	2	10	127	889
S6	50A	1	10	112	896
	50A	2	10	110	880
S7	50A	1	10	115	1035
	50A	2	10	132	924
S8	50A	1	10	100	800
	50A	2	10	117	819
S9	50A	1	10	117	936
	50A	2	10	135	920
S10	50A	1	10	115	1035
	50A	2	10	132	924
S11	50A	1	10	117	819
	50A	2	10	100	800
S12	50A	1	10	100	800
	50A	2	10	112	880
S13	50A	1	10	110	880
	50A	2	10	132	896
S14	50A	1	10	115	1035
	50A	2	10	132	924

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
		m	kgF
50A	10	255	157
Peso Total 50A =			157 kgF

CONCRETO fck = 25 MPa ECS = Ver na Planta	OBRA N.º 0001
CLIENTE	REV. N.º 008
OBRA SAPATAS - VESTIÁRIO CLUBE	TÍTULO
S1 / S2 / S3 / S4 / S5 / S6 / S7 / S8 / S9 / S10 / S11 / S12 / S13 / S14	
DATA 21/01/2026	ESCALA 1:25
DESENHO VES-FUN-FUN-008-R00	COORD.
ENG.º	

Planta Fundacao

Escala 1:50



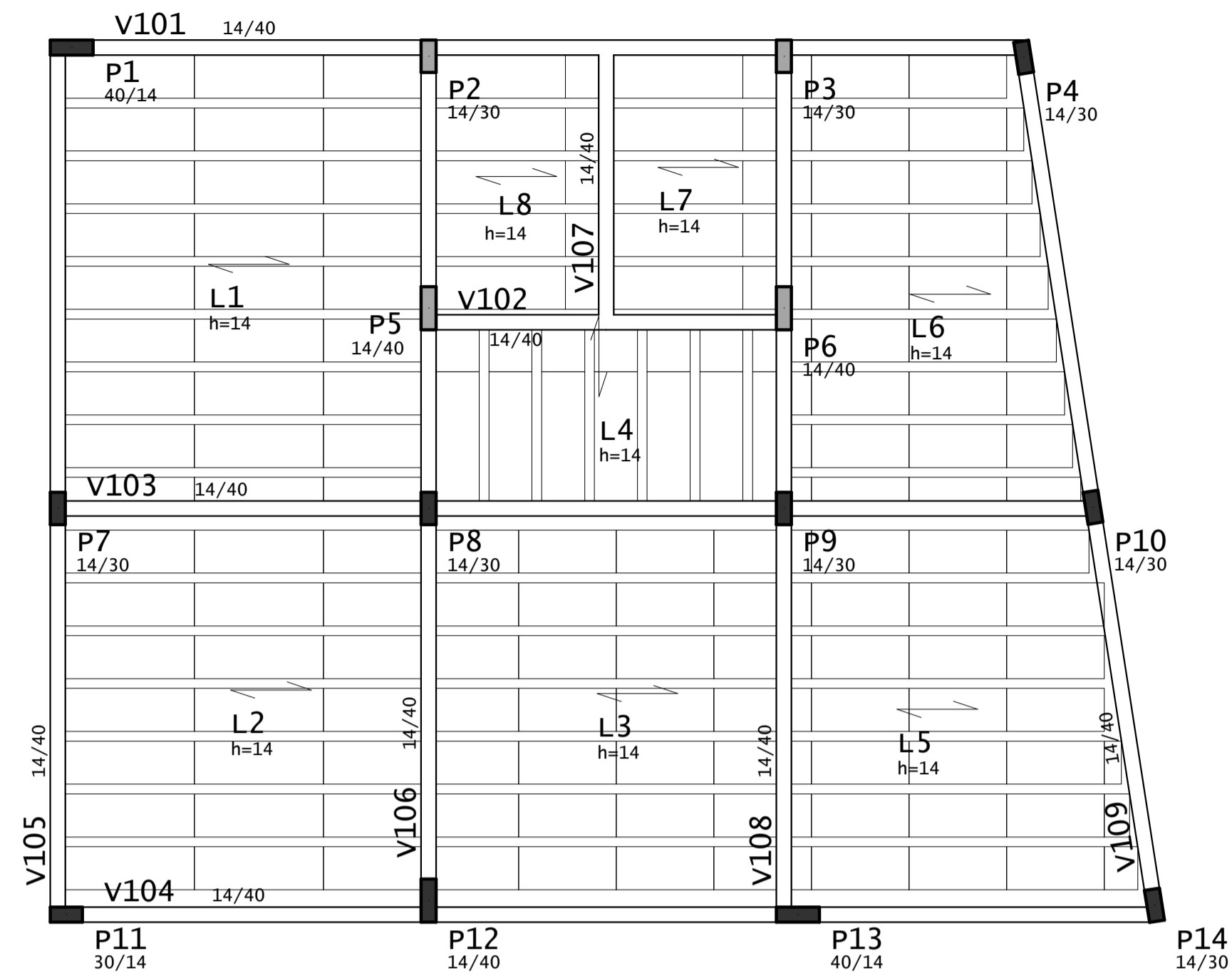
MEMBRO	AÇO	POS	BIT	QUANT	COMPRIMENTO	
					UNIT	TOTAL
			mm		cm	cm
V1	50A	1	10	2	914	1828
	50A	2	10	2	920	1840
	60A	3	5	55	79	4345
V2	50A	1	10	3	385	1155
	50A	2	10	2	385	770
	60A	3	5	21	79	1659
V3	50A	1	8	2	1015	2030
	50A	2	8	2	1020	2040
	60A	3	5	61	79	4819
V4	50A	1	8	2	1072	2144
	50A	2	8	2	1054	2108
	60A	3	5	62	79	4898
V5	50A	1	10	2	649	1298
	50A	2	10	2	265	795
	60A	3	5	50	863	1726
V6	50A	1	8	2	819	1638
	50A	2	8	2	804	1608
	60A	3	5	45	79	3555
V7	50A	1	8	2	290	580
	50A	2	8	2	300	600
	60A	3	5	17	79	1343
V8	50A	1	8	2	843	1686
	50A	2	8	2	838	1676
	60A	3	5	46	79	3634
V9	50A	1	10	2	869	1738
	50A	2	10	2	823	1646
	60A	3	5	49	79	3871

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	321	49
50A	8	161	64
50A	10	128	79
Peso Total 60A =			49 kgf
Peso Total 50A =			143 kgf

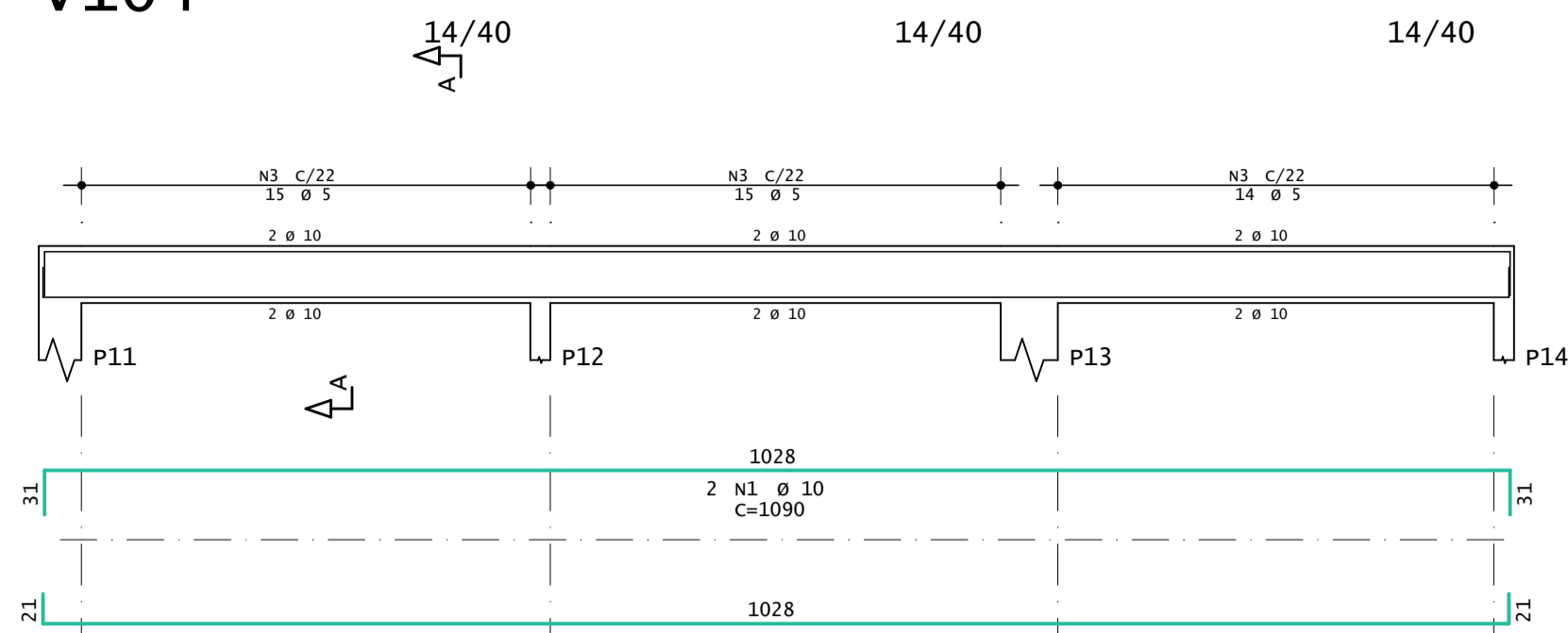
CONCRETO		OBRA N.º	
fck = 25 MPA		0001	
ECS = 24150 MPA		DES. N.º	
CLIENTE		002	
OBRA		BALDRAMES - VESTIÁRIO CLUBE	
TÍTULO		Planta Fundacao / V1 / V2 / V3 / V4 / V5 / V6 / V7 / V8 / V9	
DATA		REV. N.º	
21/01/2026		00	
ESCALA		COORD.	
1:50		ENG.º	
DESENHO		VES-FUN-VIG-002-R00	

Planta Cobertura

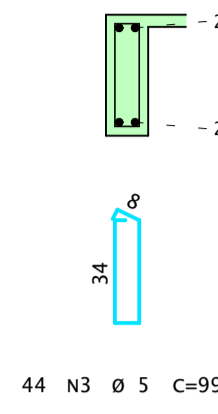
Escala 1:50



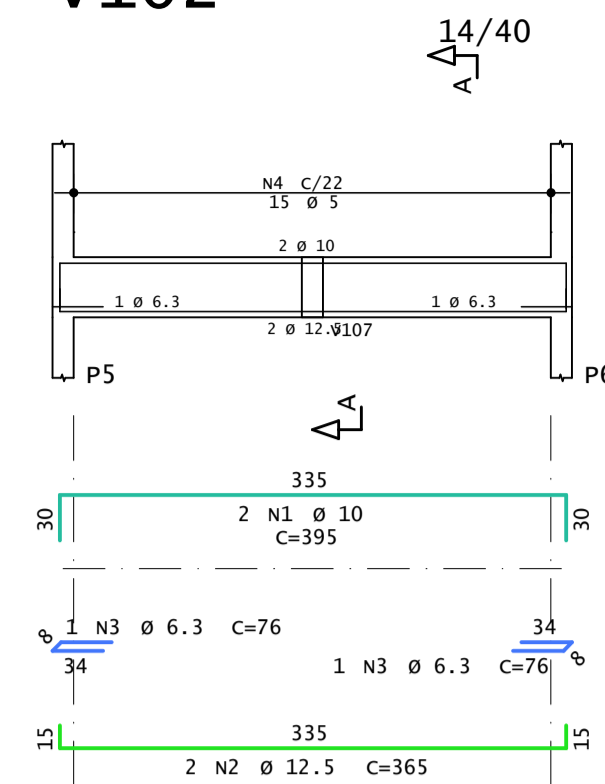
V104



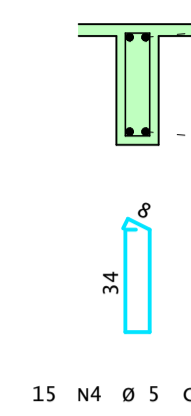
Corte A



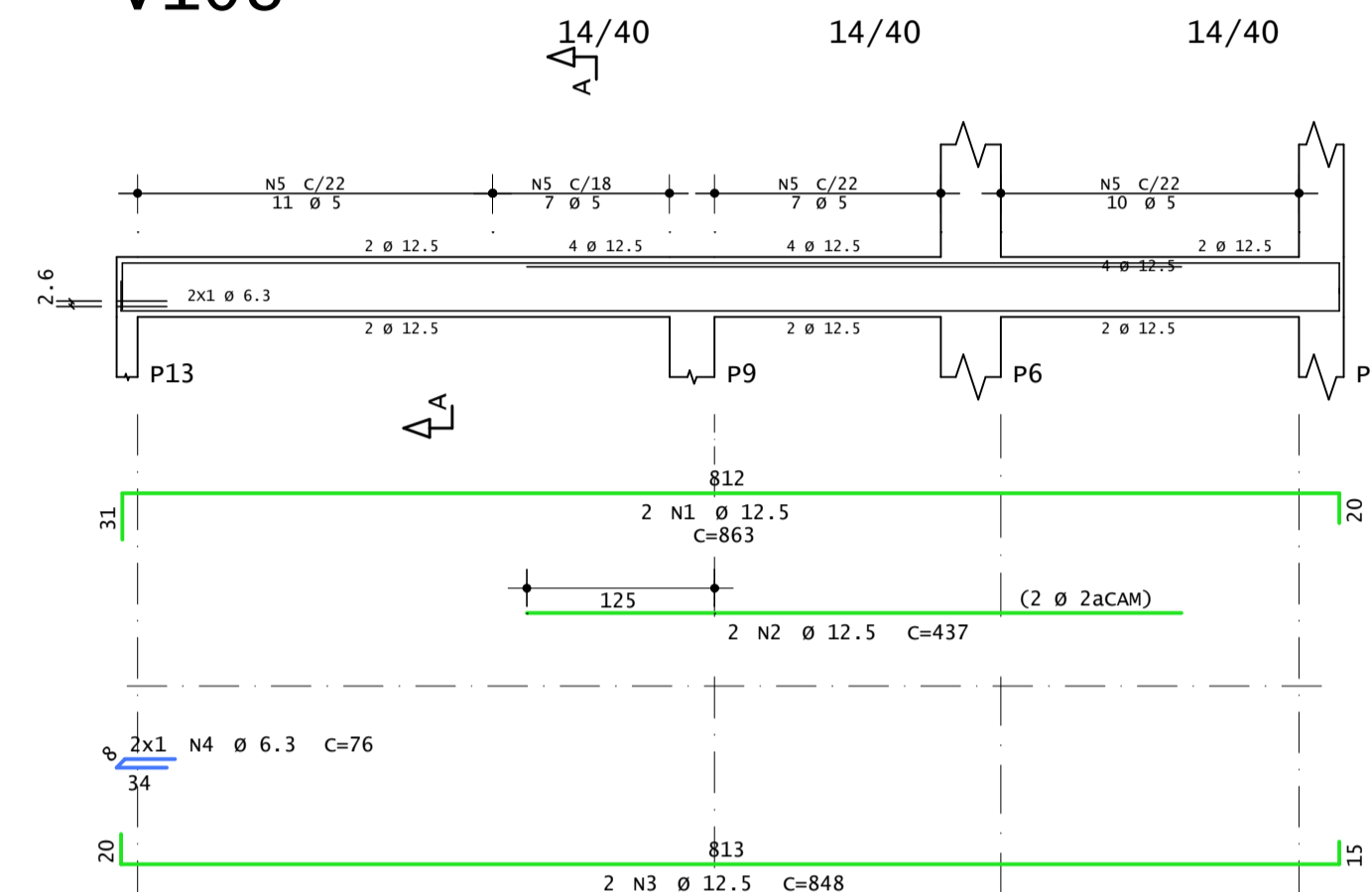
V102



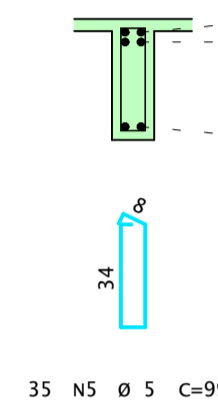
Corte A



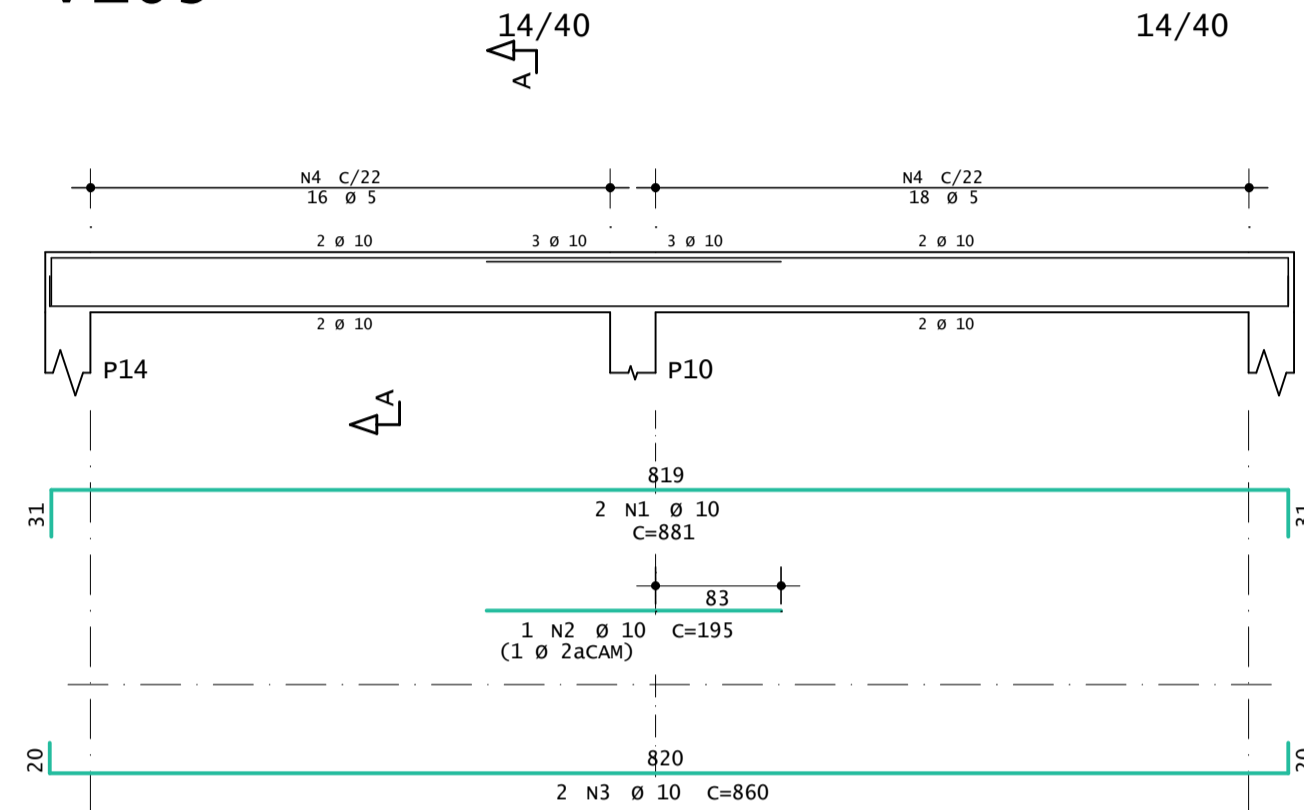
V108



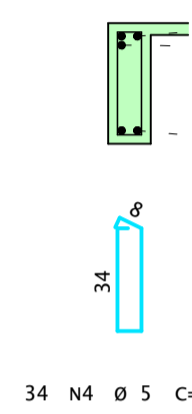
Corte A



V109



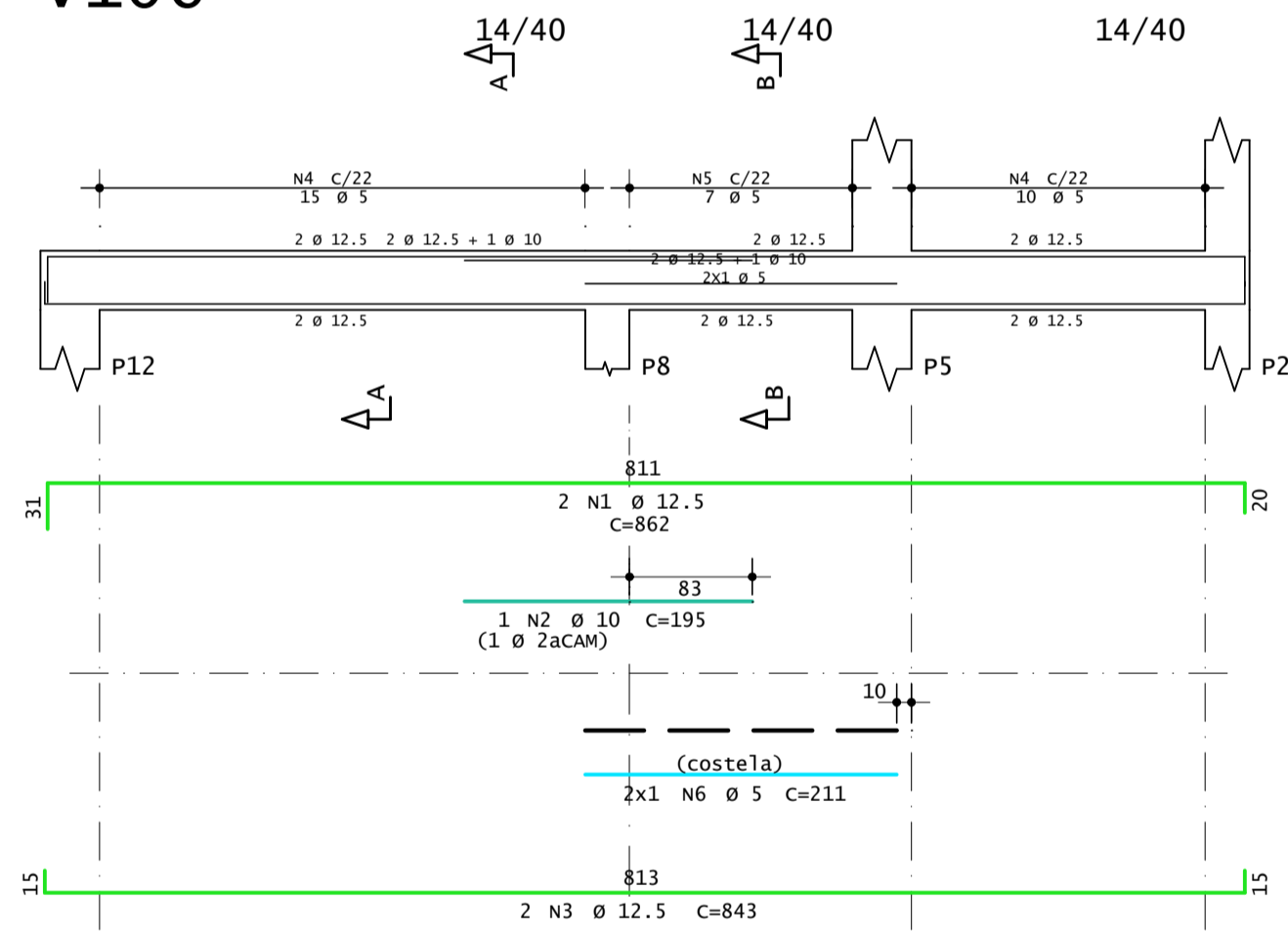
Corte A



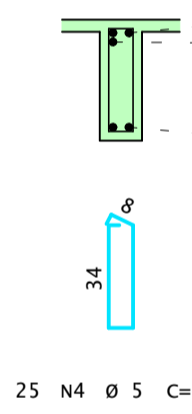
AÇO	POS	BIT	QUANT	COMPRIMENTO		
				UNIT	TOTAL	
		mm		cm	cm	
V101	50A	1	10	2	965	1930
	50A	2	10	2	920	1840
	60A	3	5	39	99	3861
V102	50A	1	10	2	395	790
	50A	2	12.5	2	365	730
	50A	3	6.3	2	76	152
	60A	4	5	15	99	1485
V103	50A	1	10	2	1031	2062
	50A	2	10	2	1000	2000
	60A	3	5	44	99	4356
V104	50A	1	10	2	1090	2180
	50A	2	10	2	1070	2140
	60A	3	5	44	99	4356
V105	50A	1	10	2	874	1748
	50A	2	10	2	195	390
	50A	3	10	2	843	1686
	50A	4	6.3	1	76	76
	60A	5	5	17	107	1819
	60A	6	5	19	99	1881
	60A	7	5	2	403	806
V106	50A	1	12.5	2	862	1724
	50A	2	10	1	195	195
	50A	3	12.5	2	843	1686
	60A	4	5	25	99	2475
	60A	5	5	7	107	749
	60A	6	5	2	211	422
V107	50A	1	10	4	290	1160
	50A	2	6.3	2	76	152
	60A	3	5	11	99	1089
V108	50A	1	12.5	2	863	1726
	50A	2	12.5	2	457	874
	50A	3	12.5	2	848	1696
	50A	4	6.3	2	76	152
	60A	5	5	35	99	3465
V109	50A	1	10	2	881	1762
	50A	2	10	1	195	195
	50A	3	10	2	860	1720
	60A	4	5	34	99	3366

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	301	46
50A	6,3	5	1
50A	10	218	134
50A	12,5	84	81
Peso Total	60A =		46 kgf
Peso Total	50A =		217 kgf

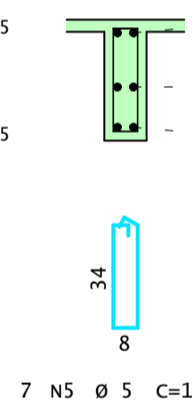
V106



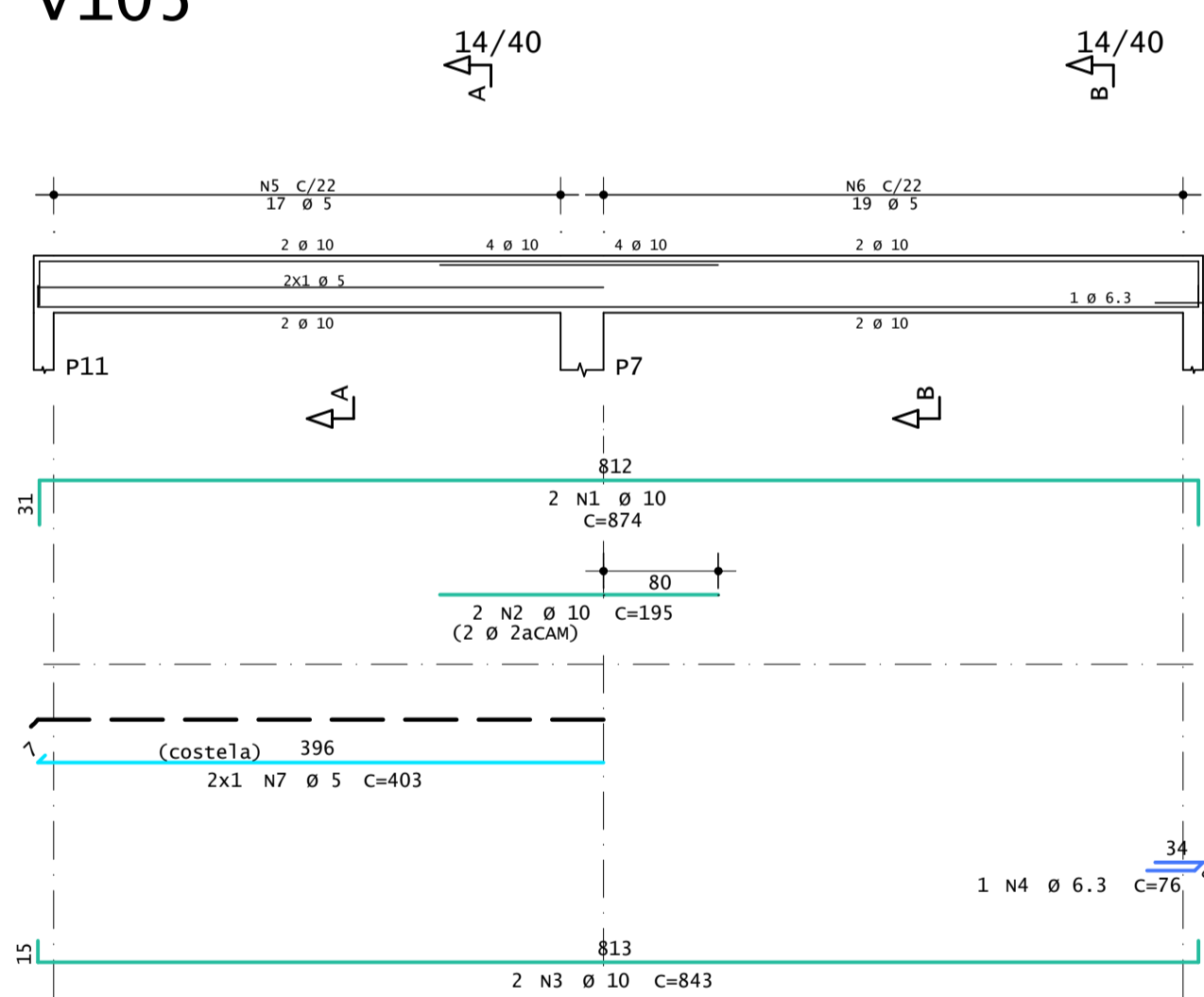
Corte A



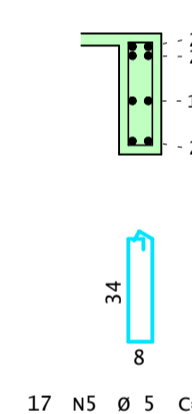
Corte B



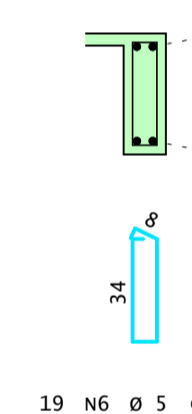
V105



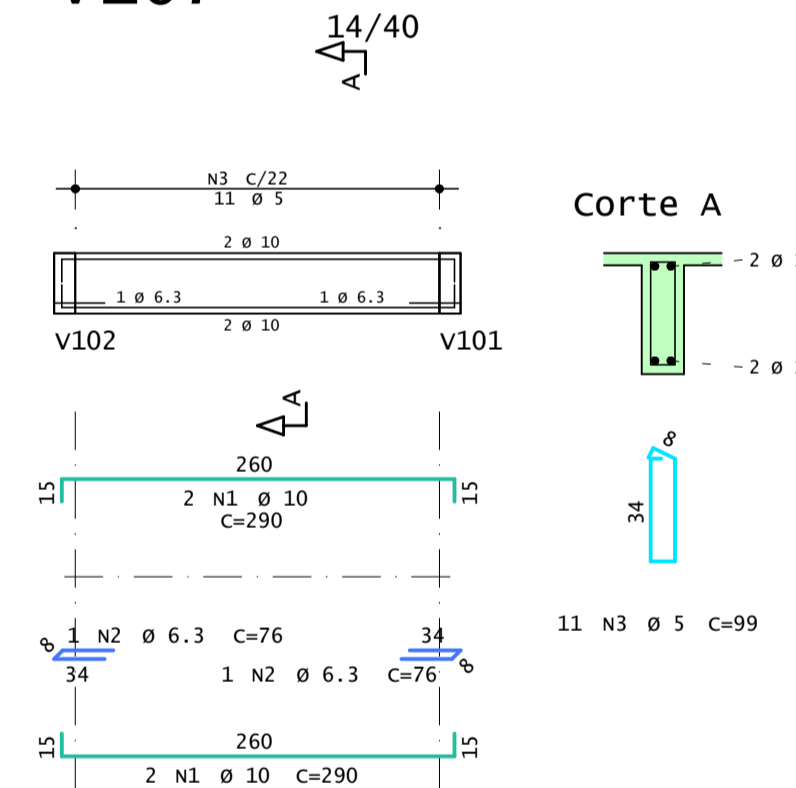
Corte A



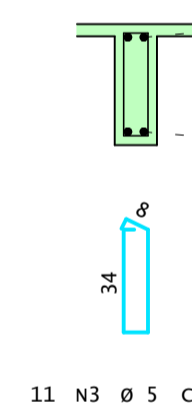
Corte B



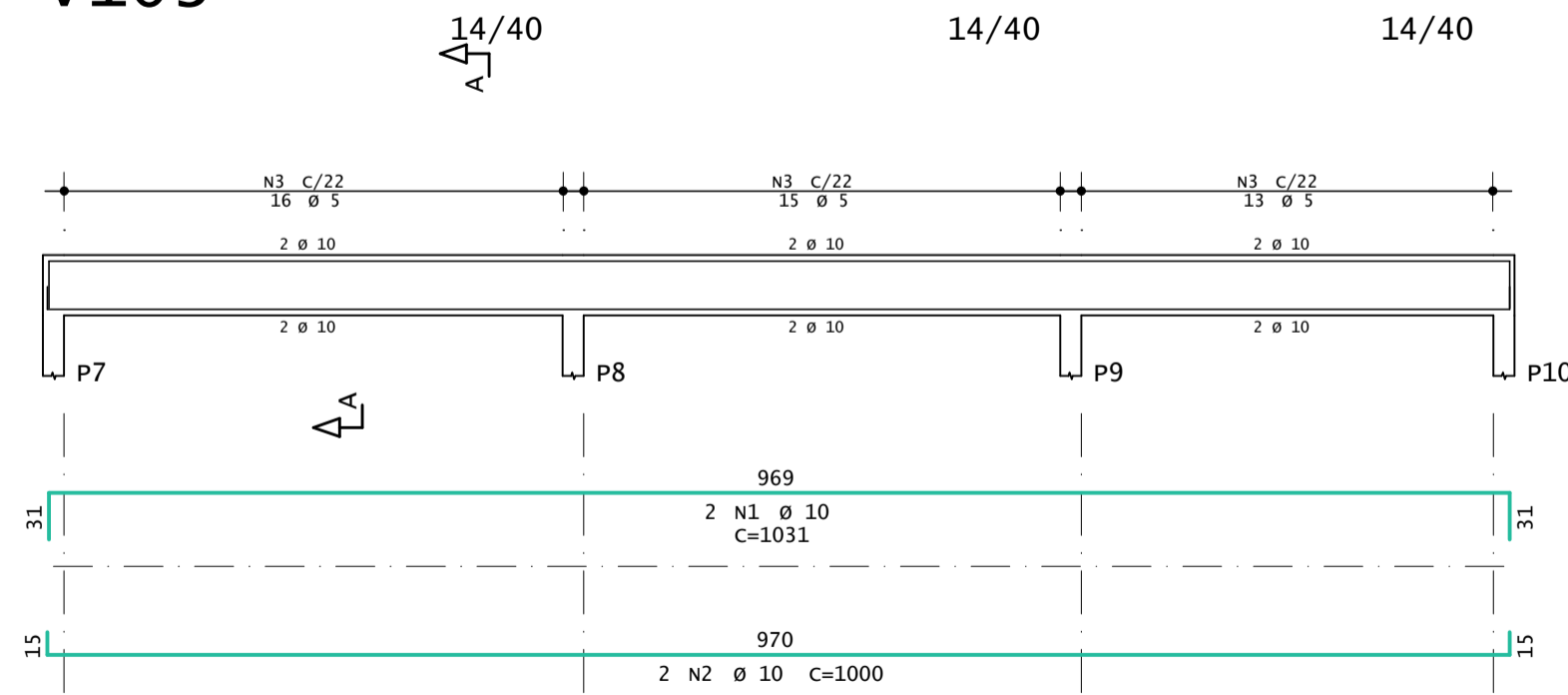
V107



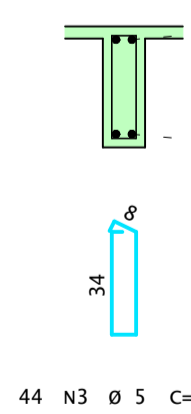
Corte A



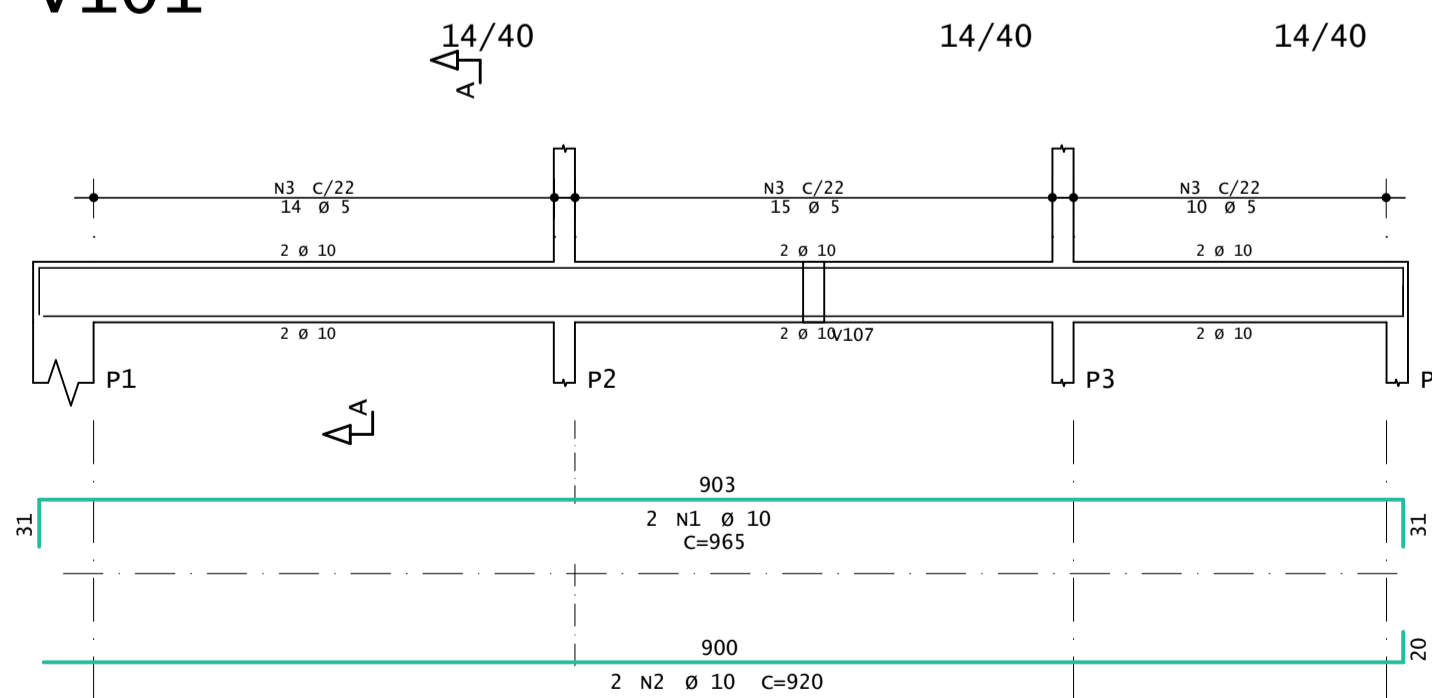
V103



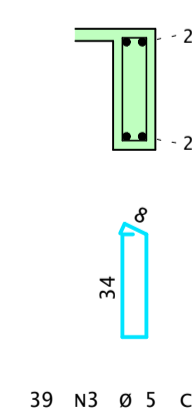
Corte A



V101



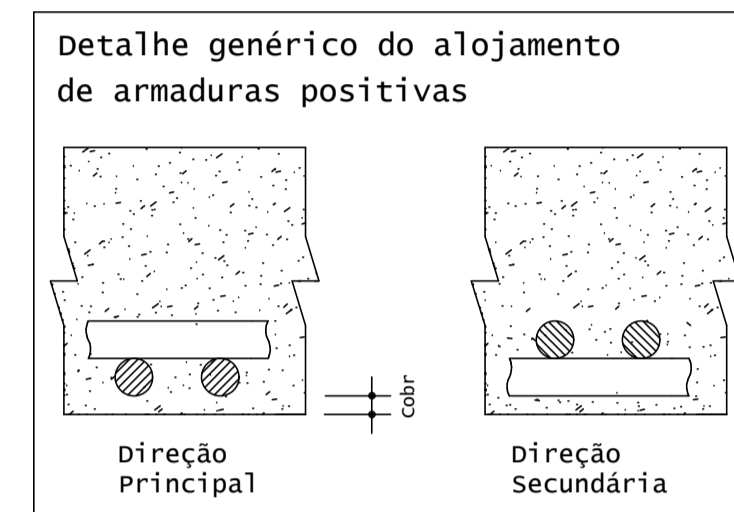
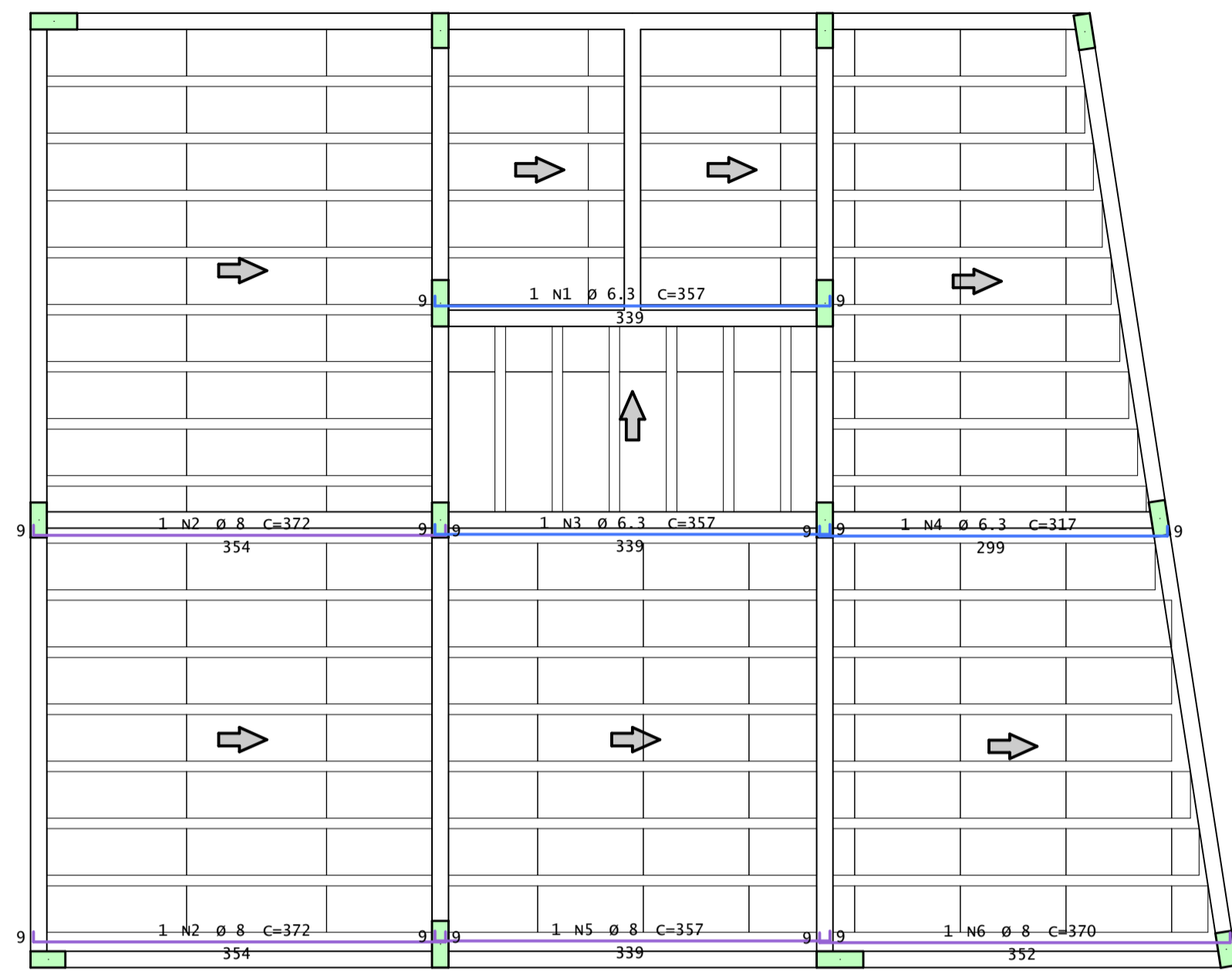
Corte A



CONCRETO		OBR. N.º	
fck = 25 MPA		0001	
ECS = 24150 MPA		DES. N.º	
CLIENTE		003	
OBR. N.º		REV. N.º	
0001		00	
TITULO		ENG.º	
COBERTURA - VESTIARIO CLUBE			
Planta Cobertura / v101 / v102 / v103 / v104 / v105 / v106 / v107 / v108 / v109			
DATA	ESCALA	DESENHO	COORD.
21/01/2026	1:50	VES-COB-VIG-003-R00	

Cobertura - Armadura positiva principal

1x

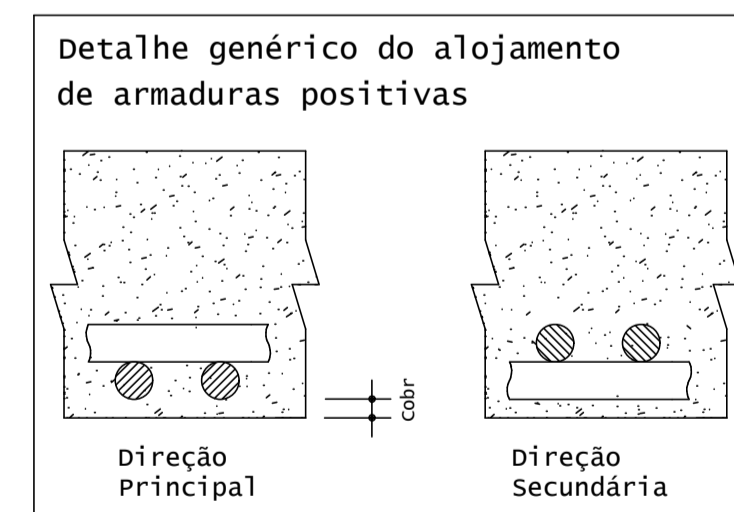
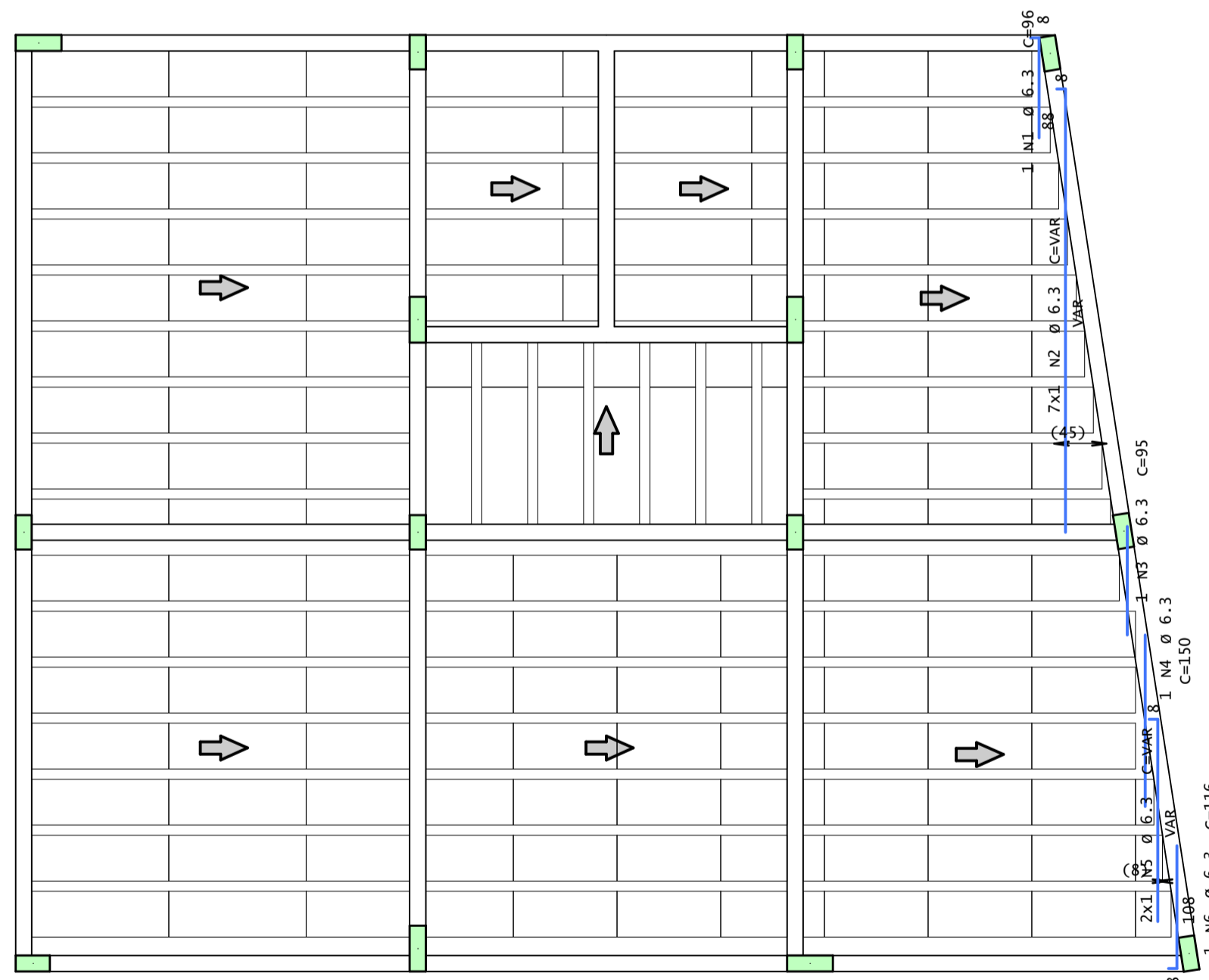


AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
cobertura - Armadura positiva principal					
50A	1	6.3	1	357	357
50A	2	8	2	372	744
50A	3	6.3	1	357	357
50A	4	6.3	1	317	317
50A	5	8	1	357	357
50A	6	8	1	370	370
cobertura - Armadura positiva secundaria					
50A	1	6.3	1	96	96
50A	2	6.3	7	--VAR--	2072
50A	3	6.3	1	95	95
50A	4	6.3	1	150	150
50A	5	6.3	2	--VAR--	336
50A	6	6.3	1	116	116

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
		m	kgf
50A	6.3	39	10
50A	8	15	6
Peso Total 50A =			15 kgf

Cobertura - Armadura positiva secundaria

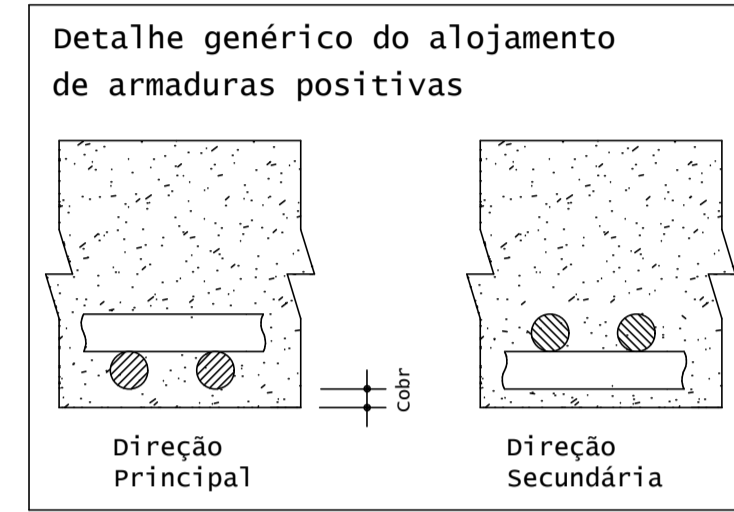
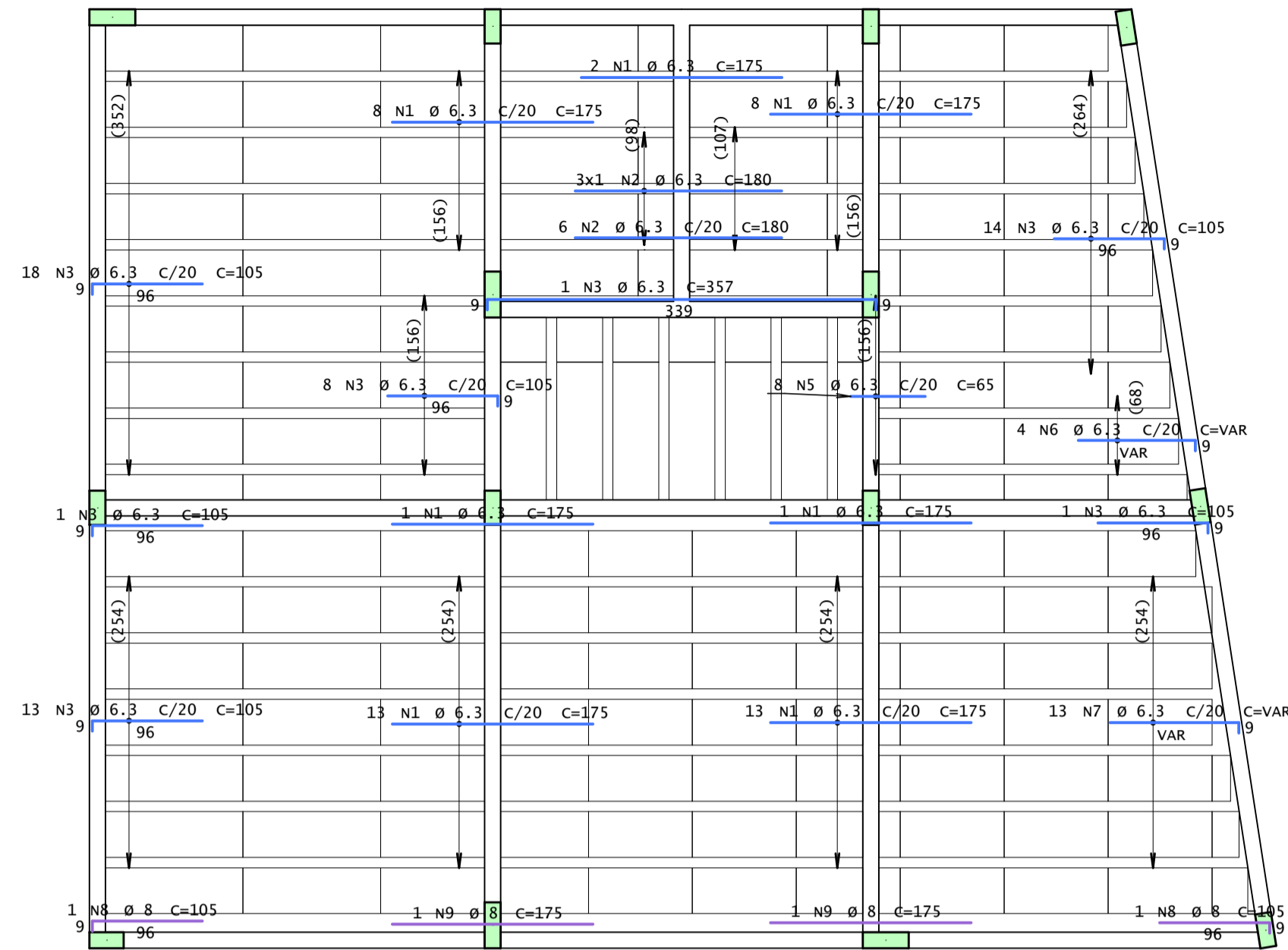
1x



CONCRETO		OBRA N.º	
fck = 25 MPA		0001	
ECS = 24150 MPA		DES. N.º	
CLIENTE		006	
OBRA		LAJES - VESTIÁRIO CLUBE	
TÍTULO		Cobertura - Armadura positiva principal / Cobertura - Armadura positiva secundaria	
DATA		REV. N.º	
21/01/2026		00	
ESCALA	DESENHO	COORD.	ENG.º
1:50	VES-COB-LAJ-006-R00		

Cobertura - Armadura negativa principal

1X



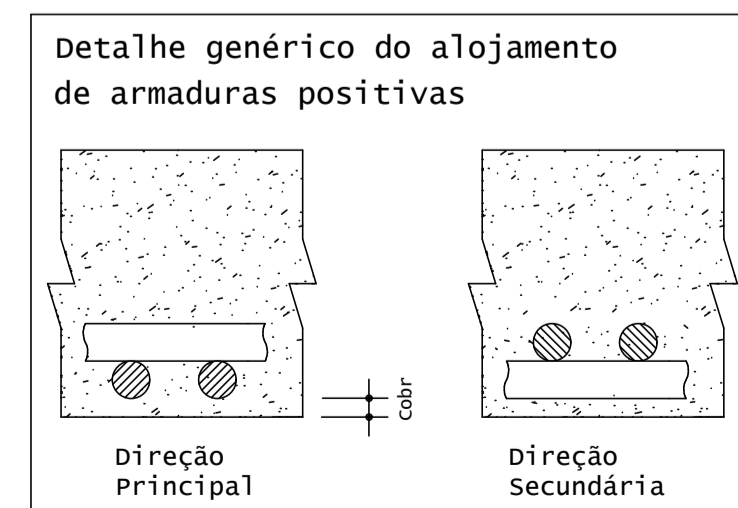
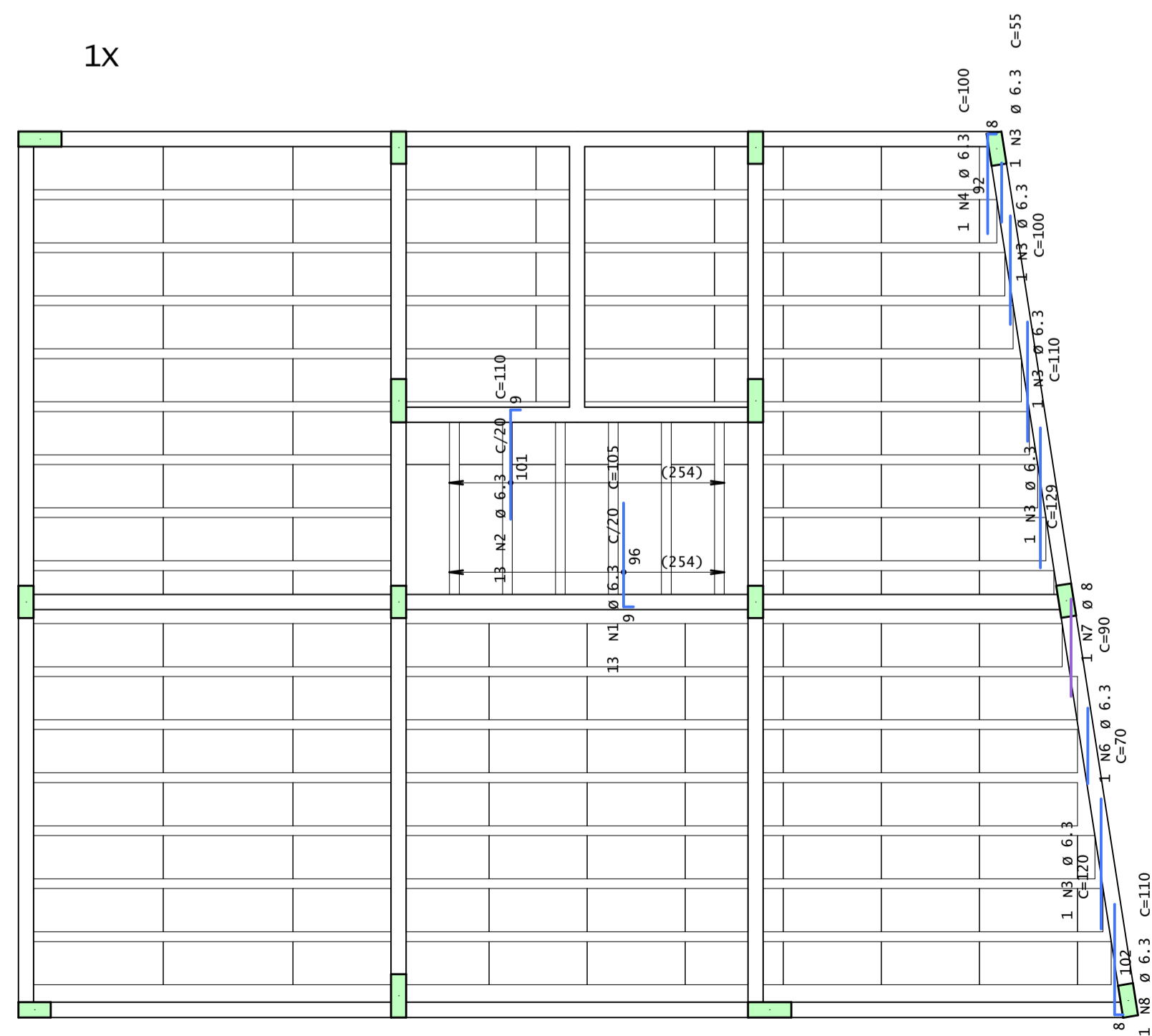
AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
mm					
cm					
Cobertura - Armadura negativa principal					
50A	1	6.3	46	175	8050
50A	2	6.3	9	180	1620
50A	3	6.3	56	105	5880
50A	5	6.3	8	65	520
50A	6	6.3	4	--VAR-	440
50A	7	6.3	13	--VAR-	1573
50A	8	8	2	105	210
50A	9	8	2	175	350
50A	10	5	15	1140	17100
Cobertura - Armadura negativa secundaria					
50A	1	6.3	13	105	1365
50A	2	6.3	13	110	1430
50A	3	6.3	5	120	600
50A	4	6.3	1	100	100
50A	6	6.3	1	70	70
50A	7	8	1	90	90
50A	8	6.3	1	110	110

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
		mm	m
			kgf
60A	5	171	26
50A	6.3	218	53
50A	8	7	3
Peso Total	60A =		26 kgf
Peso Total	50A =		56 kgf

15 N10 Ø 5 C/20 C=1140

Cobertura - Armadura negativa secundaria

1X



CONCRETO		fck = 25 MPA		OBRAS N.º		0001	
ECS = 24150 MPA		CLIENTE		DES. N.º		005	
OBRAS		LAJES - VESTIÁRIO CLUBE		REV. N.º		00	
TÍTULO		Cobertura - Armadura negativa principal / Cobertura - Armadura negativa secundaria		DATA		21/01/2026	
ESCALA		1:50		DESENHO		VES-COB-LAJ-005-R00	
COORD.				ENGENH.			

Cobertura - Armadura positiva principal

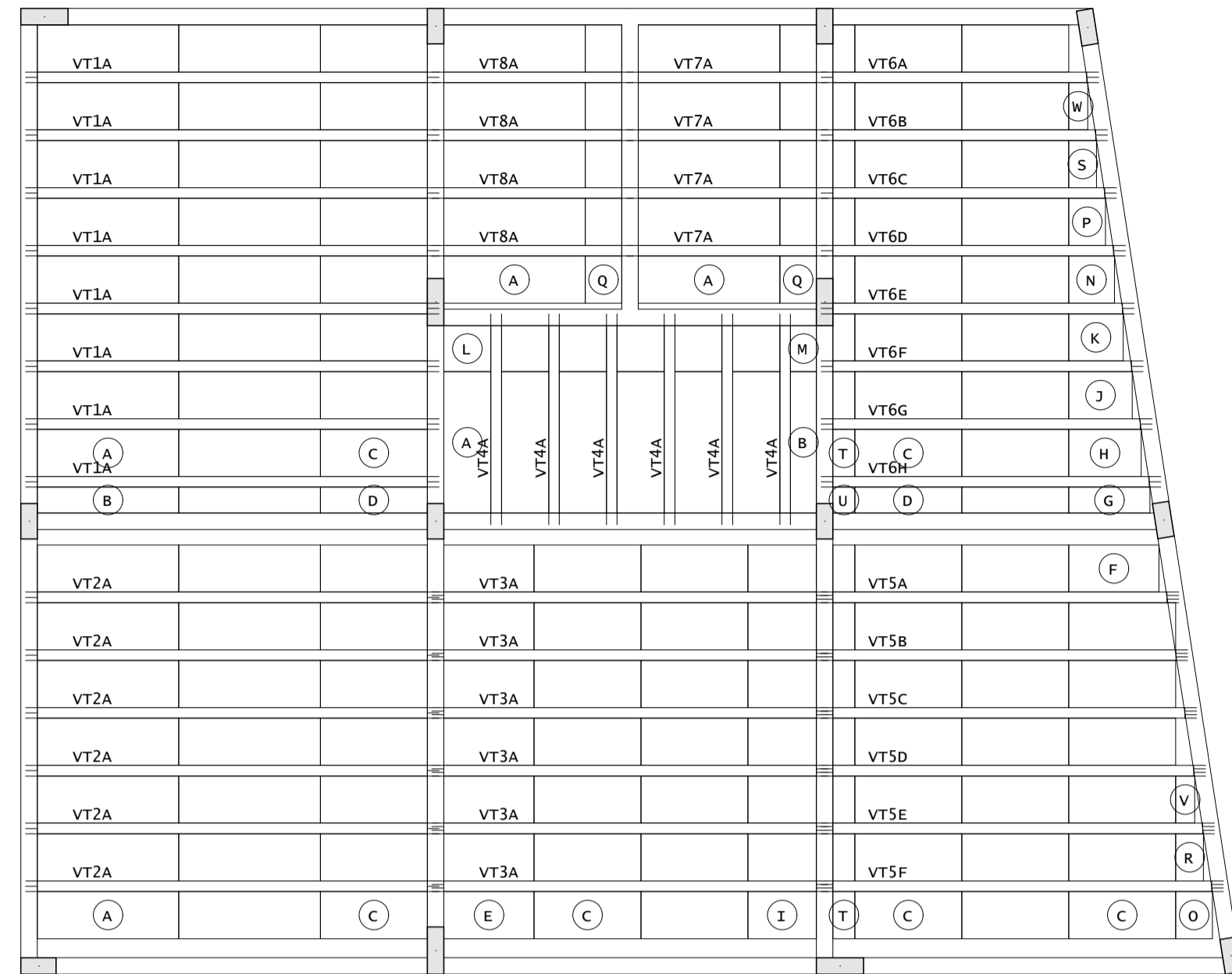
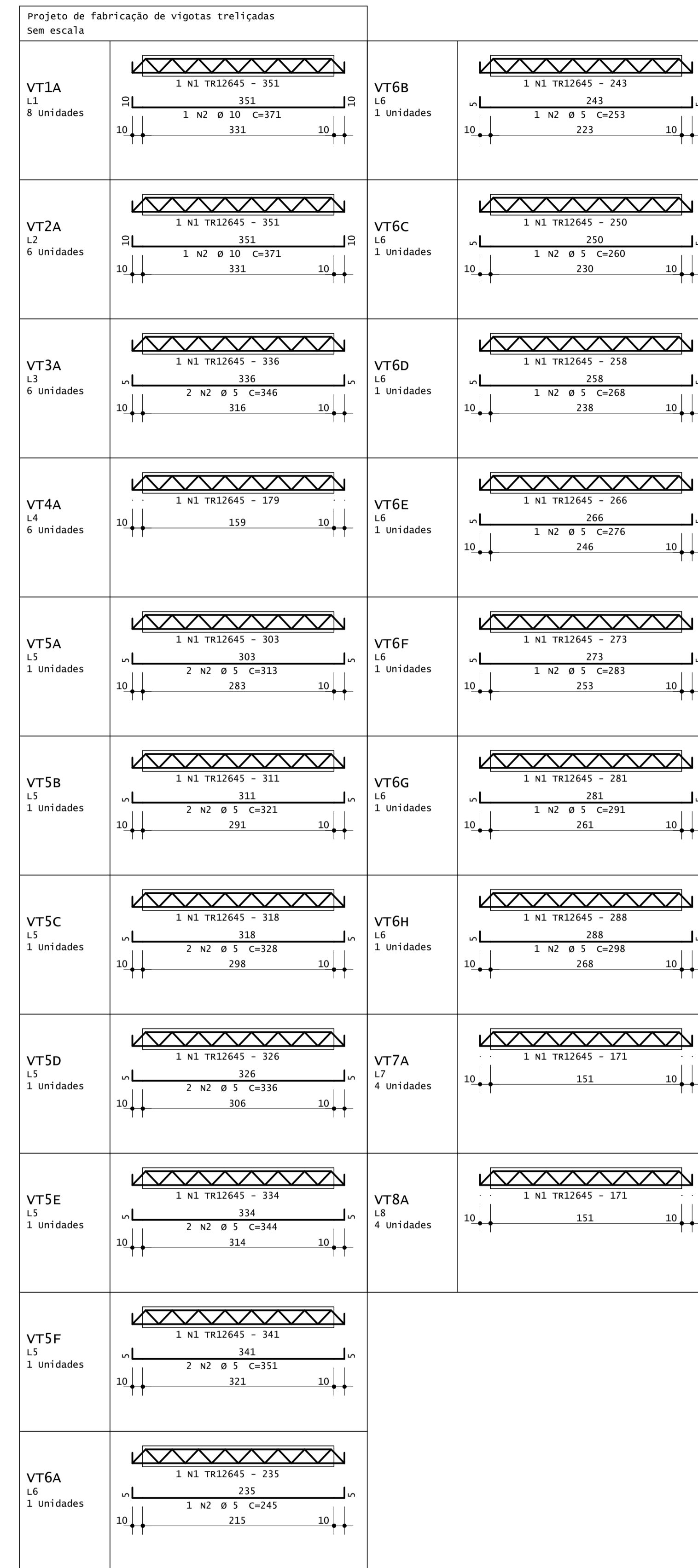


Tabela de Vigotas Treliçadas																					
Dados		Vãos / Apoios				Armação Treliçada				Armadura Adicional (1)						Armadura Adicional (2)					
Laje	Vigota	No	LapE cm	Liv cm	LapD cm	Ltot cm	Treliça	Unit cm	Total cm	No bar	Ø mm	DE cm	DD cm	Unit cm	Total cm	No bar	Ø mm	DE cm	DD cm	Total cm	
L1	VT1A	8	10	331	10	351	TR12645	351	2805	1	10	10	10	371	2965						
L2	VT2A	6	10	331	10	351	TR12645	351	2104	1	10	10	10	371	2224						
L3	VT3A	6	10	316	10	336	TR12645	336	2016	2	5	5	5	346	4152						
L4	VT4A	6	10	159	10	179	TR12645	179	1074												
L5	VT5A	1	10	283	10	303	TR12645	303	303	2	5	5	5	313	627						
L5	VT5B	1	10	291	10	311	TR12645	311	311	2	5	5	5	321	642						
L5	VT5C	1	10	298	10	318	TR12645	318	318	2	5	5	5	328	657						
L5	VT5D	1	10	306	10	326	TR12645	326	326	2	5	5	5	336	672						
L5	VT5E	1	10	314	10	334	TR12645	334	334	2	5	5	5	344	687						
L5	VT5F	1	10	321	10	341	TR12645	341	341	2	5	5	5	351	702						
L6	VT6A	1	10	215	10	235	TR12645	235	235	1	5	5	5	245	245						
L6	VT6B	1	10	223	10	243	TR12645	243	243	1	5	5	5	253	253						
L6	VT6C	1	10	230	10	250	TR12645	250	250	1	5	5	5	260	260						
L6	VT6D	1	10	238	10	258	TR12645	258	258	1	5	5	5	268	268						
L6	VT6E	1	10	246	10	266	TR12645	266	266	1	5	5	5	276	276						
L6	VT6F	1	10	253	10	273	TR12645	273	273	1	5	5	5	283	283						
L6	VT6G	1	10	261	10	281	TR12645	281	281	1	5	5	5	291	291						
L6	VT6H	1	10	268	10	288	TR12645	288	288	1	5	5	5	298	298						
L7	VT7A	4	10	151	10	171	TR12645	171	684												
L8	VT8A	4	10	151	10	171	TR12645	171	684												

Relação de blocos de enchimento			
Legenda	Quant	Dimensões	
		Larg cm	Compr cm
EPS unidirecional H10/40/120			
A	46	40	120
B	3	22	120
C	65	40	91
D	3	22	91
E	7	40	77
F	1	40	76
G	1	22	69
H	1	40	61
I	7	40	58
J	1	40	54
K	1	40	46
L	6	40	39
M	1	22	39
N	1	40	39
O	1	40	31
P	1	40	31
Q	10	40	31
R	1	40	24
S	1	40	24
T	15	40	19
U	1	22	19
V	1	40	16
W	1	40	16

Estimativa de consumo de blocos			
Fabricante	Inteiros	Cortados	Total
EPS Unidirecional H10/40/120	46	106	152



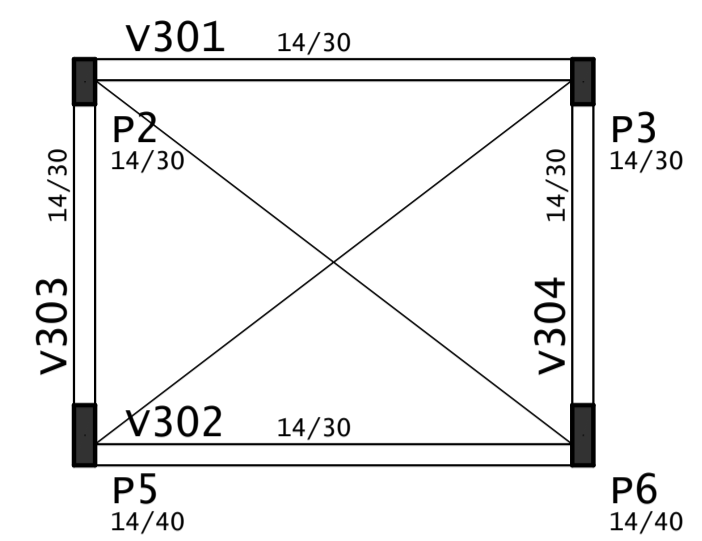
AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT cm	TOTAL cm
VT1A (X8)					
TR12645 50A	1	10	8	351	2808
TR12645 50A	2	10	8	371	2968
VT2A (X6)					
TR12645 50A	1	10	6	351	2106
TR12645 50A	2	10	6	371	2226
VT3A (X6)					
TR12645 60A	1	5	6	336	2016
TR12645 60A	2	5	12	346	4152
VT4A (X6)					
TR12645	1		6	179	1074
VT5A					
TR12645 60A	1	5	1	303	303
TR12645 60A	2	5	2	313	626
VT5B					
TR12645 60A	1	5	1	311	311
TR12645 60A	2	5	2	321	642
VT5C					
TR12645 60A	1	5	1	318	318
TR12645 60A	2	5	2	328	656
VT5D					
TR12645 60A	1	5	1	326	326
TR12645 60A	2	5	2	336	672
VT5E					
TR12645 60A	1	5	1	334	334
TR12645 60A	2	5	2	344	688
VT5F					
TR12645 60A	1	5	1	341	341
TR12645 60A	2	5	2	351	702
VT6A					
TR12645 60A	1	5	1	235	235
TR12645 60A	2	5	1	245	245
VT6B					
TR12645 60A	1	5	1	243	243
TR12645 60A	2	5	1	253	253
VT6C					
TR12645 60A	1	5	1	250	250
TR12645 60A	2	5	1	260	260
VT6D					
TR12645 60A	1	5	1	258	258
TR12645 60A	2	5	1	268	268
VT6E					
TR12645 60A	1	5	1	266	266
TR12645 60A	2	5	1	276	276
VT6F					
TR12645 60A	1	5	1	273	273
TR12645 60A	2	5	1	283	283
VT6G					
TR12645 60A	1	5	1	281	281
TR12645 60A	2	5	1	291	291
VT6H					
TR12645 60A	1	5	1	288	288
TR12645 60A	2	5	1	298	298
VT7A (X4)					
TR12645	1		4	171	684
VT8A (X4)					
TR12645	1		4	171	684

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
TR12645 60A	5	134	119
TR12645 50A	10	103	16
TR12645 50A	10	52	32
Peso Total TR12645			119 kgf
Peso Total 60A			16 kgf
Peso Total 50A			32 kgf

CONCRETO fck = MPA ECS = Ver na Planta	OBRA N.º 0001
CLIENTE	DES. N.º 004
OBRA MAPA TRELIÇAS - VESTIÁRIO CLUBE	REV. N.º 00
TÍTULO Cobertura - Armadura positiva principal	ENG. N.º
DATA 21/01/2026	ESCALA
DESENHO VES-COB-LAJ-004-R00	COORD.

Planta Castelo D'água

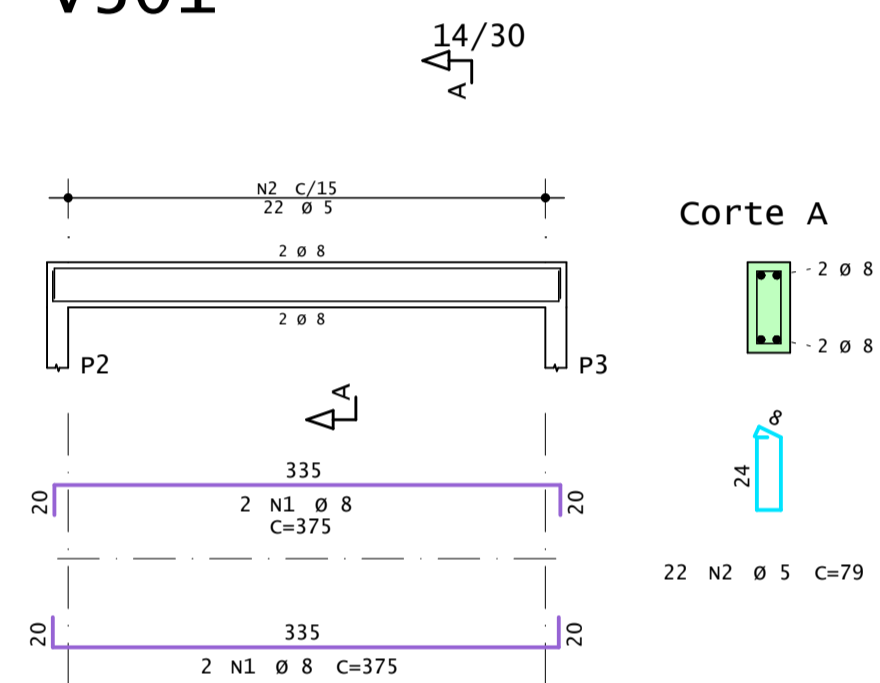
Escala 1:50



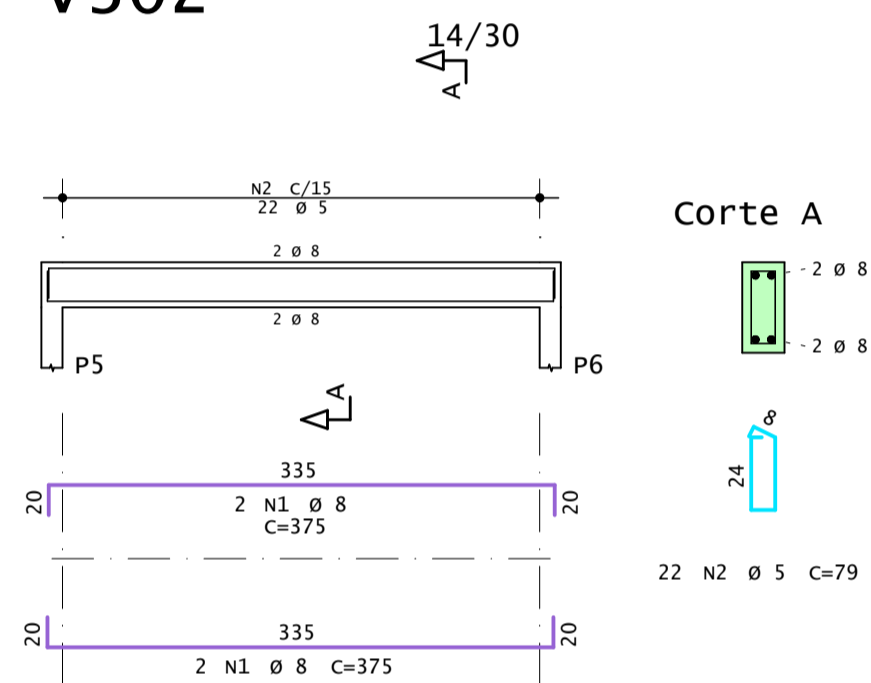
AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
		mm		cm	cm
V301	50A	1	8	375	1500
	60A	2	5	79	1738
V302	50A	1	8	375	1500
	60A	2	5	79	1738
V303	50A	1	8	300	600
	50A	2	8	279	558
	60A	3	5	79	1106
V304	50A	1	8	300	600
	50A	2	8	279	558
	60A	3	5	79	1106

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
		mm	m
			kgf
60A	5	57	9
50A	8	53	21
Peso Total		60A =	9 kgf
Peso Total		50A =	21 kgf

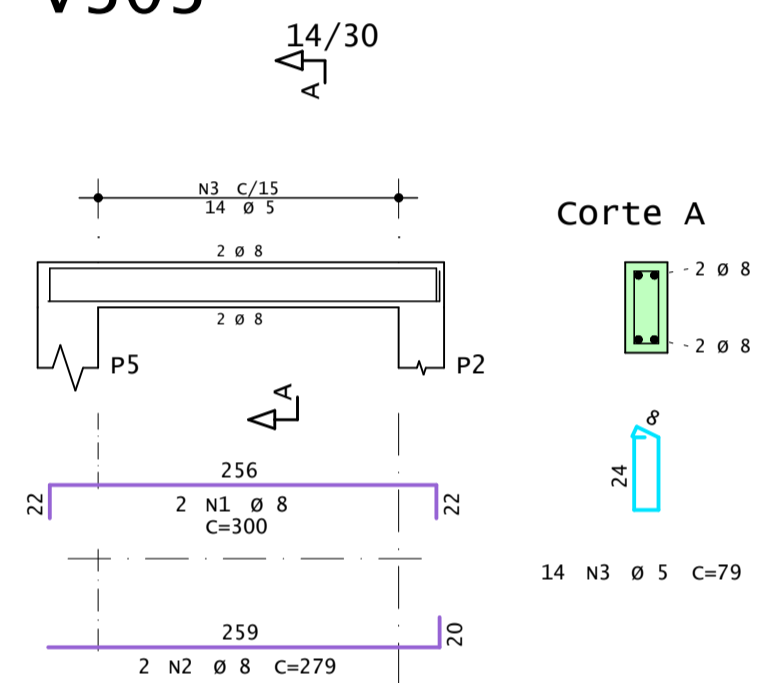
v301



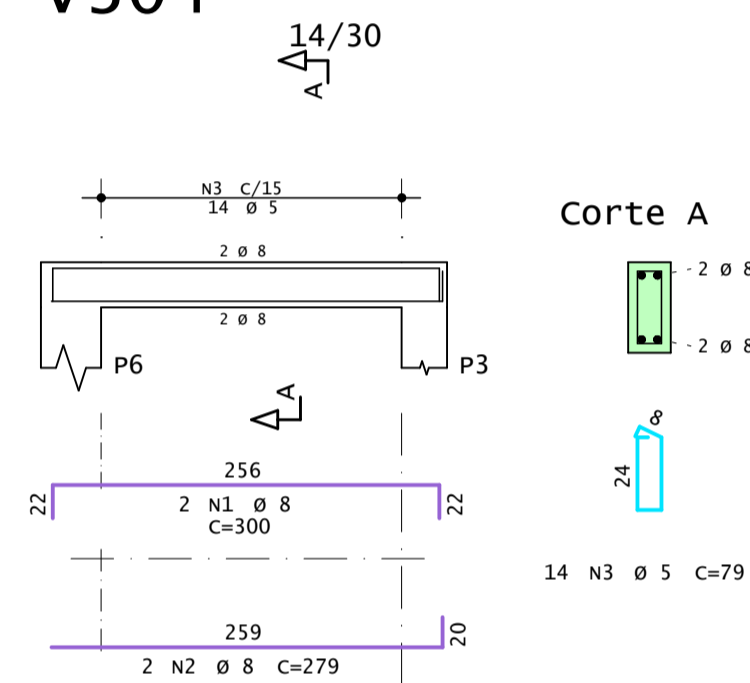
v302



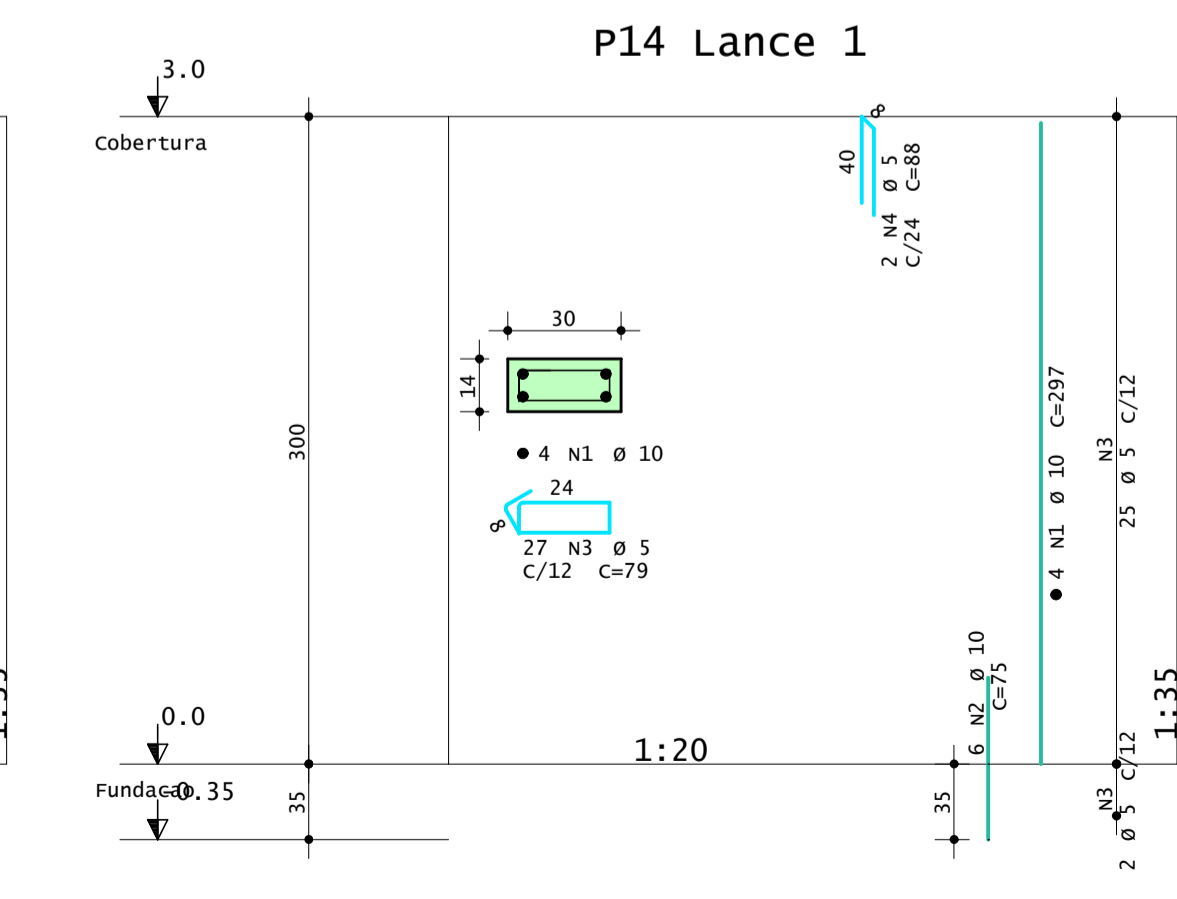
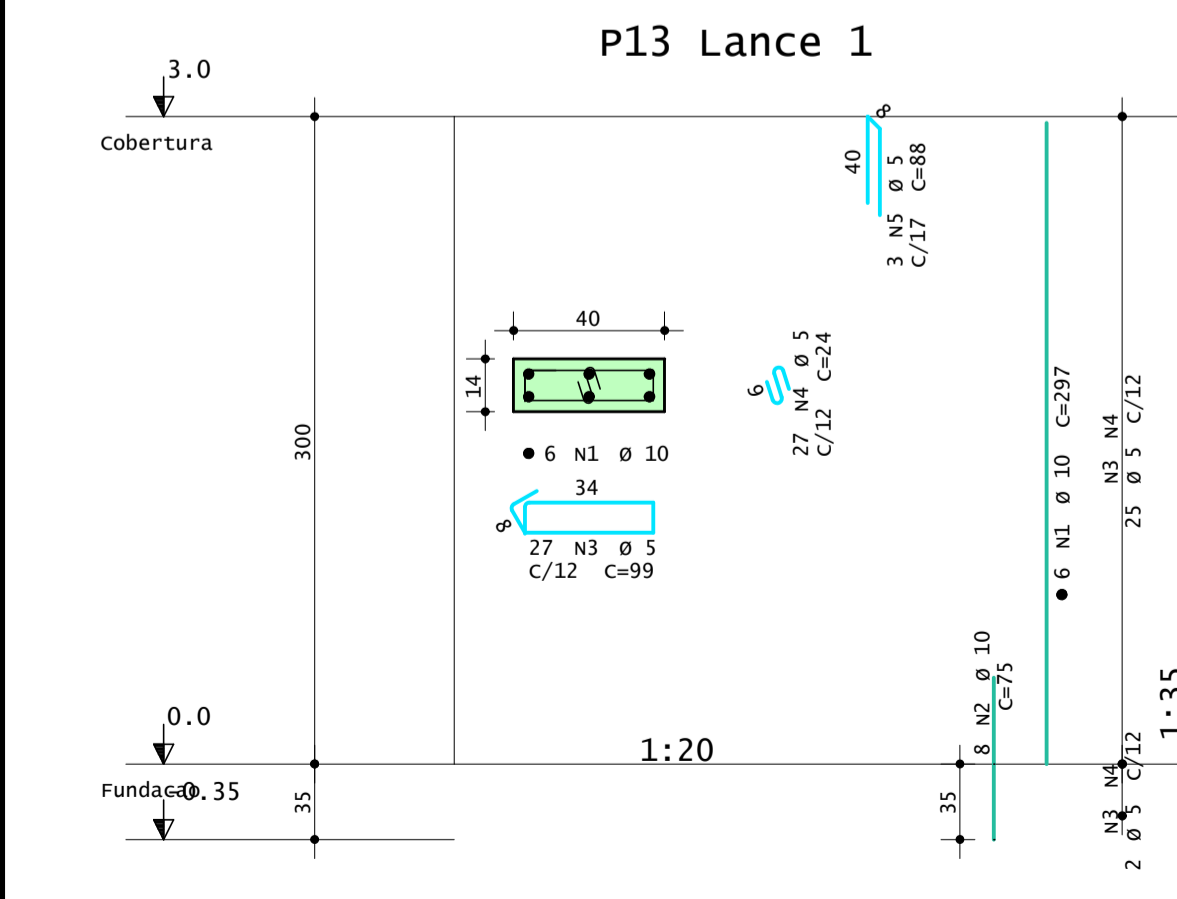
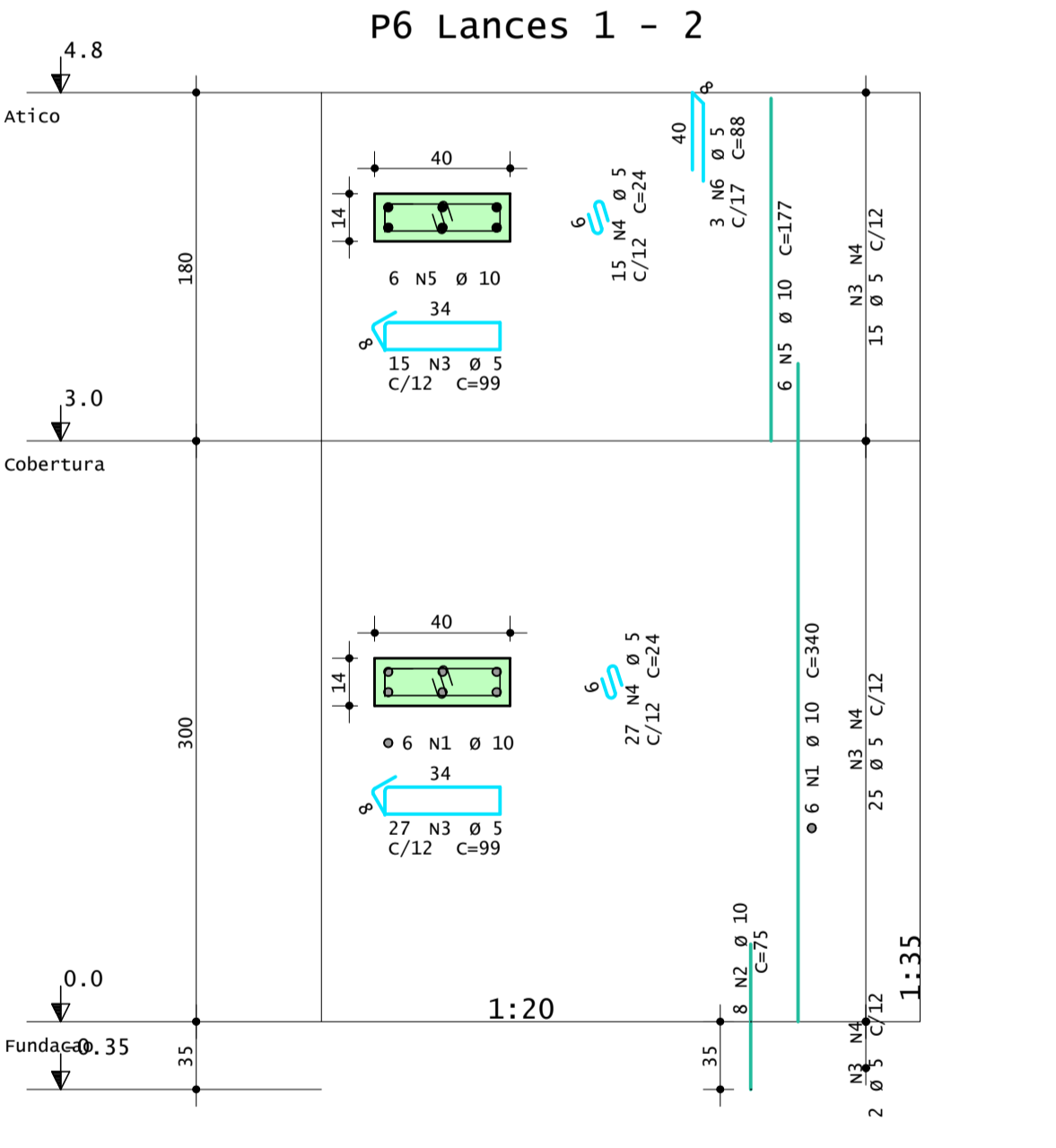
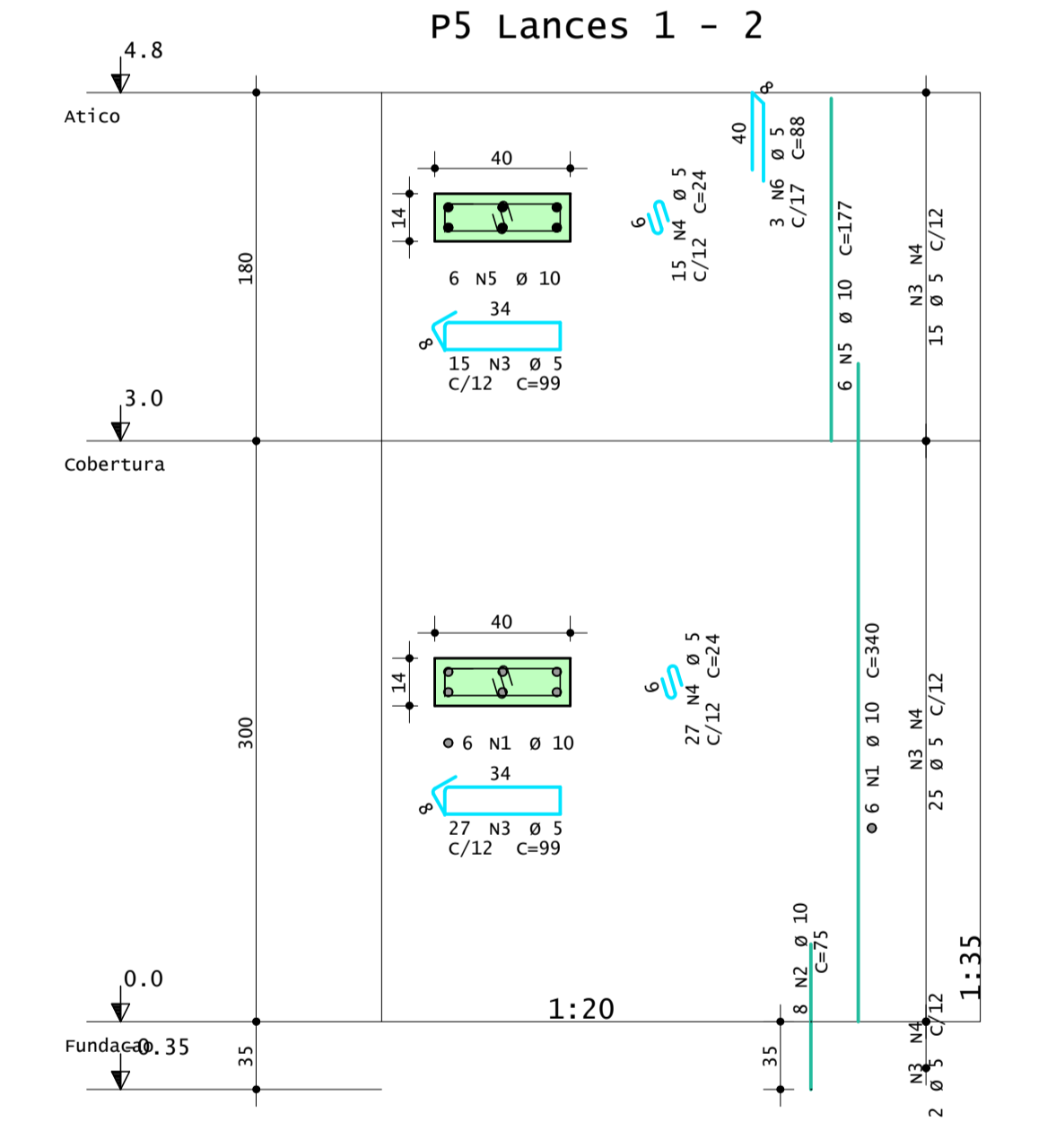
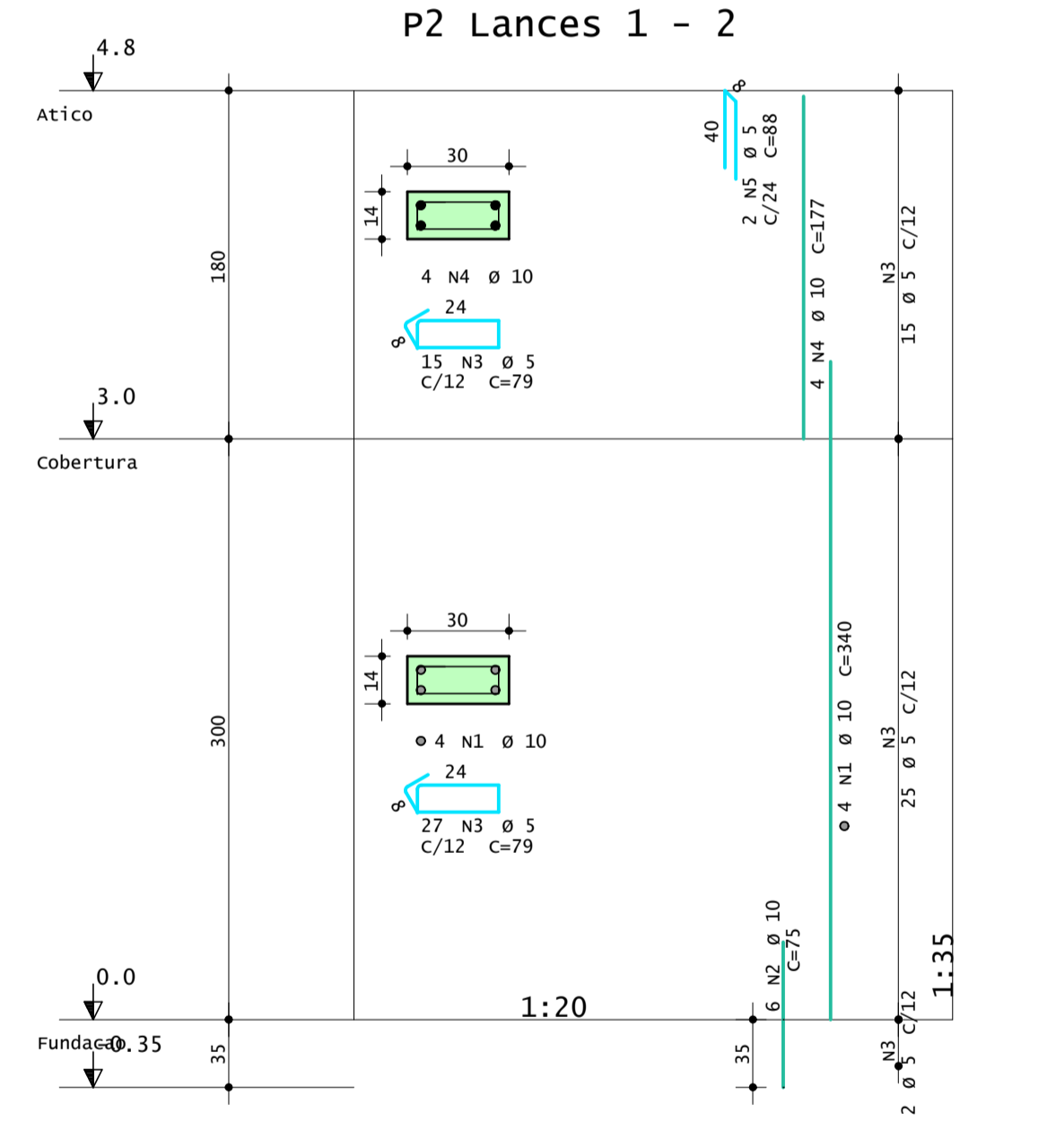
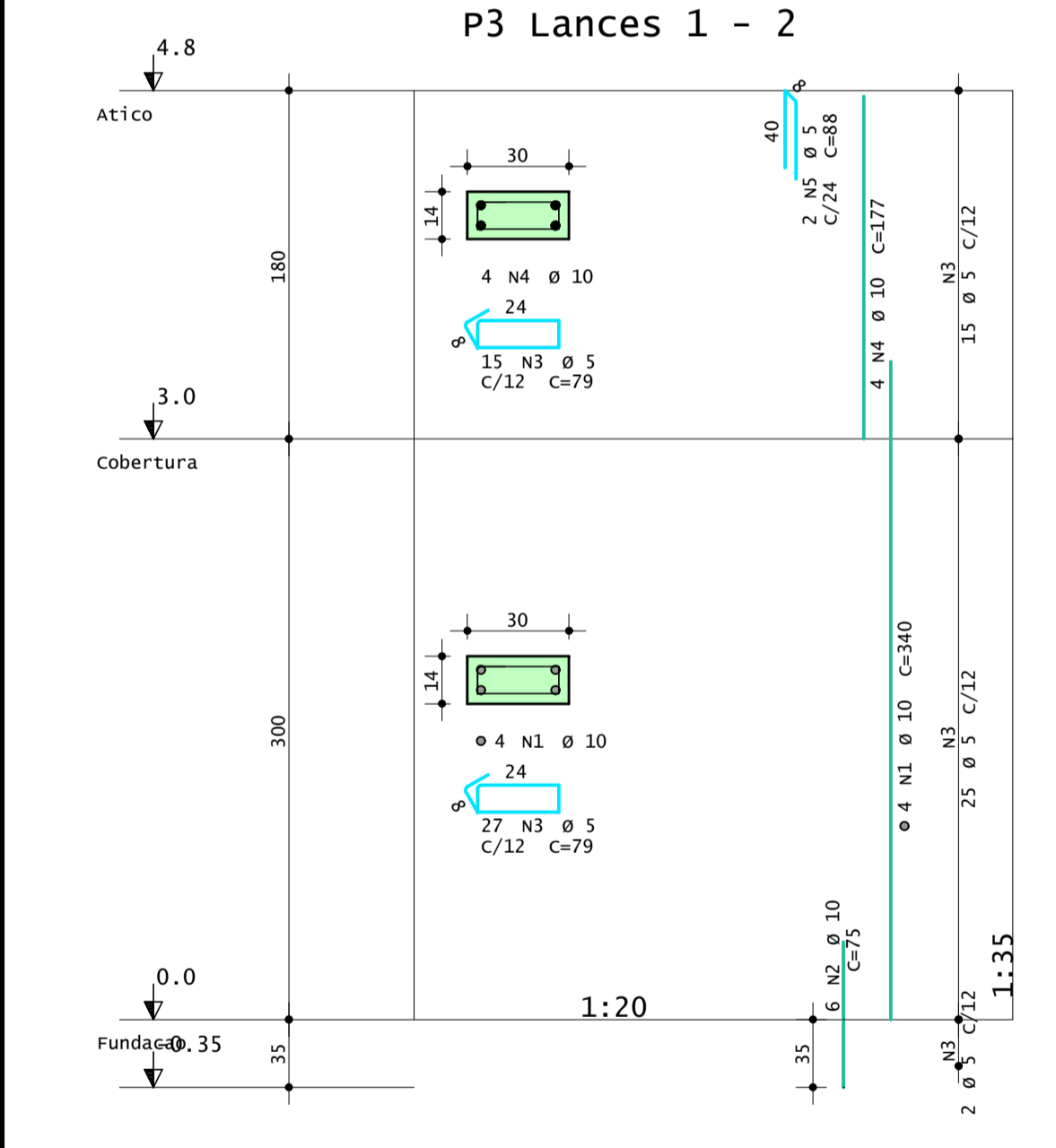
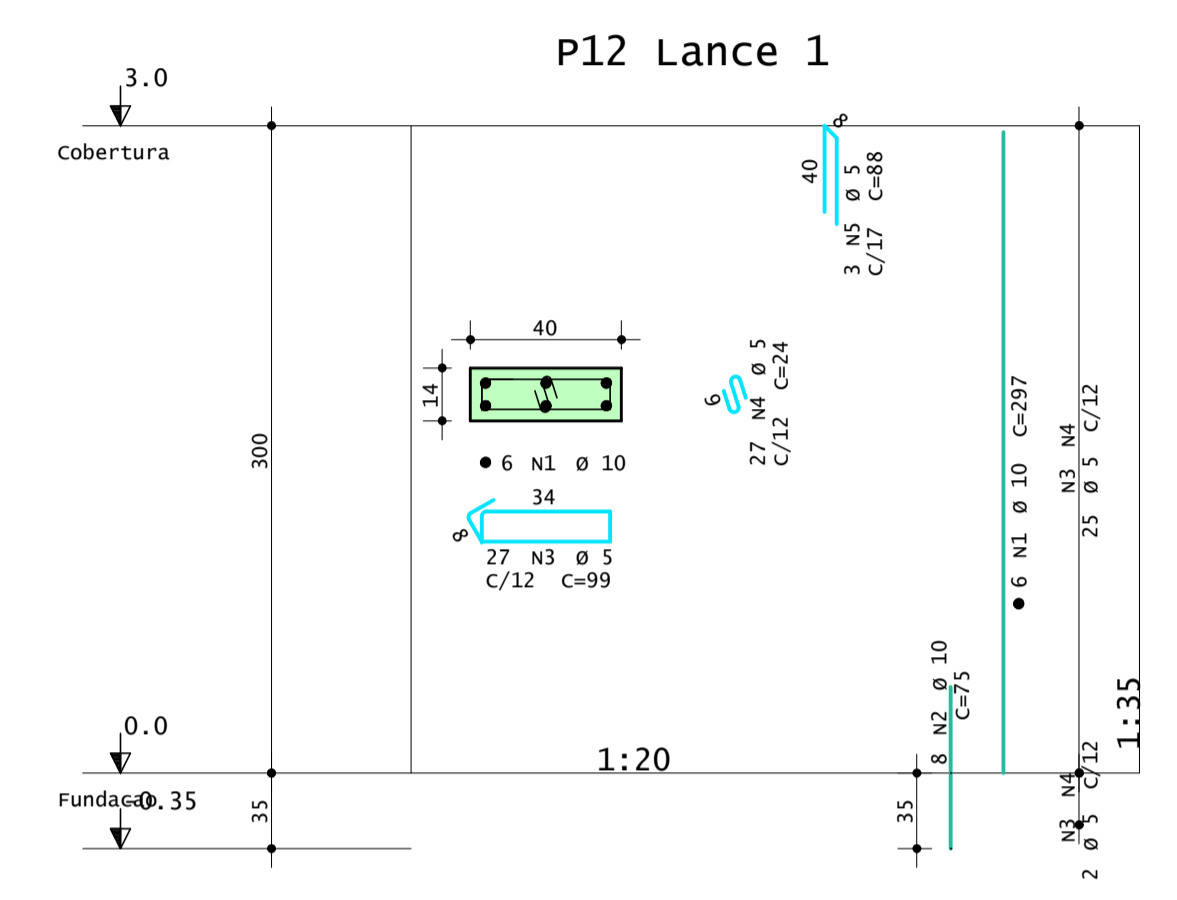
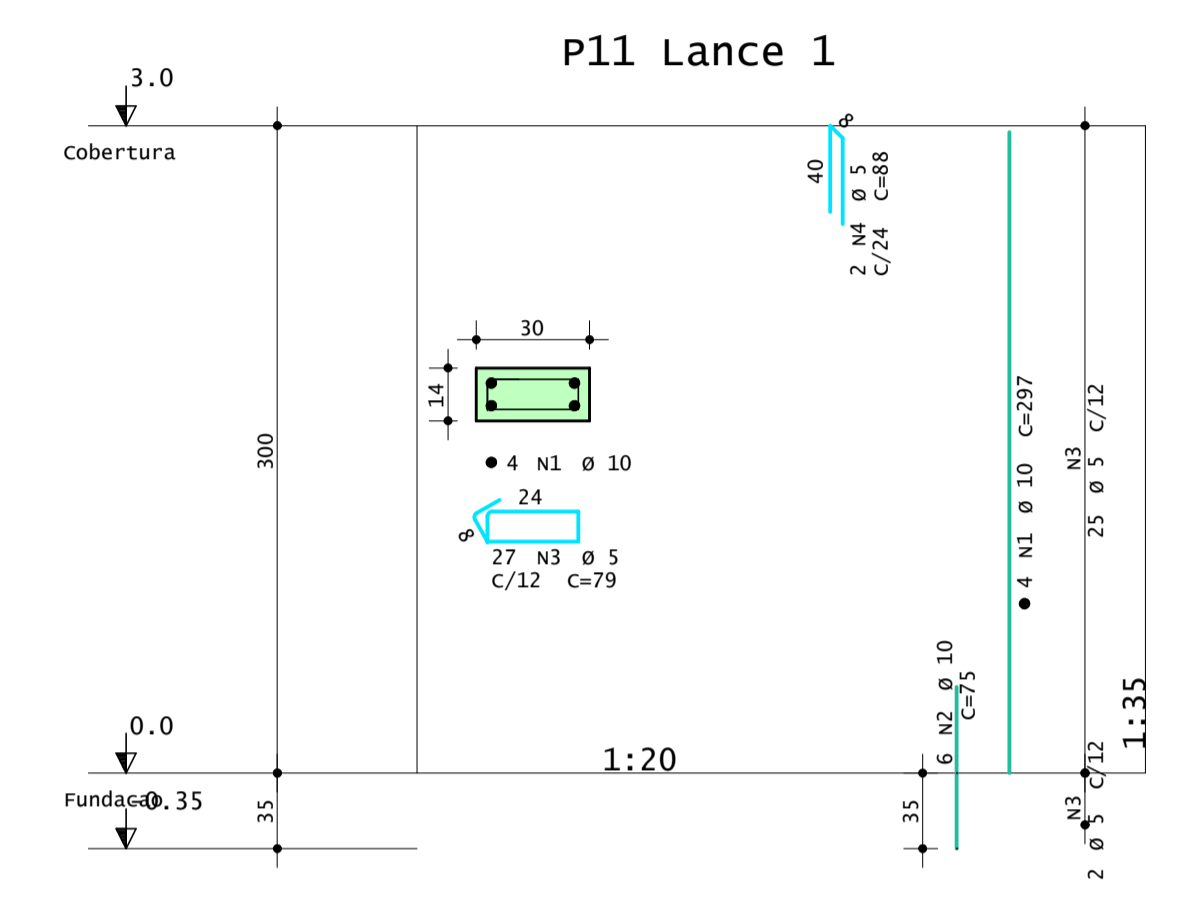
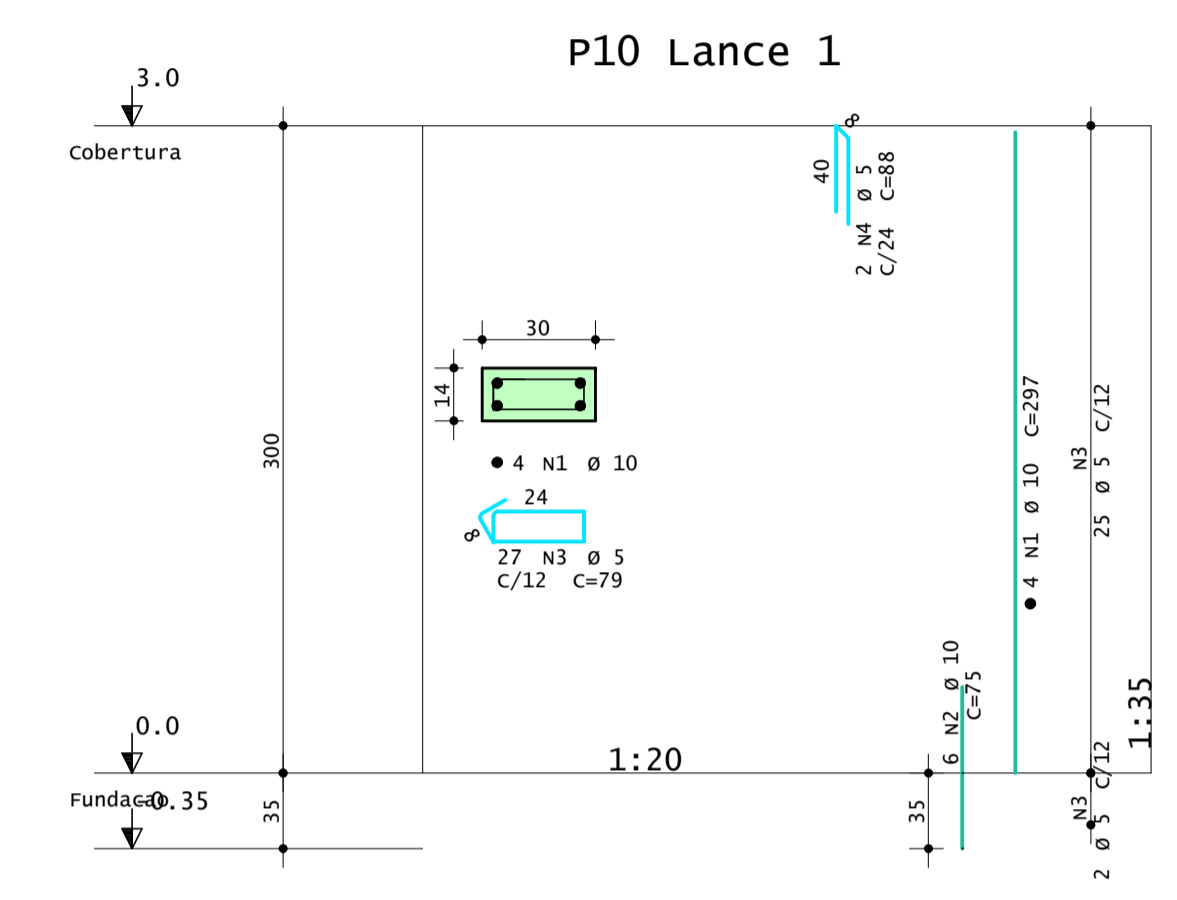
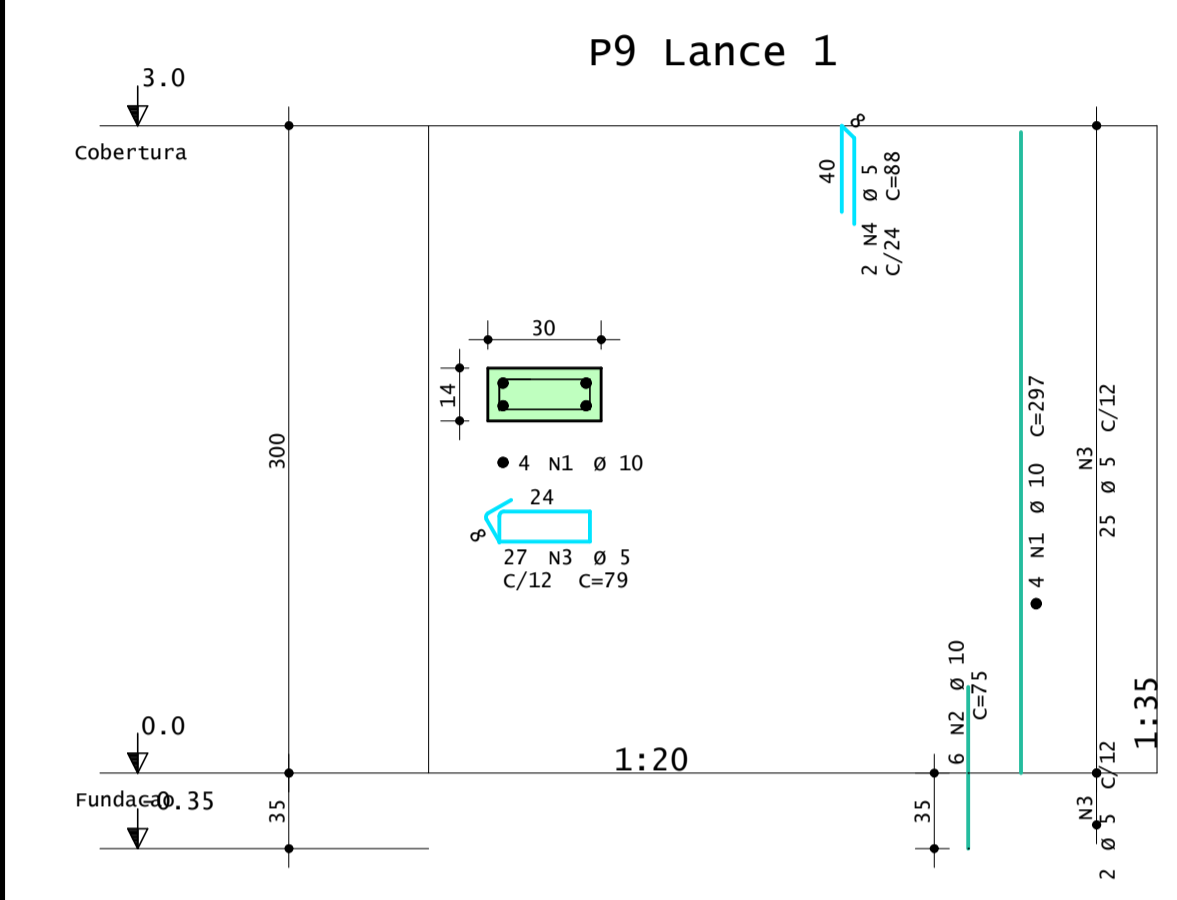
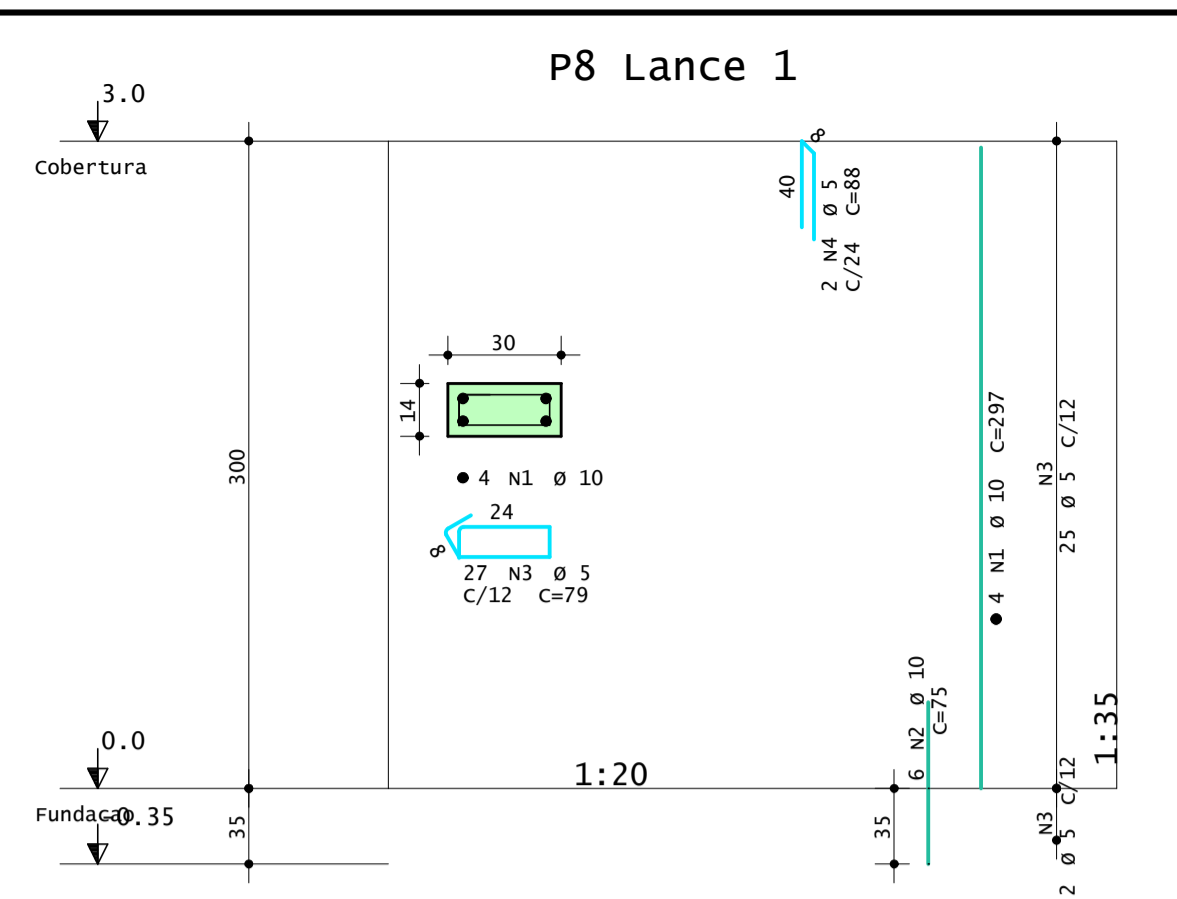
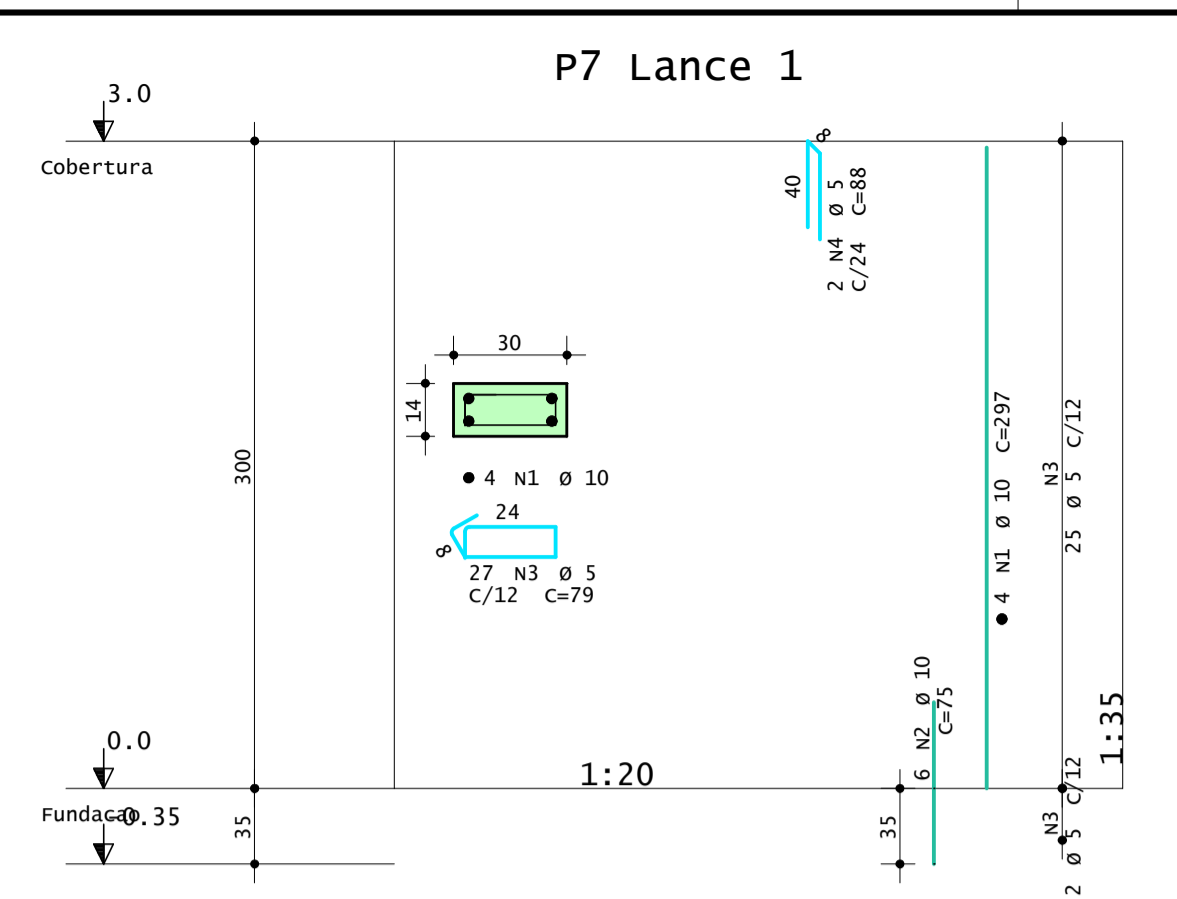
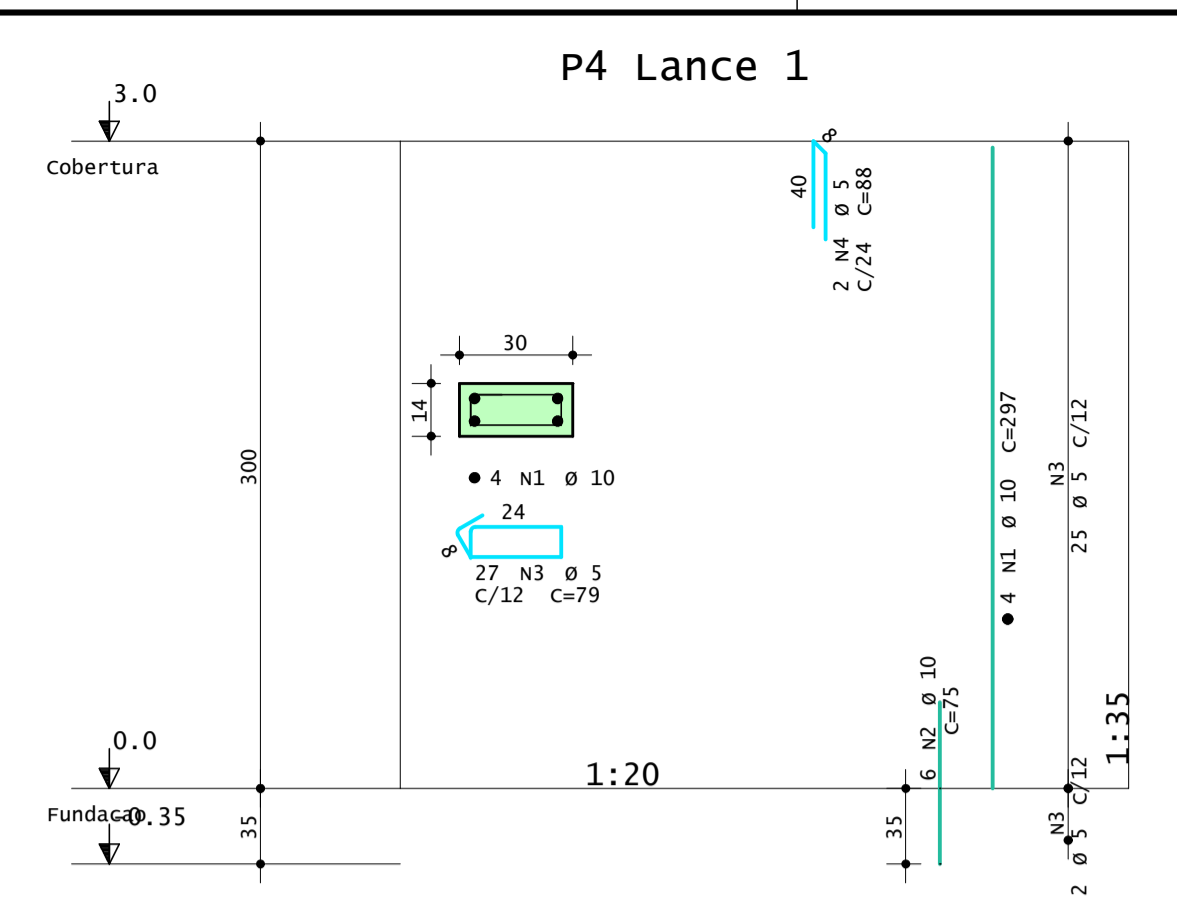
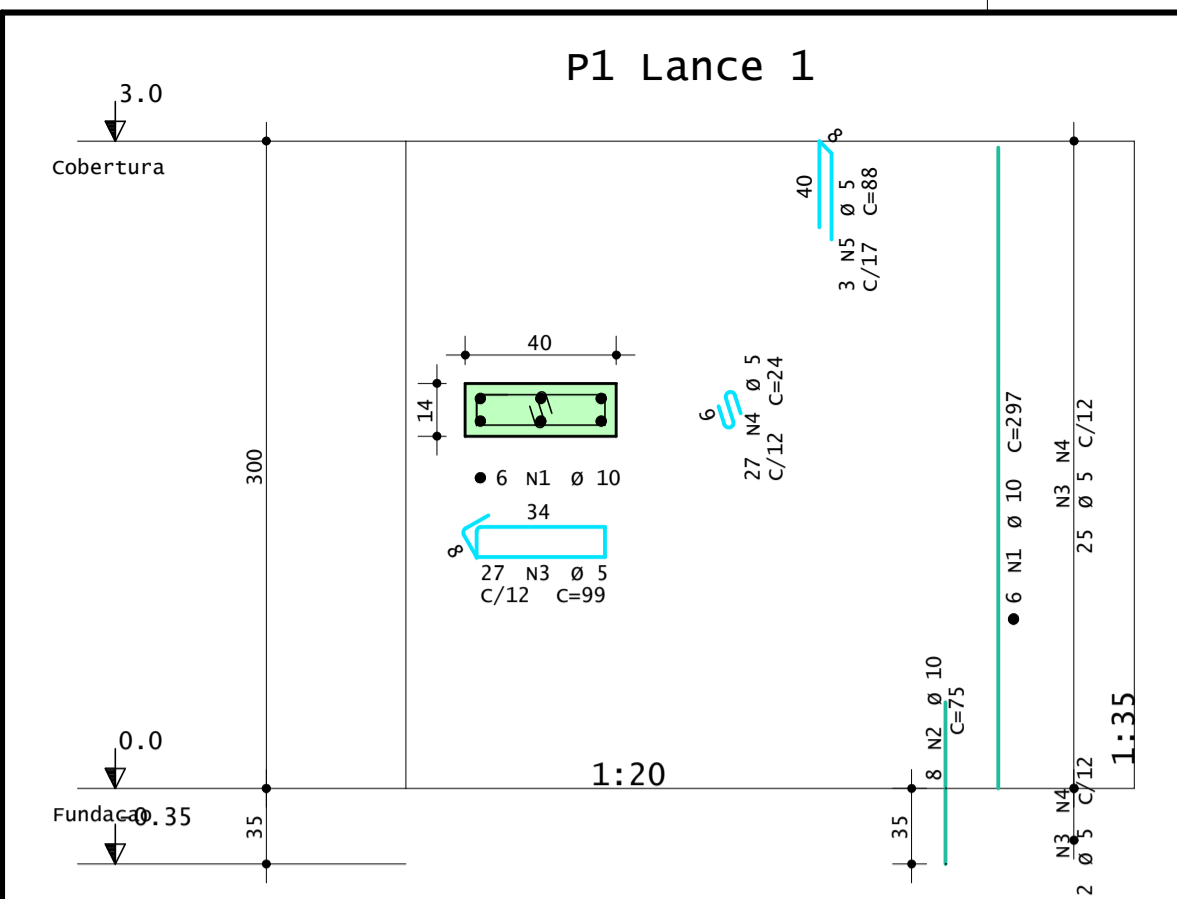
v303



v304



CONCRETO		OBRAS N.º	
fck = 25 MPA		0001	
ECS = 24150 MPA		DES. N.º	
CLIENTE		007	
OBRA		CAIXA - VESTIÁRIO CLUBE	
TÍTULO		Planta Castelo D'água / v301 / v302 / v303 / v304	
DATA		REV. N.º	
21/01/2026		00	
ESCALA	DESENHO	COORD.	ENG.º
1:50	VES-CAS-VIG-007-R00		



AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
cm					
P1 Lance 1					
50A	1	10	6	297	1782
60A	2	10	8	75	600
60A	3	5	27	99	2673
60A	4	5	27	24	648
60A	5	5	3	88	264
P2 Lances 1 - 2					
50A	1	10	4	340	1360
50A	2	10	6	75	450
60A	3	5	42	79	3318
60A	4	10	4	177	708
60A	5	5	2	88	176
P3 Lances 1 - 2					
50A	1	10	4	340	1360
50A	2	10	6	75	450
60A	3	5	42	79	3318
60A	4	10	4	177	708
60A	5	5	2	88	176
P4 Lance 1					
50A	1	10	4	297	1188
50A	2	10	6	75	450
60A	3	5	27	79	2133
60A	4	5	2	88	176
P5 Lances 1 - 2					
50A	1	10	6	340	2040
50A	2	10	8	75	600
60A	3	5	42	99	4158
60A	4	5	42	24	1008
60A	5	10	6	177	1062
60A	6	5	3	88	264
P6 Lances 1 - 2					
50A	1	10	6	340	2040
50A	2	10	8	75	600
60A	3	5	42	99	4158
60A	4	5	42	24	1008
60A	5	10	6	177	1062
60A	6	5	3	88	264
P7 Lance 1					
50A	1	10	4	297	1188
50A	2	10	6	75	450
60A	3	5	27	79	2133
60A	4	5	2	88	176
P8 Lance 1					
50A	1	10	4	297	1188
50A	2	10	6	75	450
60A	3	5	27	79	2133
60A	4	5	2	88	176
P9 Lance 1					
50A	1	10	4	297	1188
50A	2	10	6	75	450
60A	3	5	27	79	2133
60A	4	5	2	88	176
P10 Lance 1					
50A	1	10	4	297	1188
50A	2	10	6	75	450
60A	3	5	27	79	2133
60A	4	5	2	88	176
P11 Lance 1					
50A	1	10	4	297	1188
50A	2	10	6	75	450
60A	3	5	27	79	2133
60A	4	5	2	88	176
P12 Lance 1					
50A	1	10	6	297	1782
50A	2	10	8	75	600
60A	3	5	27	99	2673
60A	4	5	27	24	648
60A	5	5	3	88	264
P13 Lance 1					
50A	1	10	6	297	1782
50A	2	10	8	75	600
60A	3	5	27	99	2673
60A	4	5	27	24	648
60A	5	5	3	88	264
P14 Lance 1					
50A	1	10	4	297	1188
50A	2	10	6	75	450
60A	3	5	27	79	2133
60A	4	5	2	88	176

RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
			kgf
60A	5	448	69
50A	10	311	192
Peso Total 60A =			69 kgf
Peso Total 50A =			192 kgf

CONCRETO
fck = 25 MPA
ECS = Ver na Planta

CLIENTE

OBRA
PILARES - VESTIÁRIO CLUBE

TÍTULO
P1 Lance 1 / P2 Lances 1 - 2 /
P3 Lances 1 - 2 / P4 Lance 1 /
P5 Lances 1 - 2 / P6 Lances 1 -
2 / P7 Lance 1 / P8 Lance 1 / P9
Lance 1 / P10 Lance 1 / P11
Lance 1 / P12 Lance 1 / P13
Lance 1 / P14 Lance 1

DATA: 21/01/2026 ESCALA: 1:20 DESENHO: VES-PTL-PIL-001-R00 COORD.

OBRA N.º: **0001**
DES. N.º: **001**
REV. N.º: **00**
ENG.º