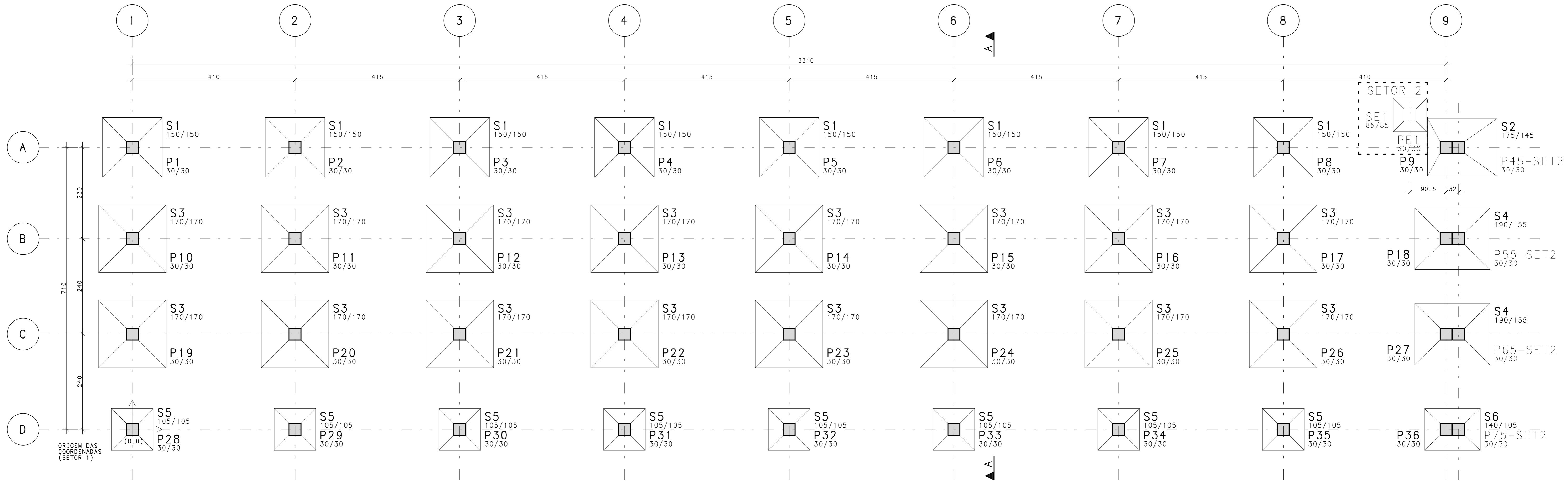


LOCAÇÃO - FUNDAÇÕES/PILARES - SETOR 1

ESCALA 1/50



BARICENTROS DOS PILARES			
Pilar	X (cm)	Pilar	Y (cm)
P1	0.0	P28	0.0
P10	0.0	P29	0.0
P19	0.0	P30	0.0
P28	0.0	P31	0.0
P2	410.0	P32	0.0
P11	410.0	P33	0.0
P20	410.0	P34	0.0
P29	410.0	P35	0.0
P3	825.0	P36	0.0
P12	825.0	P75-SET2	0.0
P21	825.0	P19	240.0
P30	825.0	P20	240.0
P4	1240.0	P21	240.0
P13	1240.0	P22	240.0
P22	1240.0	P23	240.0
P31	1240.0	P24	240.0
P5	1655.0	P25	240.0
P14	1655.0	P26	240.0
P23	1655.0	P27	240.0
P32	1655.0	P65-SET2	240.0
P6	2070.0	P10	480.0
P15	2070.0	P11	480.0
P24	2070.0	P12	480.0
P33	2070.0	P13	480.0
P7	2485.0	P14	480.0
P16	2485.0	P15	480.0
P25	2485.0	P16	480.0
P34	2485.0	P17	480.0
P8	2900.0	P18	480.0
P17	2900.0	P55-SET2	480.0
P26	2900.0	P1	710.0
P35	2900.0	P2	710.0
P9	3310.0	P3	710.0
P18	3310.0	P4	710.0
P27	3310.0	P5	710.0
P36	3310.0	P6	710.0
P45-SET2	3342.0	P7	710.0
P55-SET2	3342.0	P8	710.0
P65-SET2	3342.0	P9	710.0
P75-SET2	3342.0	P45-SET2	710.0



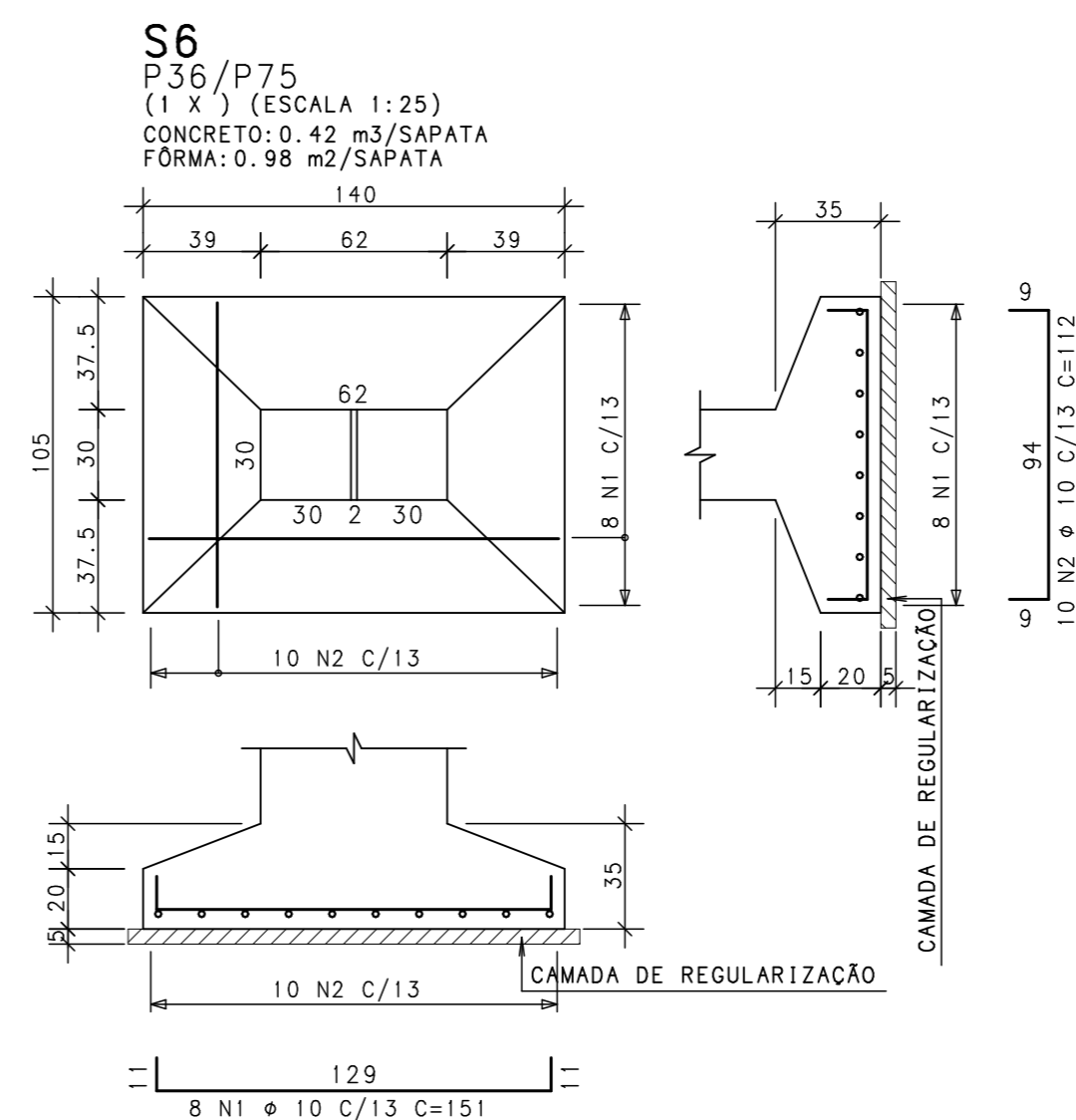
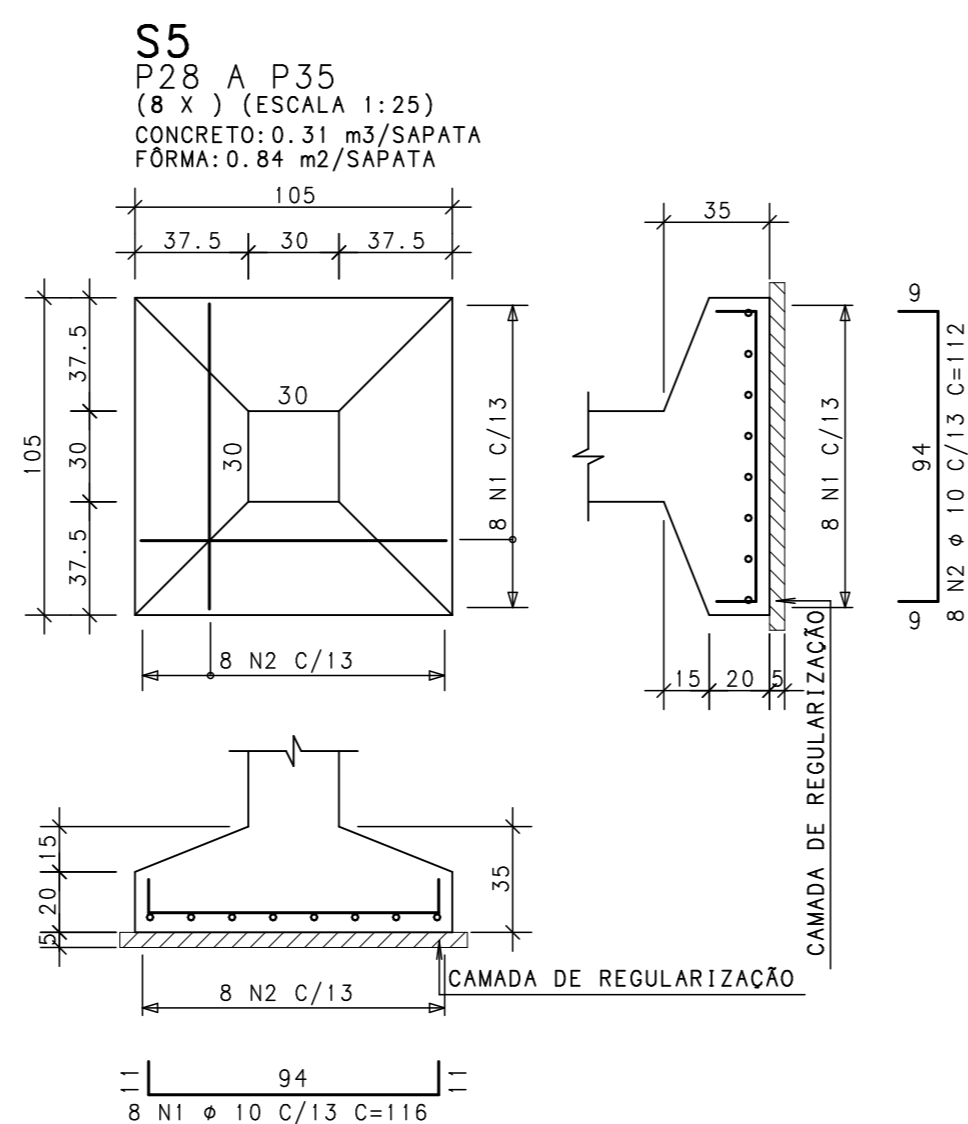
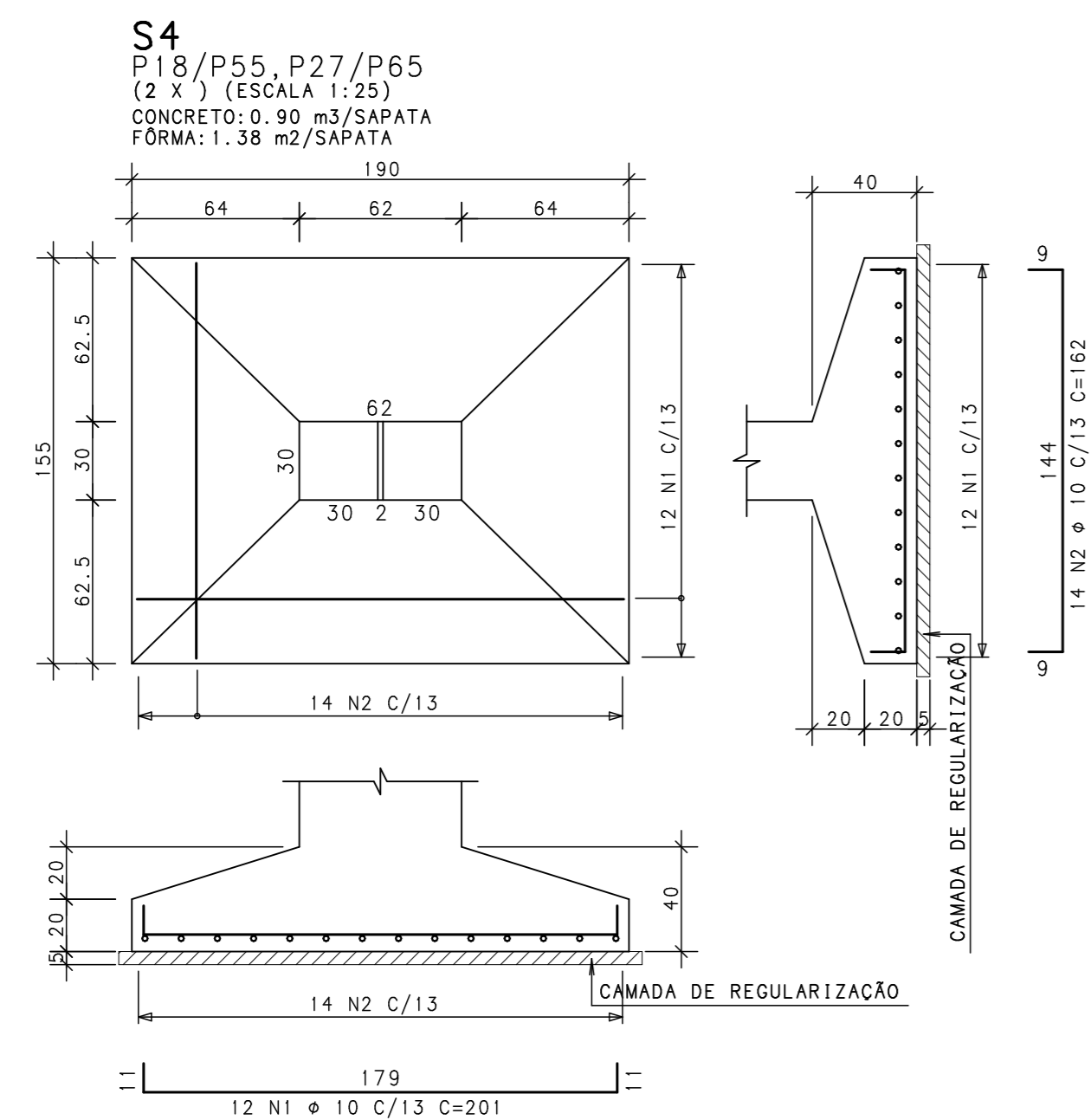
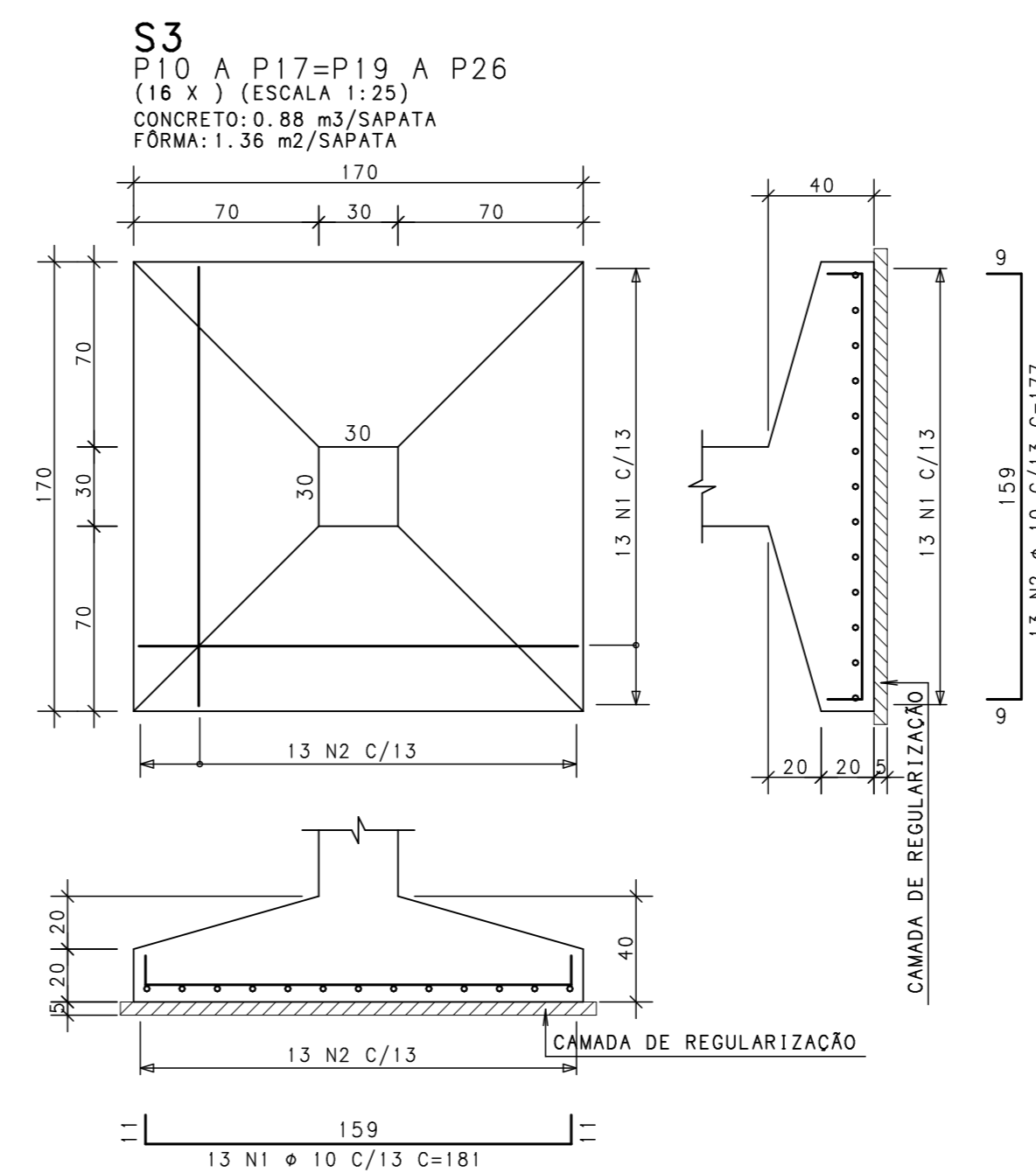
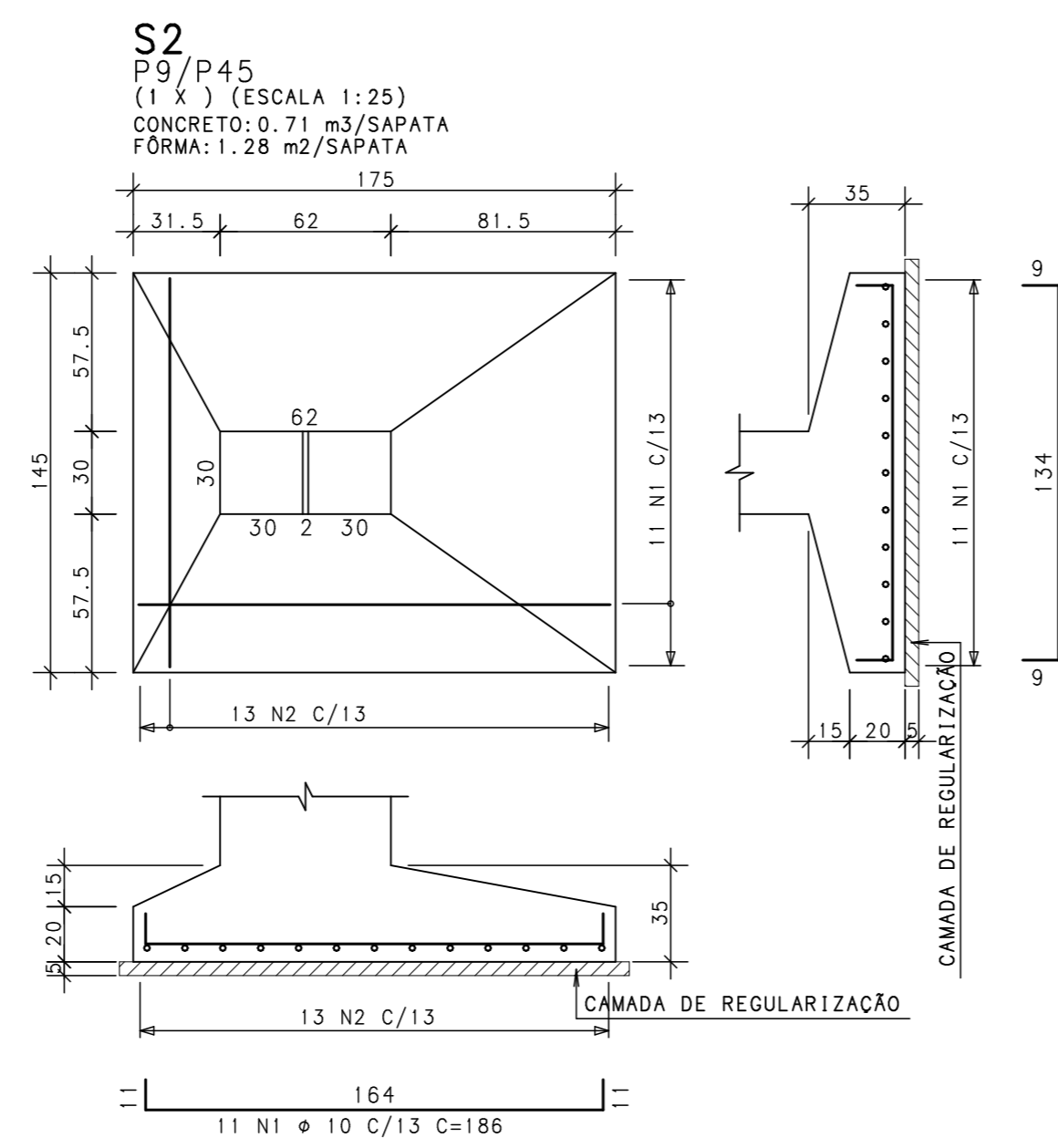
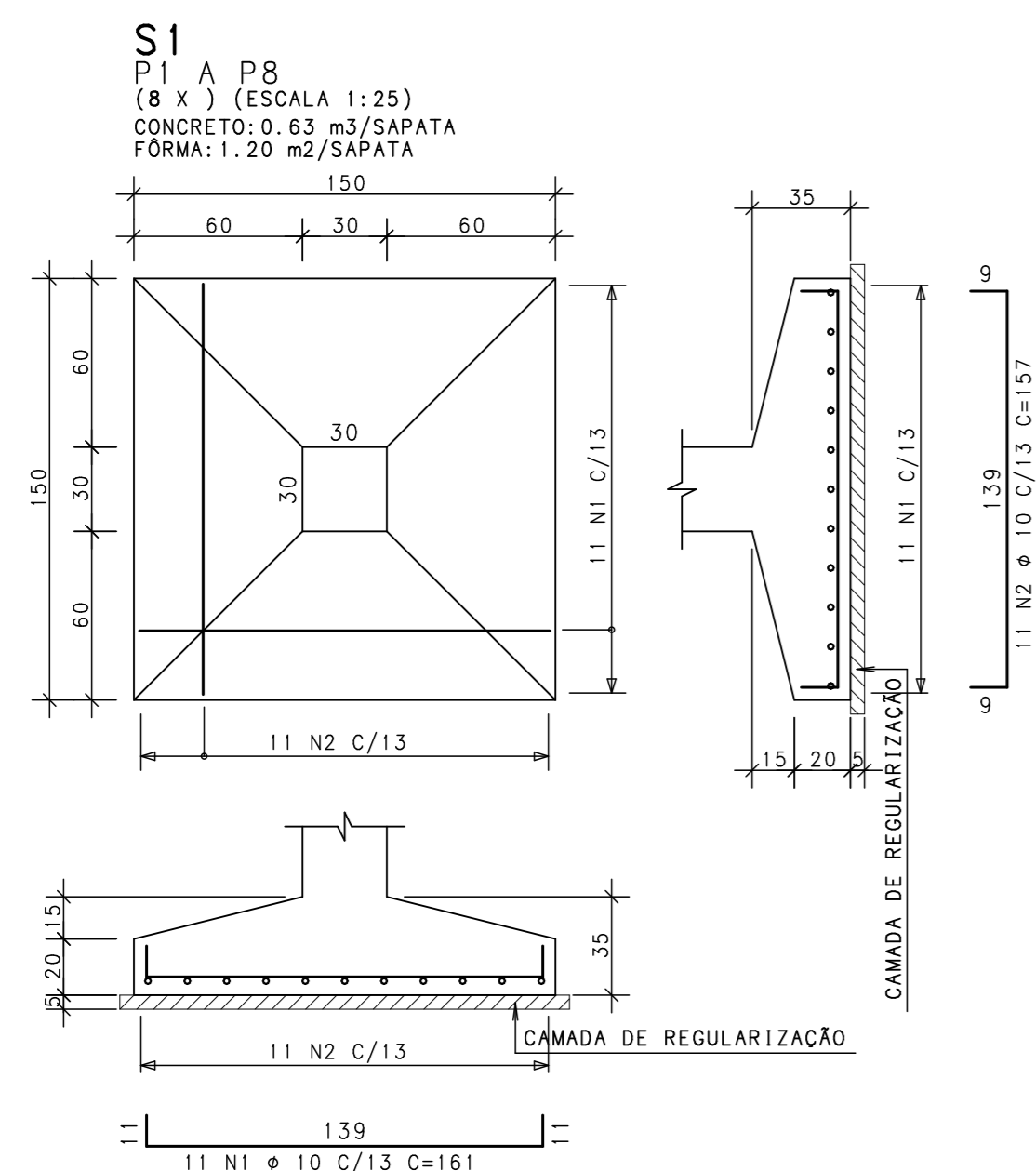
NOTAS GERAIS:

- PROJETO ESTRUTURAL ELABORADO DE ACORDO COM A NBR 6118;
- A ESTRUTURA DEVERÁ SER CONSTRUÍDA DE ACORDO COM A NBR 14931;
- O CONCRETO EMPREGADO NA EXECUÇÃO DAS ESTRUTURAS DE CUMPRIR OS REQUISITOS ESTABELECIDOS NA NBR 12655;
- COTAS E DIMENSÕES EM CENTÍMETROS;
- NÃO RETIRAR COTAS EM ESCALA;
- CONTROLAR RIGOROSAMENTE AS MEDIDAS EM OBRA;
- CONFIRMAR OS COMPRIMENTOS DOS FERROS "IN LOCO";
- AS FUNDAÇÕES FORAM DIMENSIONADAS PARA UMA TENSÃO ADMISSÍVEL NO SOLO DE 1,00 kg/cm² A UMA PROFUNDIDADE DE 1,50 m (NÍVEL DE ASSENTAMENTO DAS FUNDAÇÕES DOS PILARES), ABAIXO DO TERRENO DO SETOR;
- ESTES VALORES DEVERÃO SER VERIFICADOS E CONFIRMADOS POR UM TÉCNICO ESPECIALIZADO EM SOLOS E QUALQUER DISCREPÂNCIA DEVERÁ SER COMUNICADA AO ENGENHEIRO PROJETISTA ESTRUTURAL;
- TORNA-SE INDISPENSÁVEL INSPEÇÃO PARA IDENTIFICAR SITUAÇÕES PARTICULARES NO TERRENO, TAIS COMO: POÇOS D'ÁGUA ATERRADOS; ZONAS DE ATERRO COM ENTULHO OU MESMO LIXO; FORMIGUEIROS; OU ATÉ MESMO MÁ QUALIDADE DO SOLO DE OCORRÊNCIA LOCALIZADA;
- CLASSE DE AGRESSIVIDADE AMBIENTAL: III
 $f_{ck} > 30 \text{ MPa}$
 MÓDULO DE DEFORMAÇÃO TANGENTE INICIAL MÍNIMO: 30672.5 MPa
 CONSUMO MÍNIMO DE CIMENTO: 350kg/m³
 FATOR ÁGUA-CIMENTO MÁXIMO: 0,55
 CONTROLE DE EXECUÇÃO DA OBRA: RIGOROSO
 COBRIMENTO = 3,00 cm (LAJES);
 3,50 cm (VIGAS);
 3,50 cm (PILARES);
 4,50 cm (PILARES-TRECHO EM CONTATO COM O SOLO JUNTO AOS ELEMENTOS DE FUNDAÇÃO);
 4,50 cm (FUNDAÇÕES);
- A DEFORMAÇÃO FINAL DOS ELEMENTOS ESTRUTURAIS NÃO DEVERÁ ACONTECER ANTES DE SER ATINGIDO O MÓDULO DE ELASTICIDADE DO CONCRETO, CALCULADO EM FUNÇÃO DO f_{ck} DE PROJETO E AFERIDO ATRAVÉS DE ENSAIOS EM LABORATÓRIOS ESPECIALIZADOS (VER NBR 14931 E NBR 15696);
- DOBRAR FERRAGEM SEGUNDO OS RAIOS DE CURVATURA EXIGIDOS PELA NBR 6118;
- UTILIZAR DISPOSITIVOS DISTANCIADORES E ESPACADORES ("COÇADAS", "GATOS", ETC.) QUE GARANTAM OS COBRIMENTOS E POSICIONAMENTOS DAS ARMADURAS;
- AS ARMADURAS DEVERÃO ESTAR LIMPAS E ISENTAS DE QUALQUER SUBSTÂNCIA QUE PREJUDIQUEM SUA ADERÊNCIA AO CONCRETO, INCLUSIVE ESCAMAS DE OXIDAÇÃO;
- LIMPAR AS FORMAS E VEDAR TODAS AS JUNTAS ANTES DO LANÇAMENTO DO CONCRETO EM HIPÓTESE ALGUMA A CONCRETAGEM PODERÁ OCORRER SOBRE RASPA, PÓ, PEDACOS MADEIRA OU QUALQUER OUTRO CORPO ESTRANHO À ESTRUTURA;
- O RESUMO DE ARMADURA ACIMA NÃO INCLUI PERDAS;
- MODIFICAÇÕES NESTE PROJETO E SUA UTILIZAÇÃO EM OUTRA OBRA SUJEITARÃO OS RESPONSÁVEIS AS PENAS DA LEGISLAÇÃO VIGENTE.

ENG. CIVIL / PROJETISTA ESTRUTURAL		RNP	
SÉRGIO COSTA DE SOUZA		060624371-2	
CLIENTE	GEOPAC / PREF. MUN. DE PARACURU		DES. N.º
OBRA	ESTÁDIO MUNICIPAL DE PARACURU		01/11
TÍTULO	LOCAÇÃO - FUNDAÇÕES/PILARES BARICENTROS / NOTAS GERAIS		REV. N.º
			00
DATA	ESCALA	FCK	DESENHO
10/08/2015	Indicada	30 MPa	SCS
			VERIF.
			SCS

ACO	POS	BIT (mm)	QUANT	COMPRIMENTO			
				UNIT (cm)	TOTAL (cm)		
S1	(X8)	50	1	10	88	161	14168
		50	2	10	88	157	13816
S2	(X16)	50	1	10	11	186	2046
		50	2	10	13	152	1976
S3	(X16)	50	1	10	208	181	37648
		50	2	10	208	177	36816
S4	(X2)	50	1	10	24	201	4824
		50	2	10	28	162	4536
S5	(X8)	50	1	10	64	116	7424
		50	2	10	64	112	7168
S6	(X8)	50	1	10	8	151	1208
		50	2	10	10	112	1120

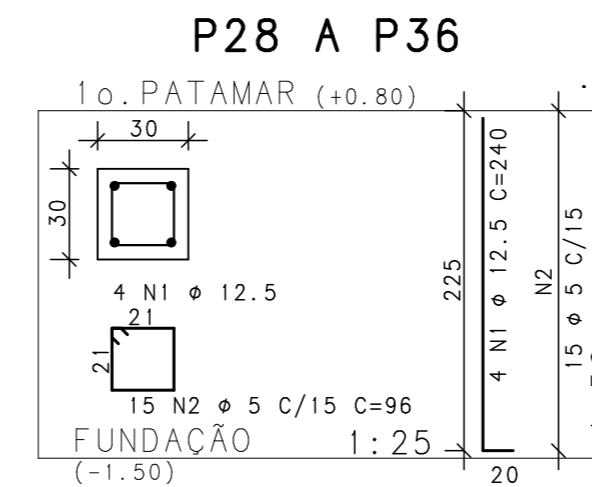
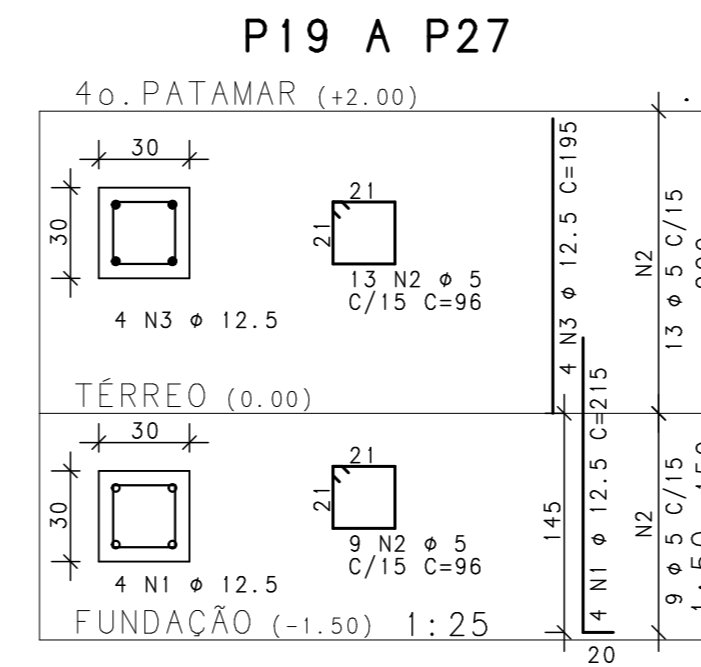
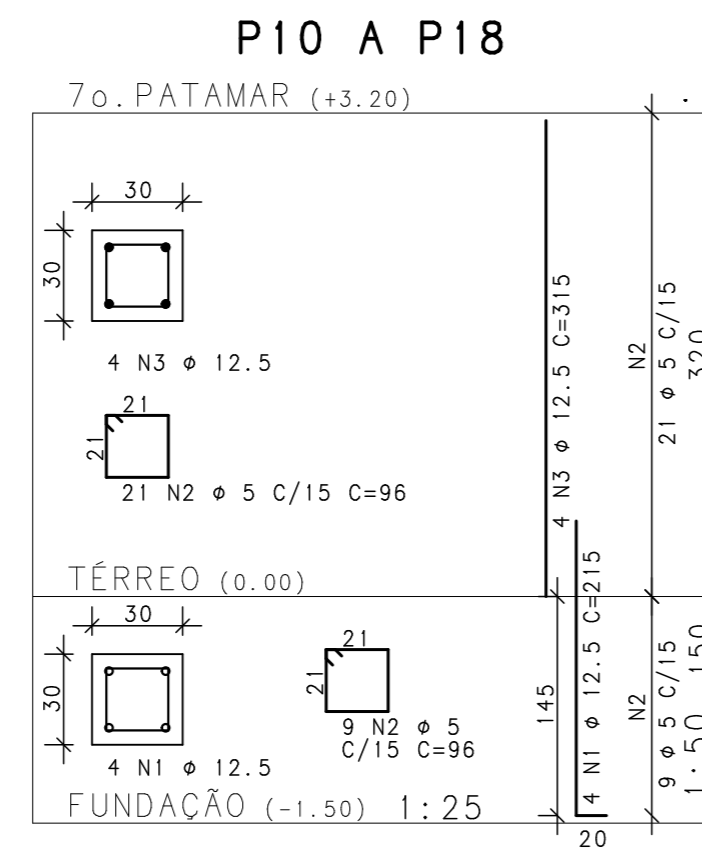
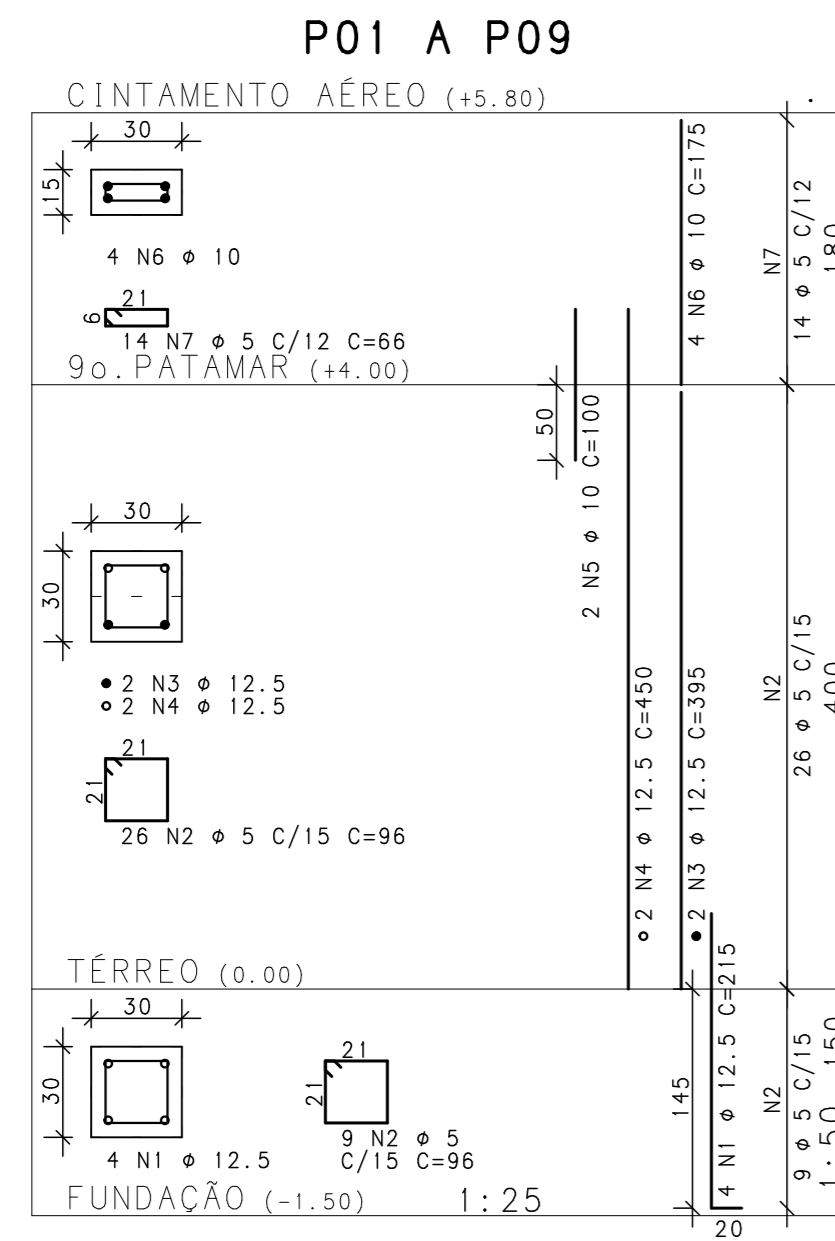
RESUMO ACO CA 50-60				
ACO	BIT (mm)	COMPR (m)	PESO (kg)	
50	10	1328	836	
Peso Total			50 =	836 kg



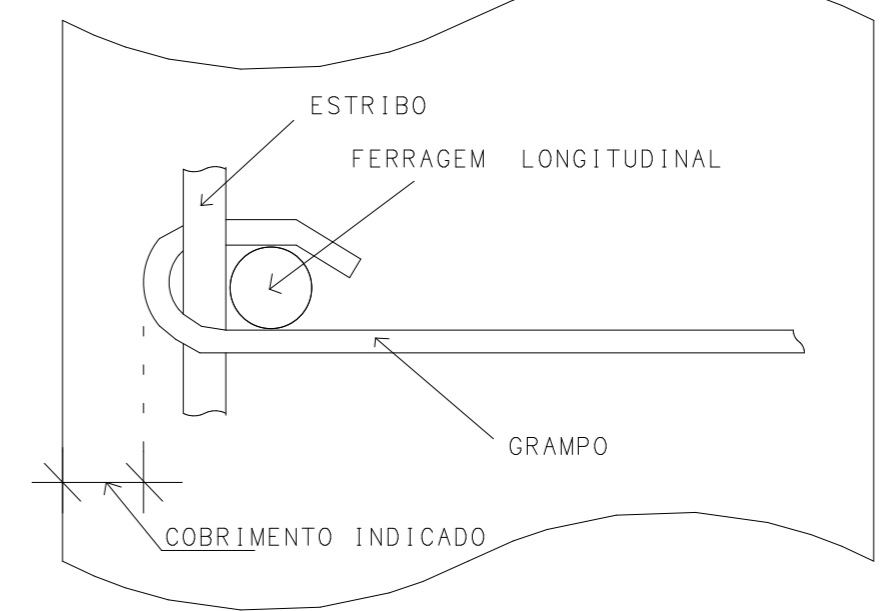
DIÂMETROS DE CURVATURA

Φ	8	10	12 ²	16	20	22 ²	25
db (mm)	4	5	6 ⁵	8	16	18	20

ENG. CIVIL / PROJETA ESTRUCTURAL				RNP	
SÉRGIO COSTA DE SOUZA				060624371-2	
CLIENTE				DES. N.º	
OBRAS				REV. N.º	
TÍTULO				02/11	
ELEMENTOS					
S1 / S2 / S3 / S4 / S5 / S6					
DATA				00	
10/08/2015	ESCALA	Indicada	FK	30 MPa	VERIF. SCS



DETALHE P/ FIXAÇÃO DE GRAMPOS
VISTA EM PLANTA



DIÂMETROS DE CURVATURA

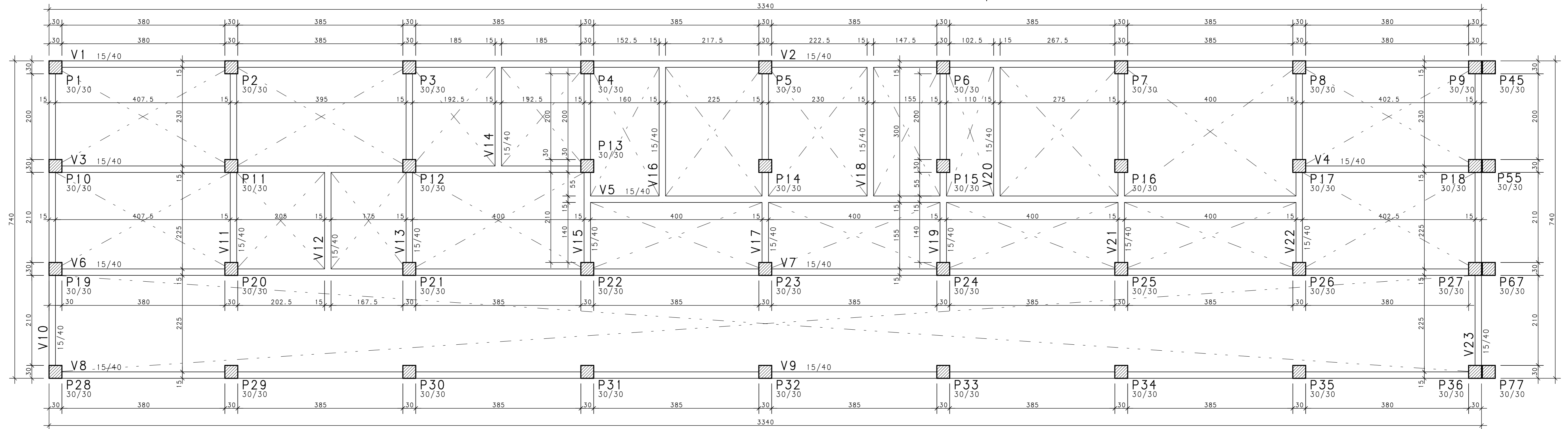
ϕ	8	10	12 ^a	16	20	22 ^a	25
db (mm)	4	5	6 ⁵	8	16	18	20

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
P01 A P09	(X9)	12.5	36	215	7740
		5	315	96	30240
		12.5	18	395	7110
		12.5	18	450	8100
		10	18	100	1800
		10	36	175	6300
		5	126	66	8316
P10 A P18	(X9)	12.5	36	215	7740
		5	270	96	25920
		12.5	36	315	11340
P19 A P27	(X9)	12.5	36	215	7740
		5	198	96	19008
		12.5	36	195	7620
P28 A P36	(X9)	12.5	36	240	8640
		5	135	96	12960

RESUMO AÇO CA 50-60

AÇO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	964	154
50	10	81	51
50	12.5	654	654
Peso Total		60	154 kg
Peso Total		50	705 kg

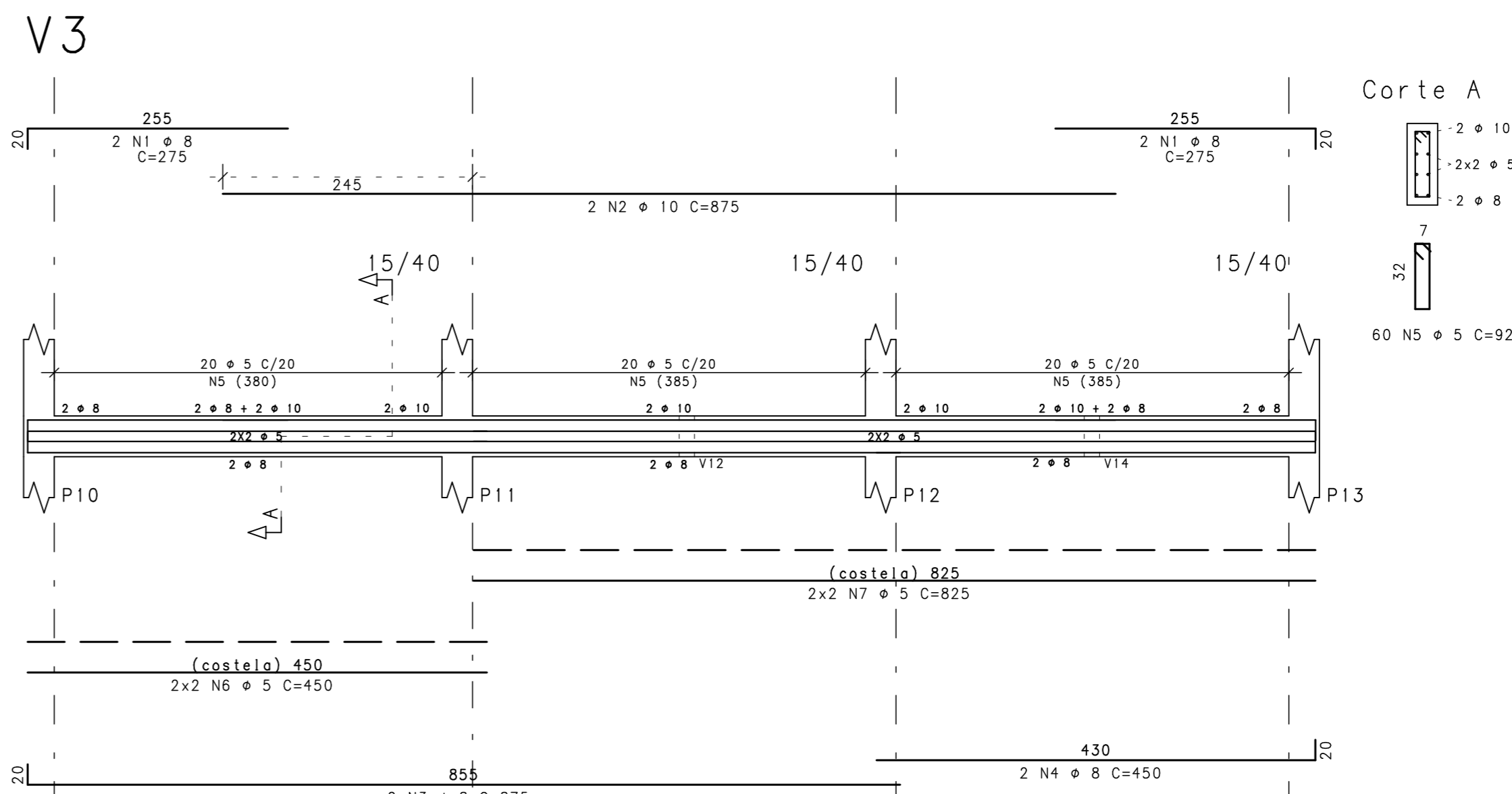
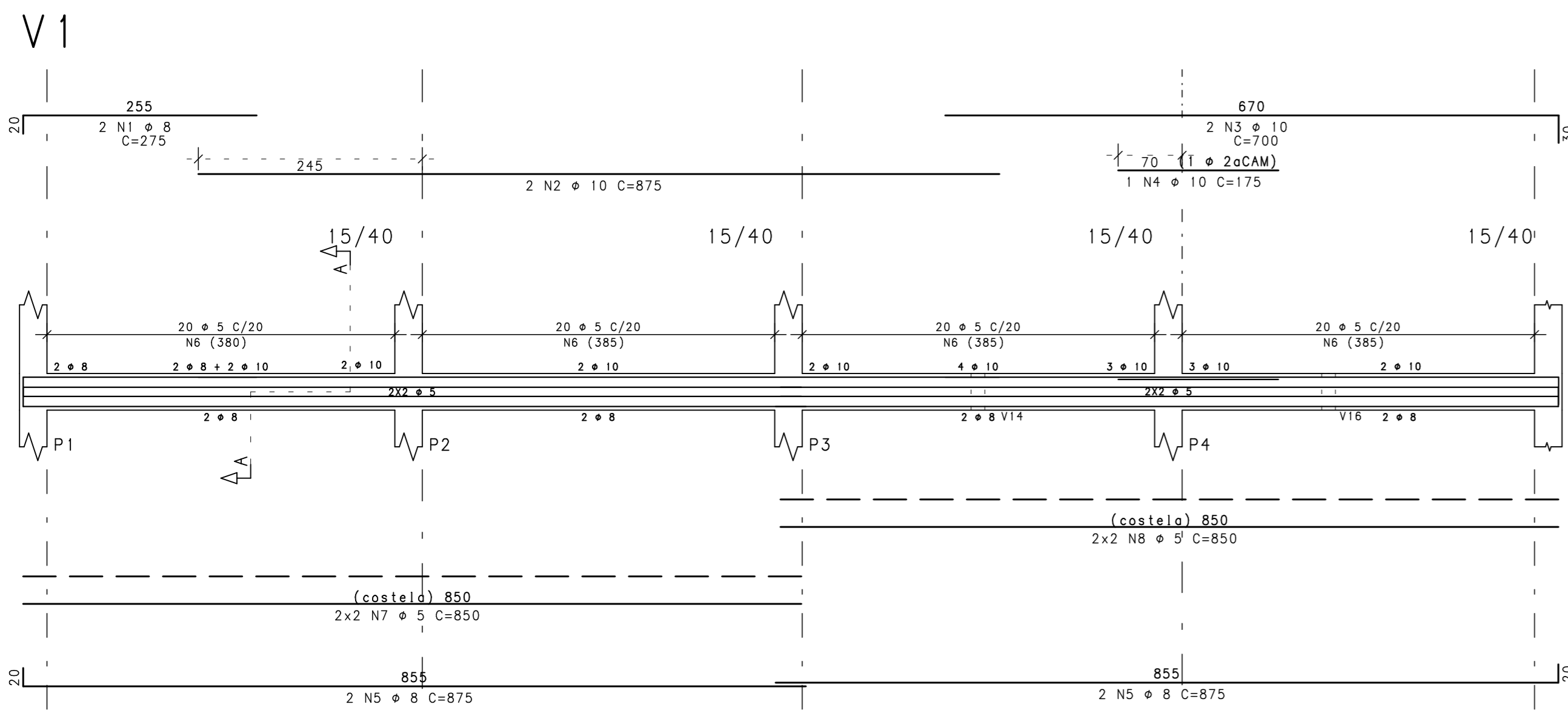
FÔRMA DO TÉRREO - SETOR 1
ESCALA 1/50



LEGENDA PILARES

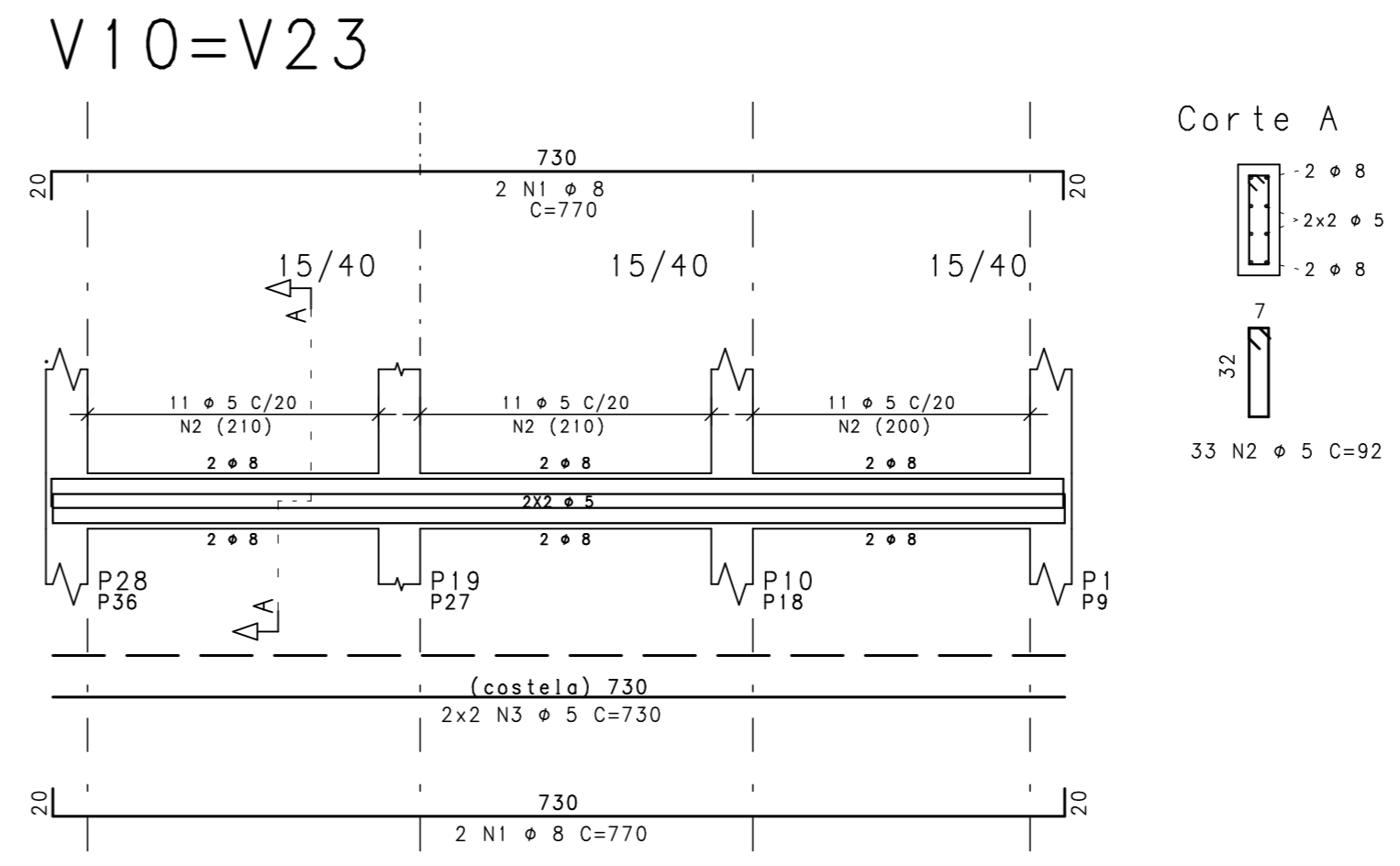
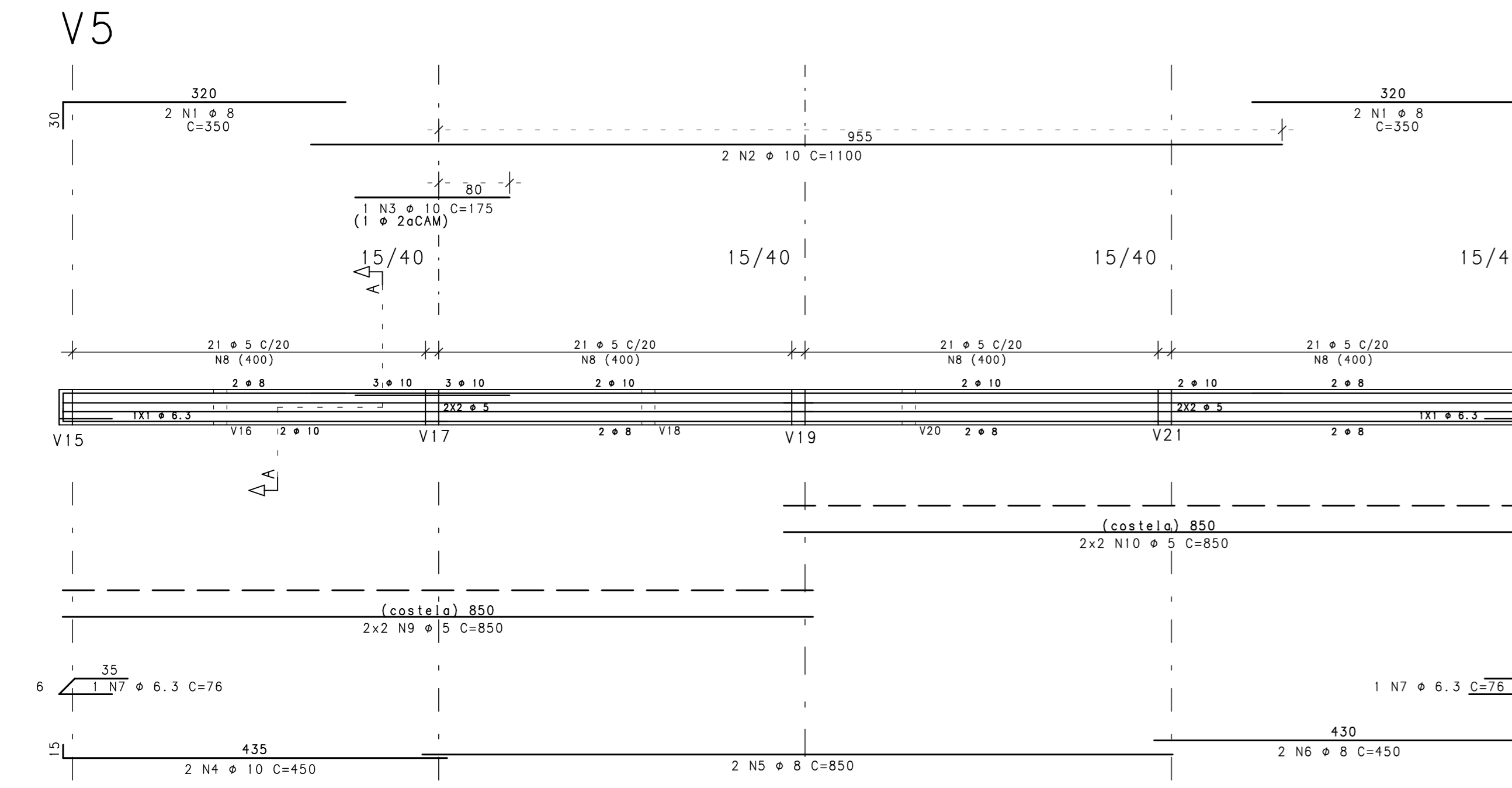
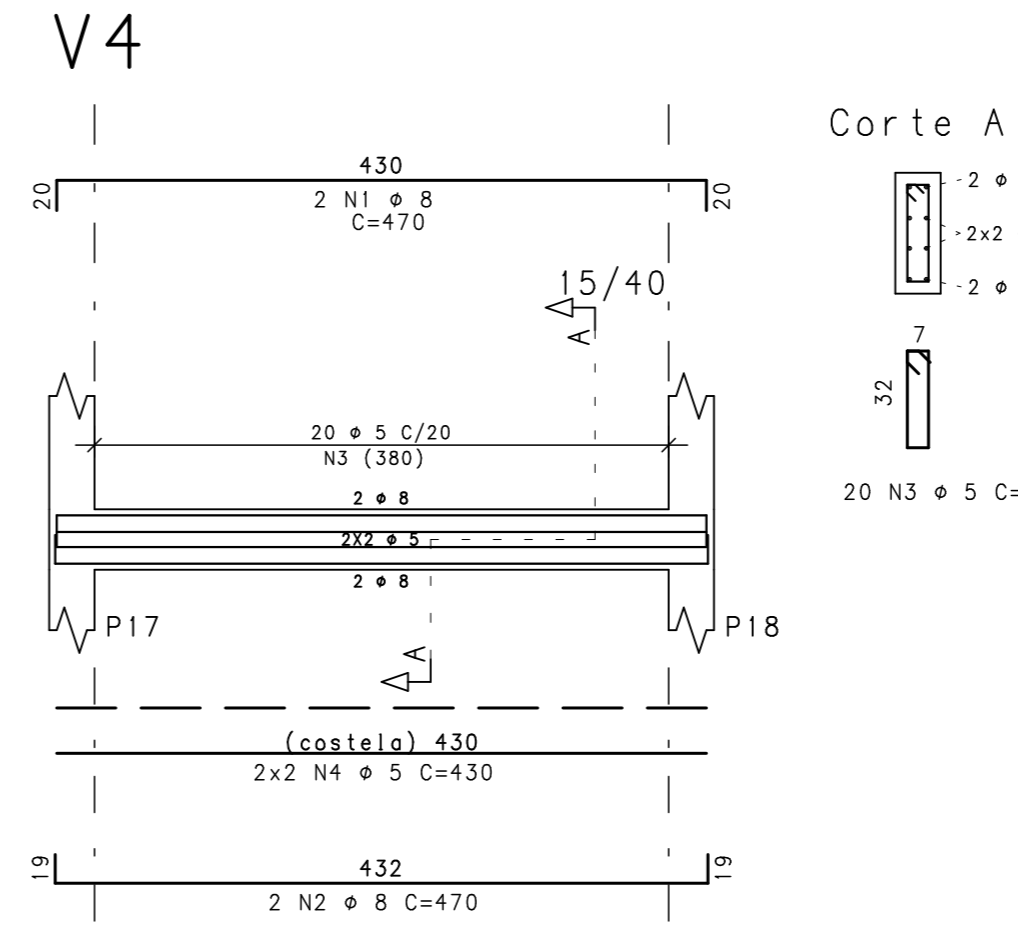
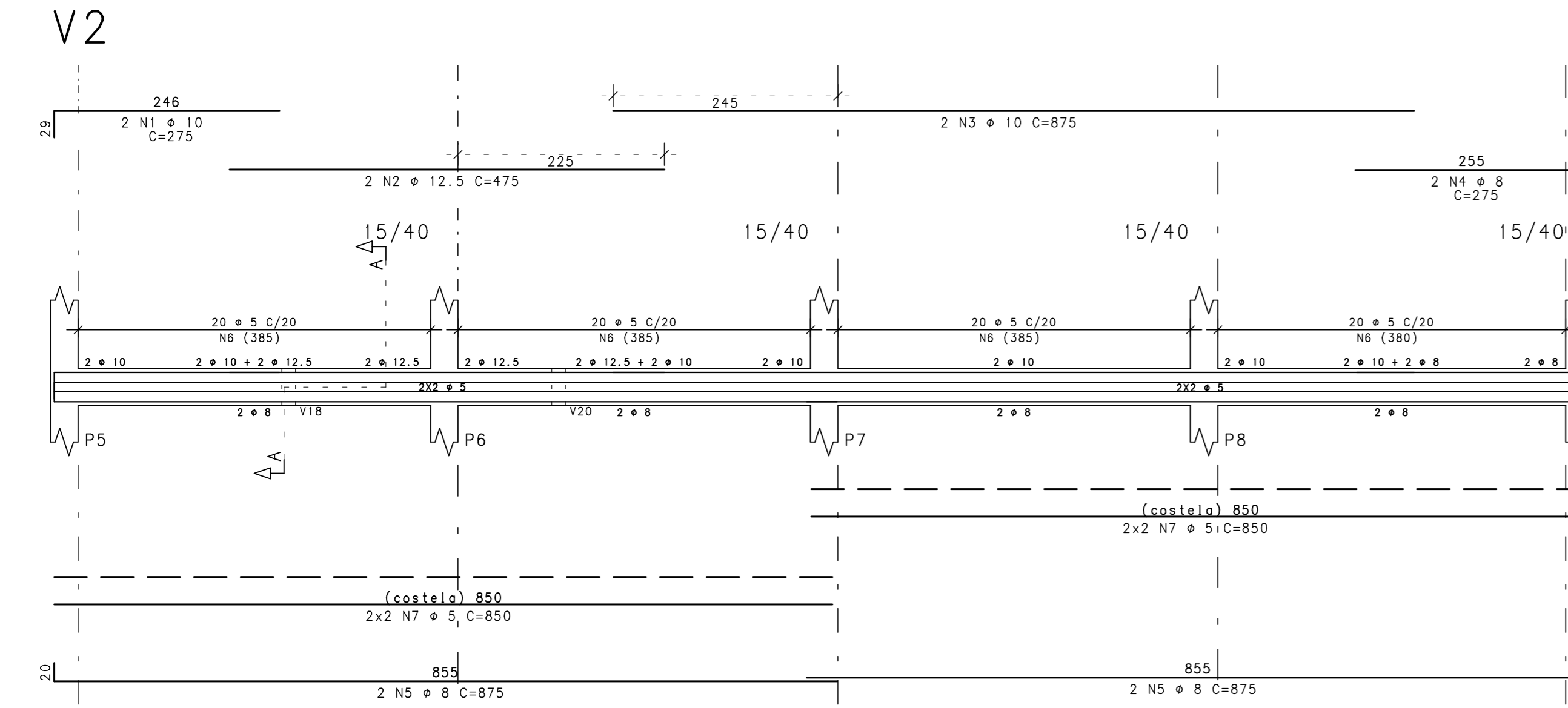
- MORRE
- CONTINUA
- NASCE

ENG. CIVIL / PROJETA ESTRUCTURAL		RNP	
SÉRGIO COSTA DE SOUZA		060624371-2	
CLIENTE	GEOPAC / PREF. MUN. DE PARACURU	DES. N.º	
OBRA	ESTÁDIO MUNICIPAL DE PARACURU		03/11
TÍTULO	TÉRREO - FÔRMA PILARES	REV. N.º	
ELEMENTOS	P1 A P9 / P10 A P18 P19 A P27 / P28 A P36		00
DATA	10/08/2015	ESCALA	1:50
FKK	30 MPa	DESENHO	SCS
		VERIF.	SCS



ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
V1					
50	1	8	2	275	550
50	2	10	2	875	1750
50	3	10	2	700	1400
50	4	10	1	175	175
50	5	8	4	875	3500
50	6	5	80	92	7360
60	7	5	4	850	3400
60	8	5	4	850	3400
V2					
50	1	10	2	275	550
50	2	12.5	2	475	950
50	3	10	2	875	1750
50	4	8	2	275	550
50	5	8	4	875	3500
60	6	5	80	92	7360
60	7	5	4	850	3400
60	8	5	4	850	3400
V3					
50	1	8	4	275	1100
50	2	10	2	875	1750
50	3	8	2	875	1750
50	4	8	2	450	900
60	5	5	60	92	5520
60	6	5	4	450	1800
60	7	5	4	825	3300
V4					
50	1	8	2	470	940
50	2	8	2	470	940
60	3	5	20	92	1840
60	4	5	4	430	1720
V5					
50	1	8	4	350	1400
50	2	10	2	1100	2200
50	3	10	1	175	175
50	4	10	2	450	900
50	5	8	2	850	1700
50	6	8	2	450	900
50	7	6.3	2	76	152
60	8	5	84	92	7728
60	9	5	4	850	3400
60	10	5	4	850	3400
V10=V23 (X2)					
50	1	8	8	770	6160
60	2	5	66	92	6072
60	3	5	8	730	5840

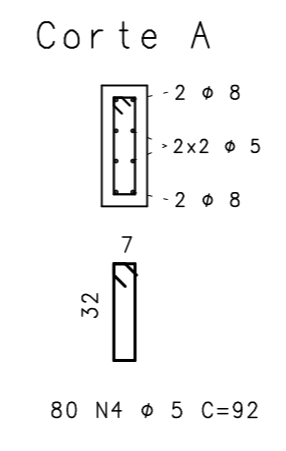
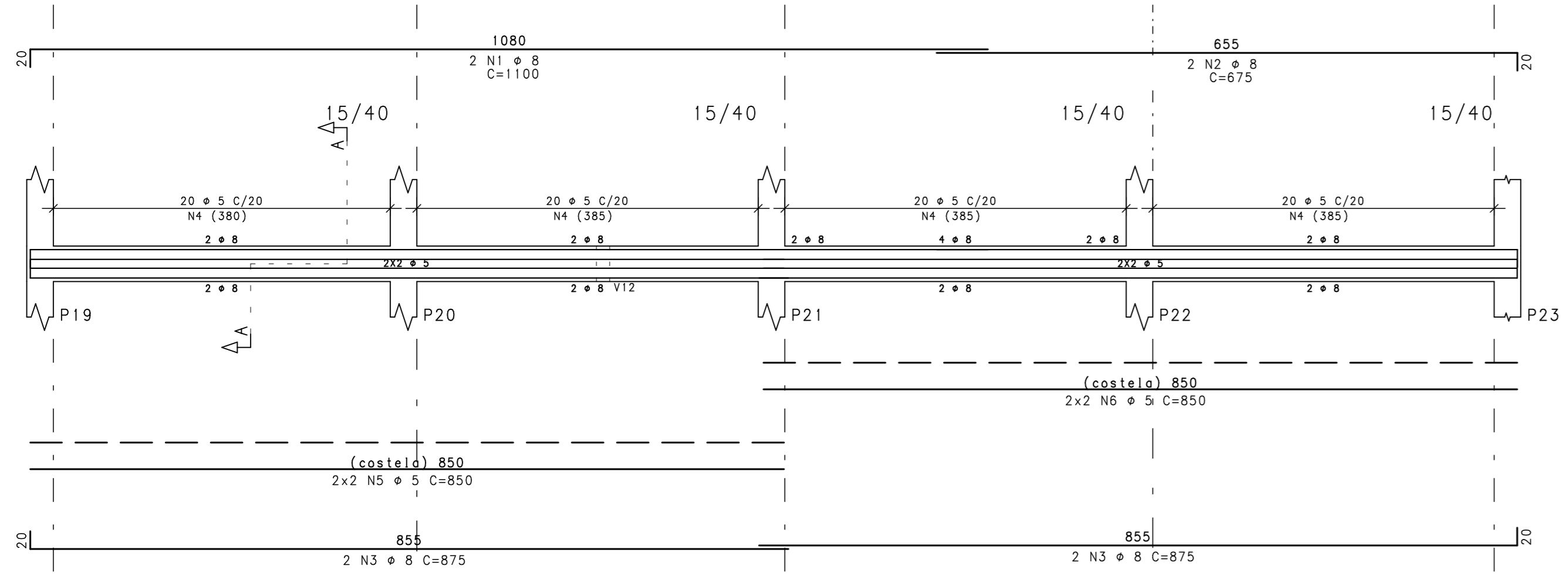
RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	689	110
50	6.3	2	0
50	8	239	96
50	10	107	67
50	12.5	10	10
Peso Total		60	110 kg
Peso Total		50	173 kg



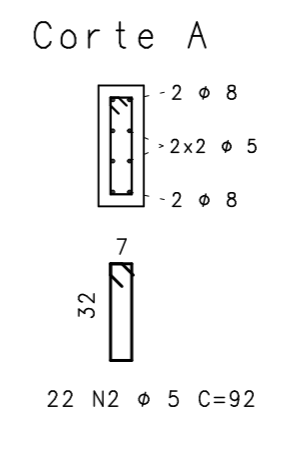
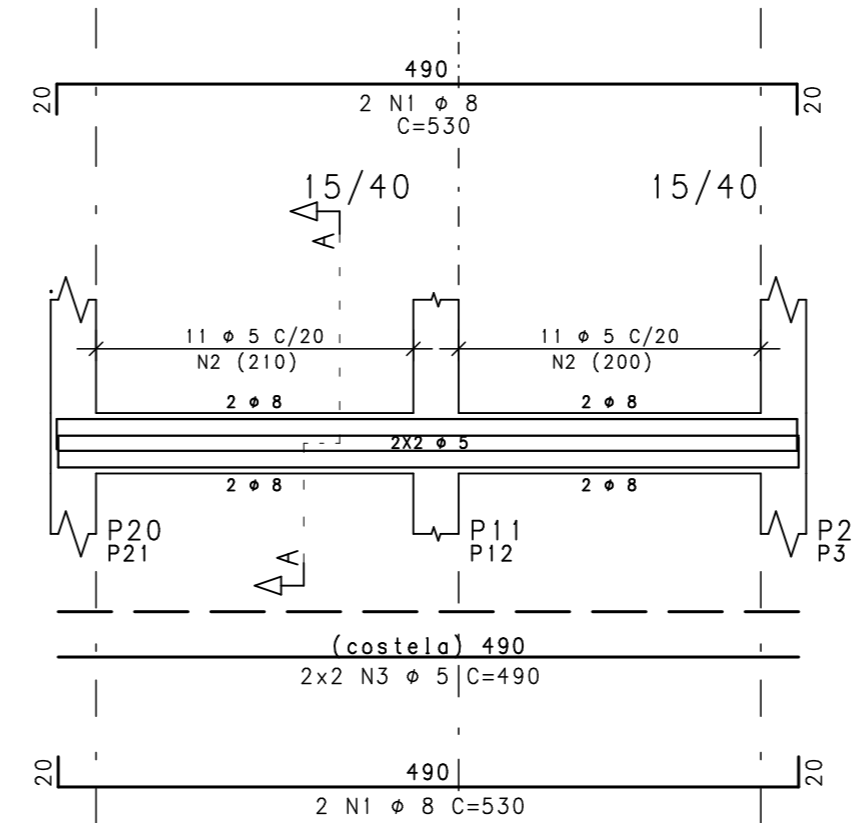
DIÂMETROS DE CURVATURA							
Ø	8	10	12.5	16	20	22.5	
db (mm)	4	5	6.5	8	1.6	1.8	2.0

ENG. CIVIL / PROJETA ESTRUCTURAL SÉRGIO COSTA DE SOUZA RNP: 060624371-2		DES. N.º 04/11
CLIENTE GEOPAC / PREF. MUN. DE PARACURU		REV. N.º 00
OBRA ESTÁDIO MUNICIPAL DE PARACURU		TÍTULO TÉRREO - VIGAS
ELEMENTOS V1 / V2 / V3 / V4 / V5 V10=V23		DATA 10/08/2015
ESCALA 1:50	FCK 30 MPa	DESENHO SCS
VERIF. SCS		

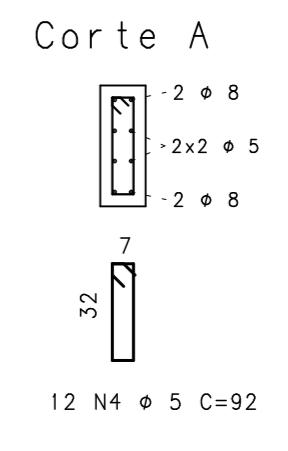
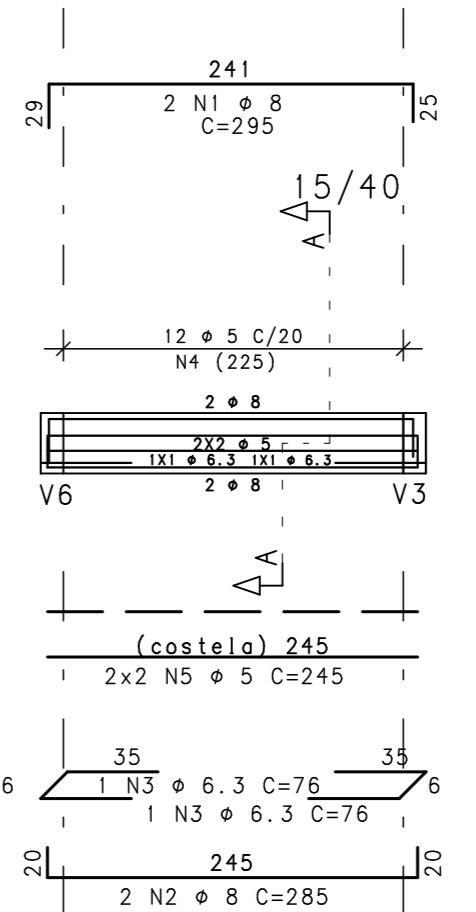
V6



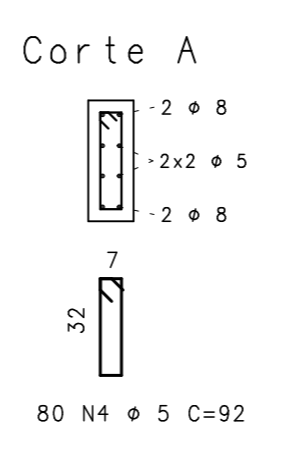
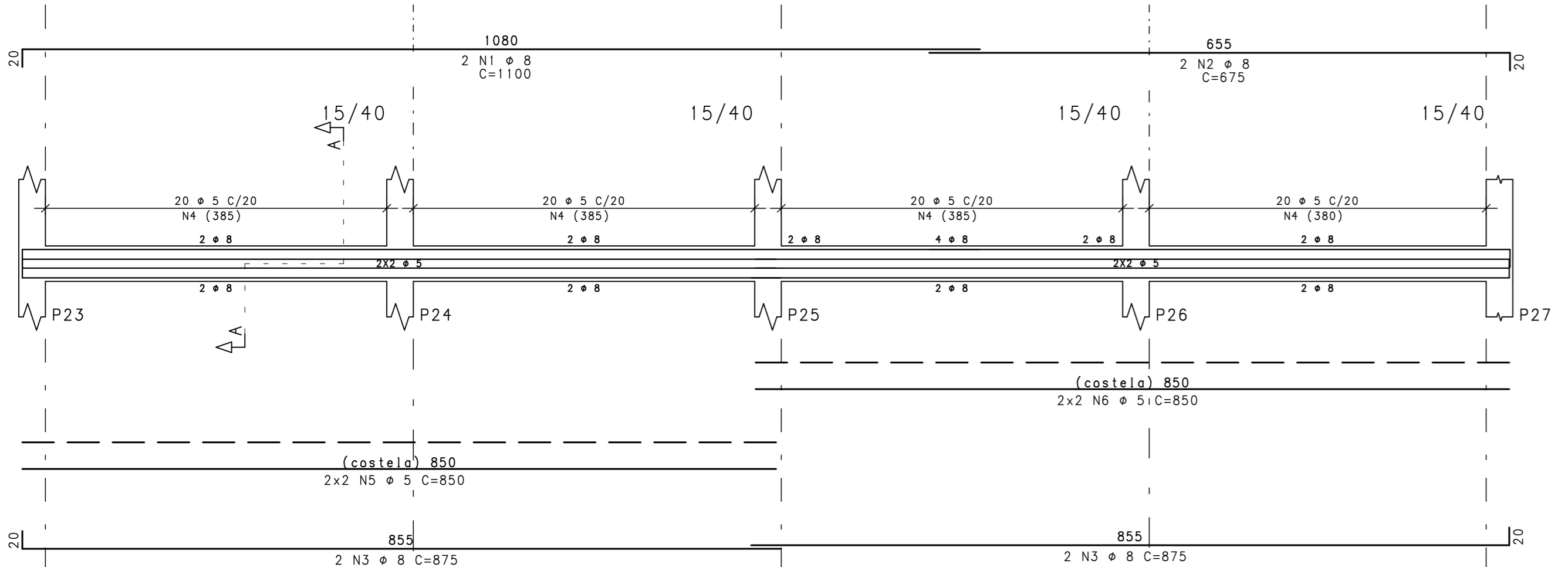
V11=V13



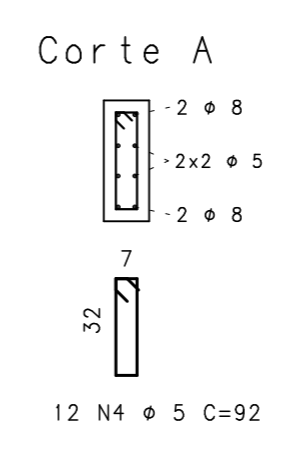
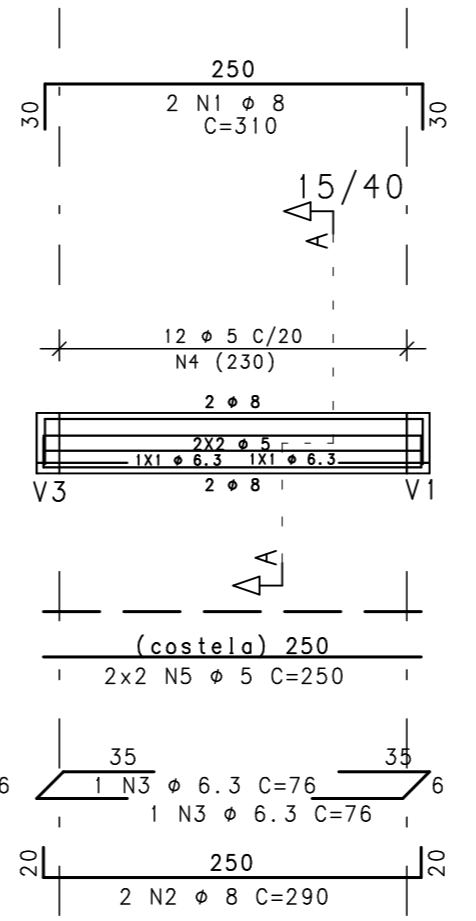
V12



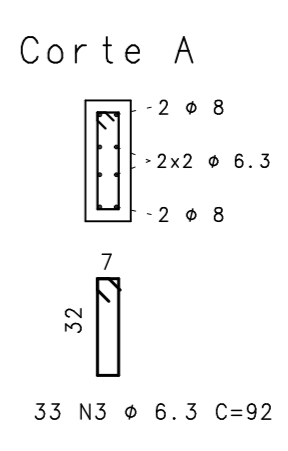
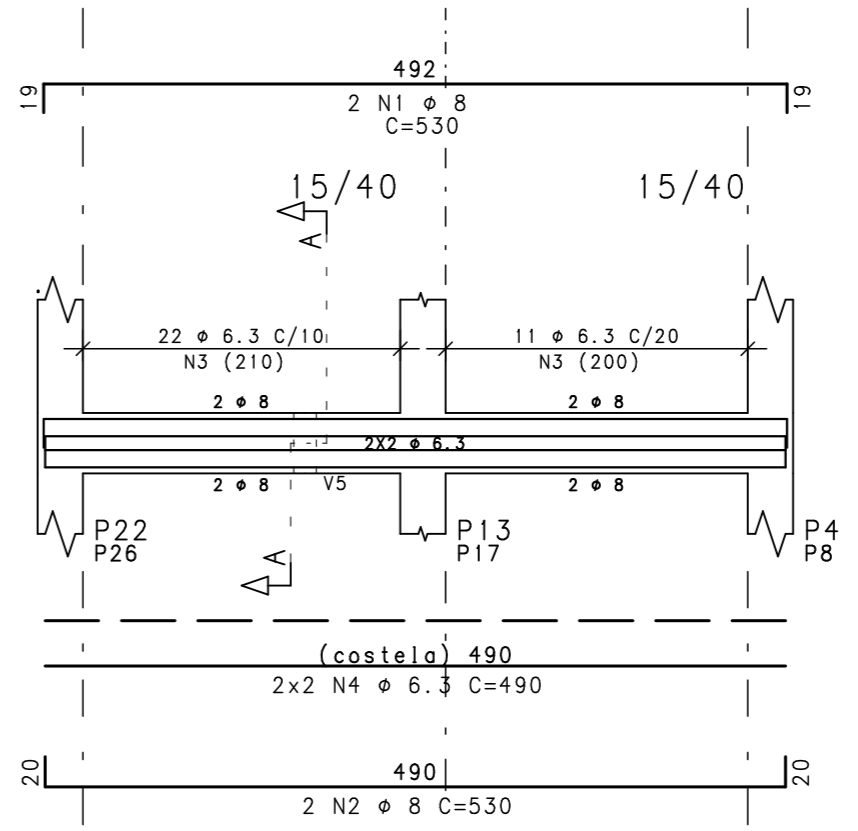
V7



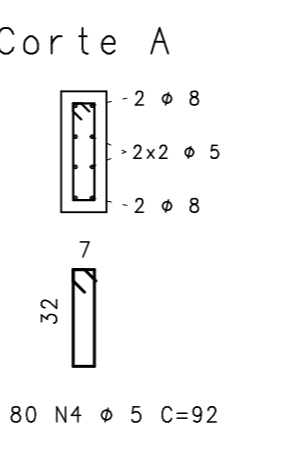
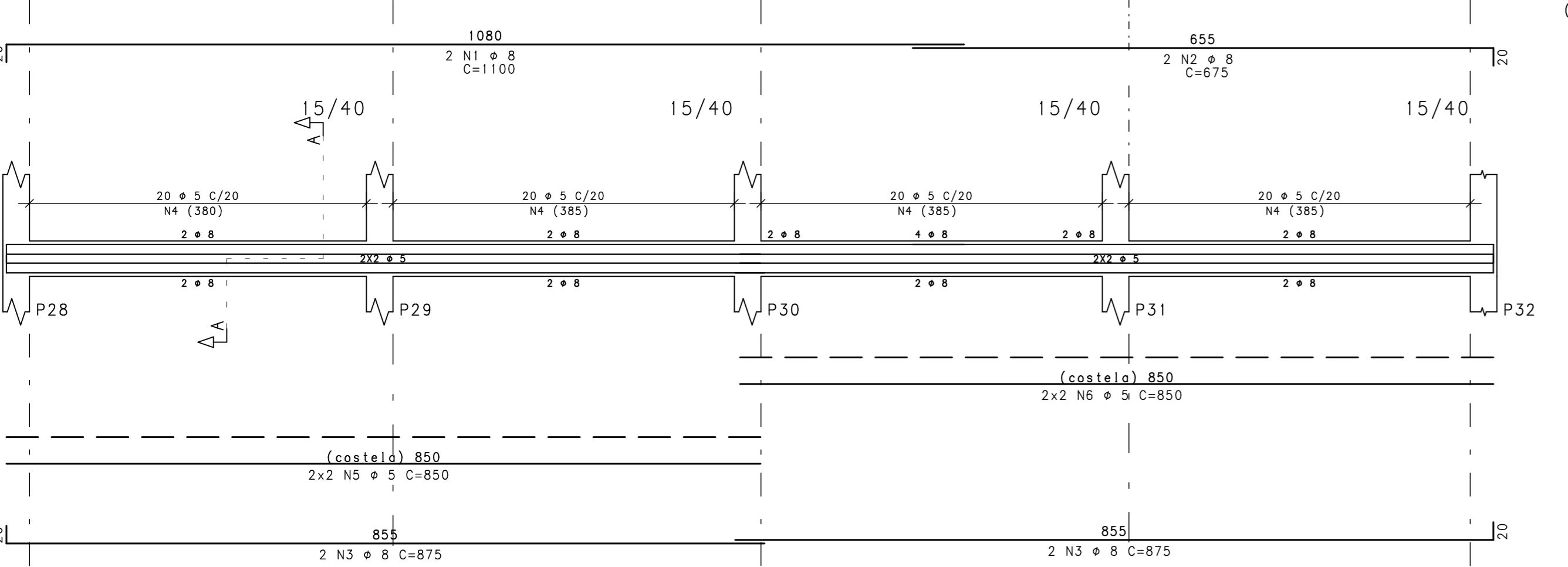
V14



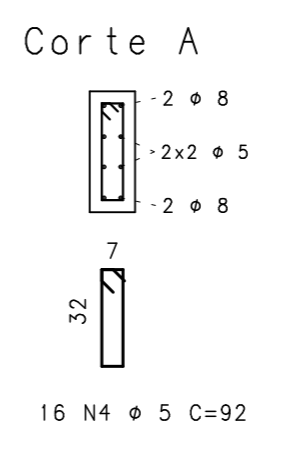
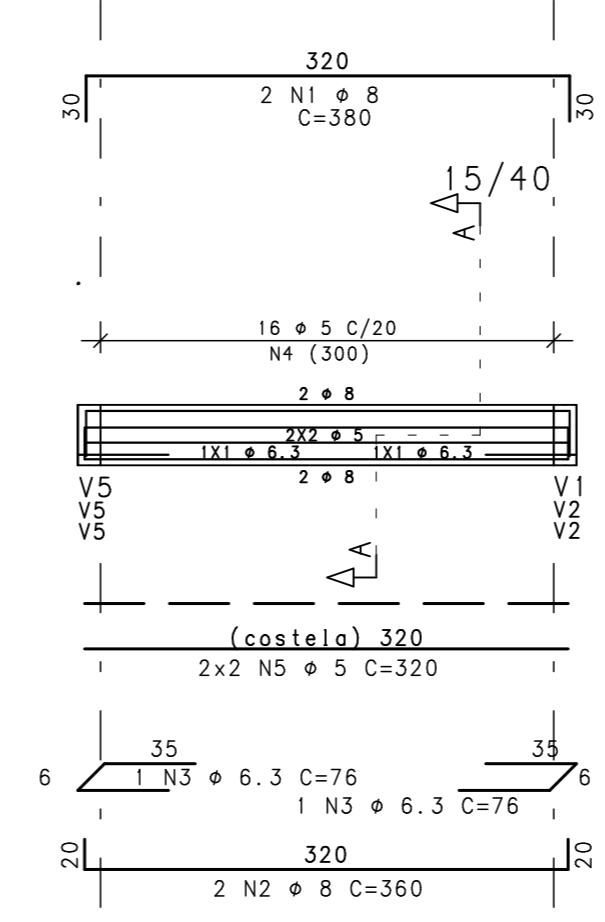
V15=V22



V8



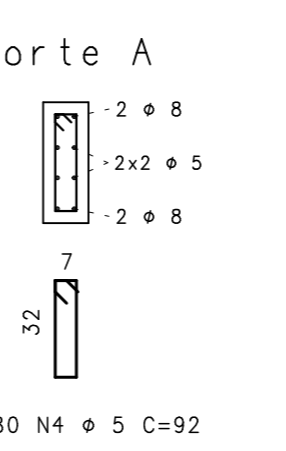
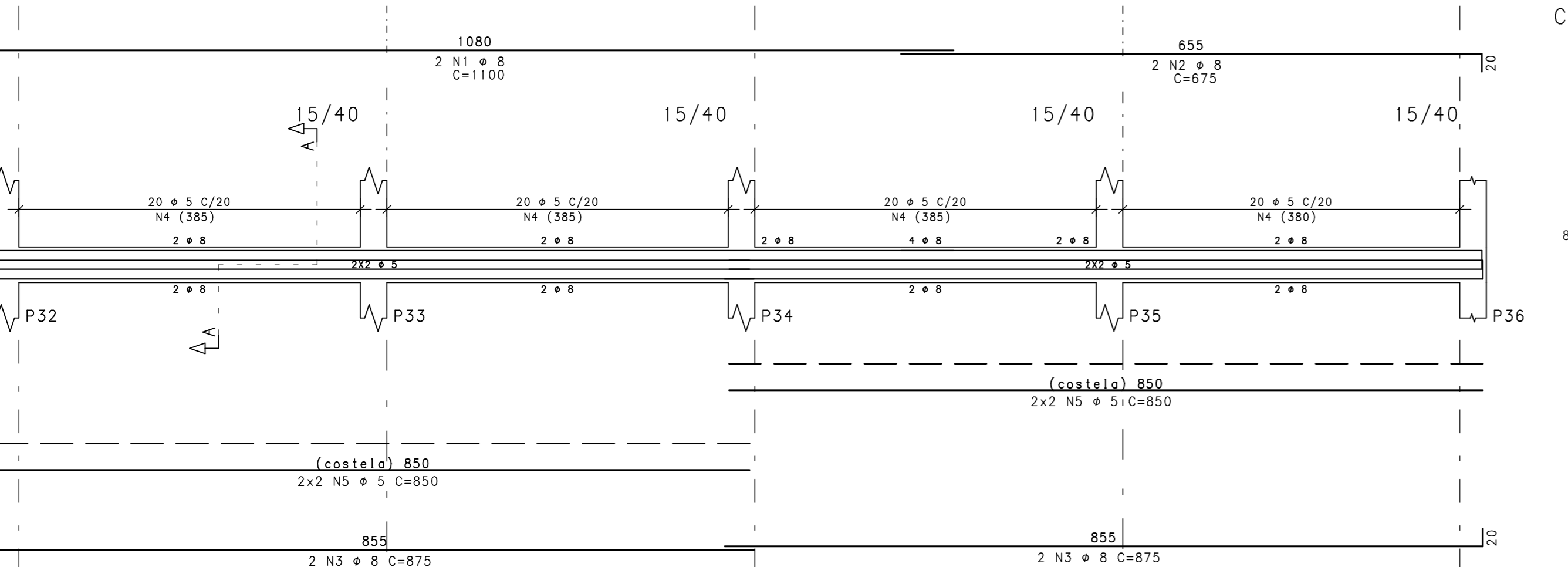
V16=V18=V20



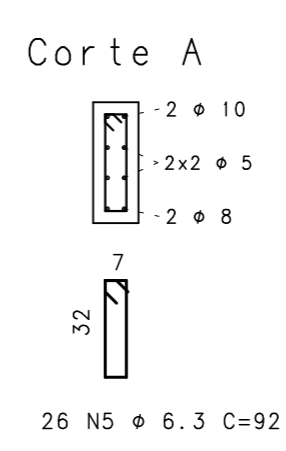
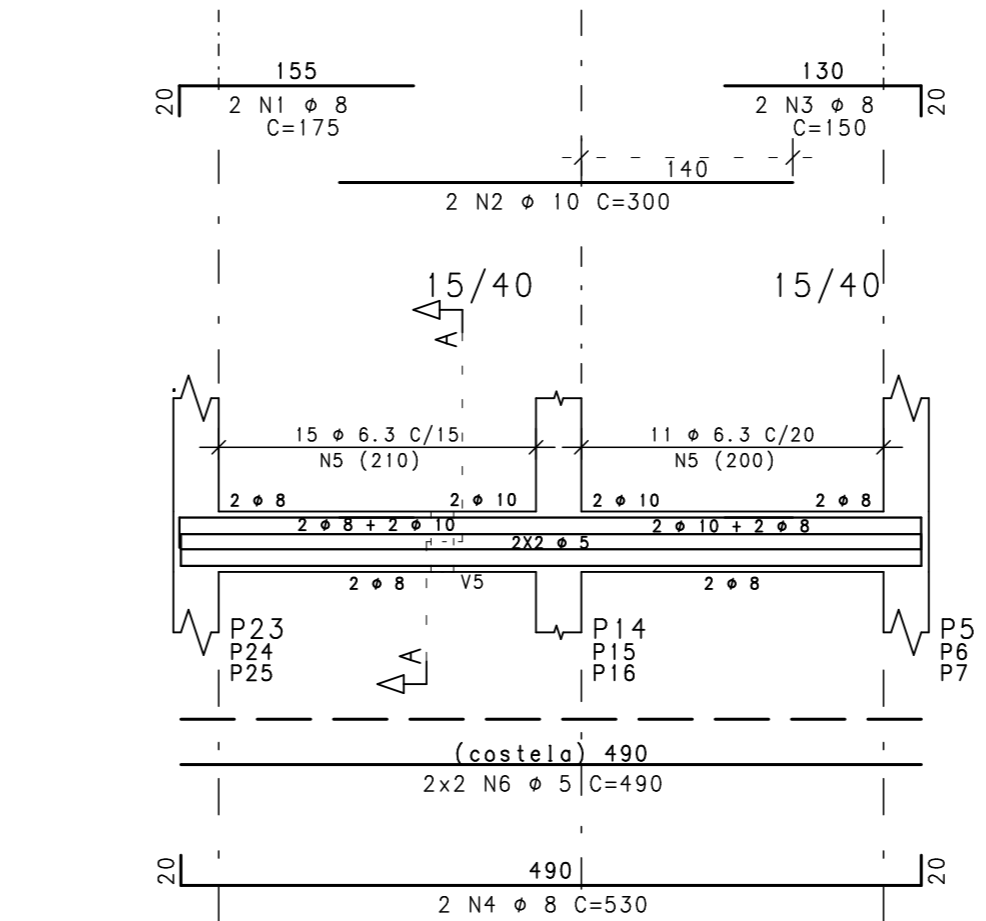
DIÂMETROS DE CURVATURA

φ	8	10	12.5	16	20	22.5	25
db (mm)	4	5	6.5	8	16	18	20

V9



V17=V19=V21



ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
V6					
50	1	8	2	1100	2200
50	2	8	2	675	1350
50	3	8	4	875	3500
60	4	5	80	92	7360
60	5	5	4	850	3400
60	6	5	4	850	3400
V7					
50	1	8	2	1100	2200
50	2	8	2	675	1350
50	3	8	4	875	3500
60	4	5	80	92	7360
60	5	5	4	850	3400
60	6	5	4	850	3400
V8					
50	1	8	2	1100	2200
50	2	8	2	675	1350
50	3	8	4	875	3500
60	4	5	80	92	7360
60	5	5	4	850	3400
60	6	5	4	850	3400
V9					
50	1	8	2	1100	2200
50	2	8	2	675	1350
50	3	8	4	875	3500
60	4	5	80	92	7360
60	5	5	4	850	3400
60	6	5	4	850	3400
V11=V13 (X2)					
50	1	8	8	530	4240
60	2	5	44	92	4048
60	3	5	8	490	3920
V12					
50	1	8	2	295	590
50	2	8	2	285	570
50	3	6.3	2	76	152
60	4	5	12	92	1104
60	5	5	4	245	980
V14					
50	1	8	2	310	620
50	2	8	2	290	580
50	3	6.3	2	76	152
60	4	5	12	92	1104
60	5	5	4	250	1000
V15=V22 (X2)					
50	1	8	4	530	2120
50	2	8	4	530	2120
50	3	6.3	66	92	6072
50	4	6.3	8	490	3920
V16=V18=V20 (X3)					
50	1	8	6	380	2280
50	2	8	6	360	2160
50	3	6.3	6	76	456
60	4	5	48	92	4416
60	5	5	12	320	3840
V17=V19=V21 (X3)					
50	1	8	6	175	1050
50	2	10	6	300	1800
50	3	8	6	150	900
50	4	8	6	530	3180
50	5	6.3	78	92	7176
60	6	5	12	490	5880

RESUMO AÇO CA 50-60

ACO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	829	133
50	6.3	179	45
50	8	486	194
50	10	1.8	11
Peso Total 60 =			133 kg
Peso Total 50 =			251 kg

ENG. CIVIL / PROJETA ESTRUCTURAL

SÉRGIO COSTA DE SOUZA RNP: **060624371-2**

CLIENTE: **GEOPAC / PREF. MUN. DE PARACURU** DES. N.º

OBRA: **ESTÁDIO MUNICIPAL DE PARACURU** 05/11

TÍTULO: **TÉRREO - VIGAS**

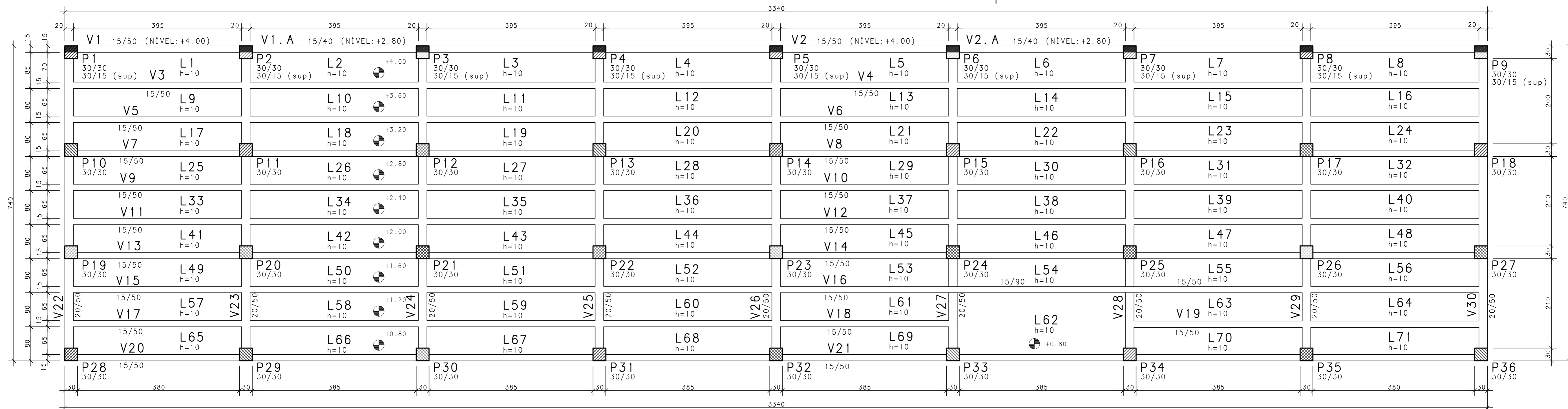
ELEMENTOS: **V6 / V7 / V8 / V9**
V11=V13 / V12 / V14
V15=V22 / V16=V18=V20
V17=V19=V21

DATA: 10/08/2015 ESCALA: 1:50 FCK: 30 MPa DESENHO: SCS VERIF: SCS

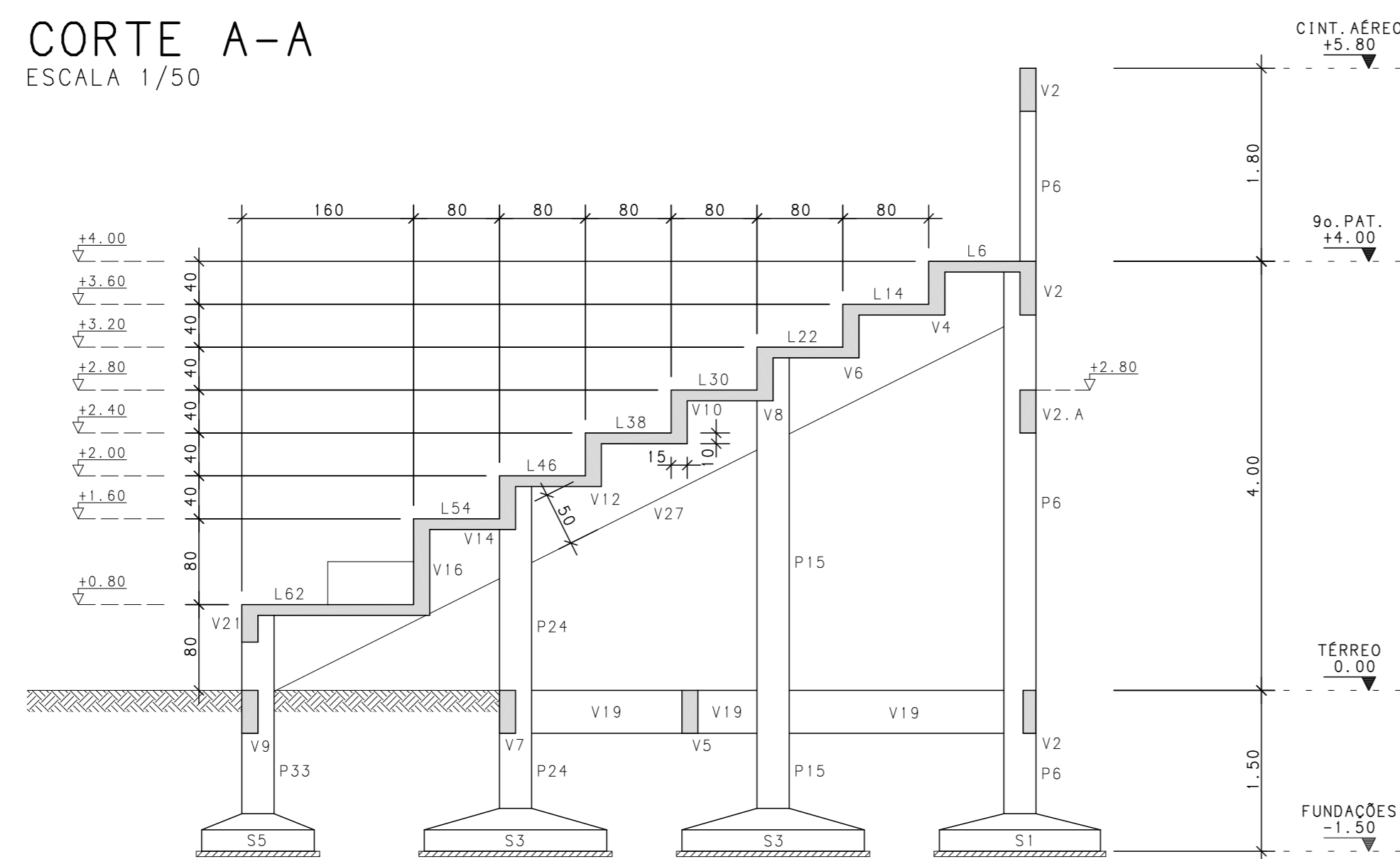
REV. N.º: **00**

FÔRMA DA ARQUIBANCADA - SETOR 1

ESCALA 1/50

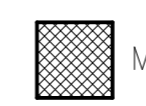
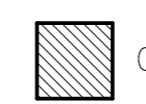
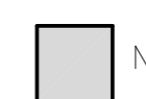


CORTE A-A
ESCALA 1/50



C.F. = CONTRA FLECHA NO MEIO DO VÃO
C.F. = 1,00cm ONDE NÃO INDICADO

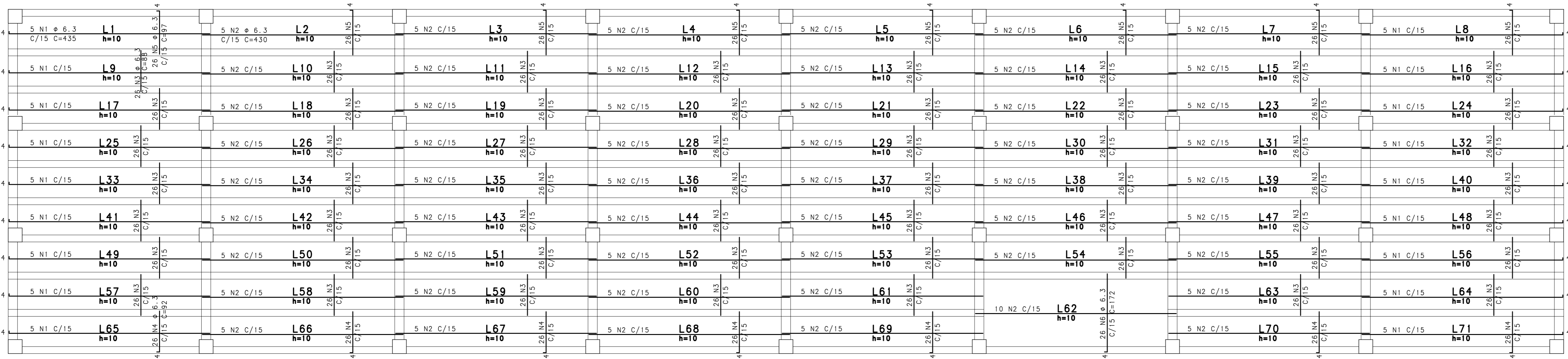
LEGENDA PILARES

-  MORRE
-  CONTINUA
-  NASCE

ENG. CIVIL / PROJETA ESTRUCTURAL		RNP	
SÉRGIO COSTA DE SOUZA		060624371-2	
CLIENTE	GEOPAC / PREF. MUN. DE PARACURU		DES. N.º
OBRAS	ESTÁDIO MUNICIPAL DE PARACURU		06/11
TÍTULO	ARQUIBANCADA - FÔRMA		REV. N.º
	CORTE A-A		00
DATA	ESCALA	FK	DESENHO
10/08/2015	1:50	30 MPa	SCS
			VERIF.
			SCS

ARM. POSITIVA DA ARQUIBANCADA - SETOR 1

ESCALA 1/50

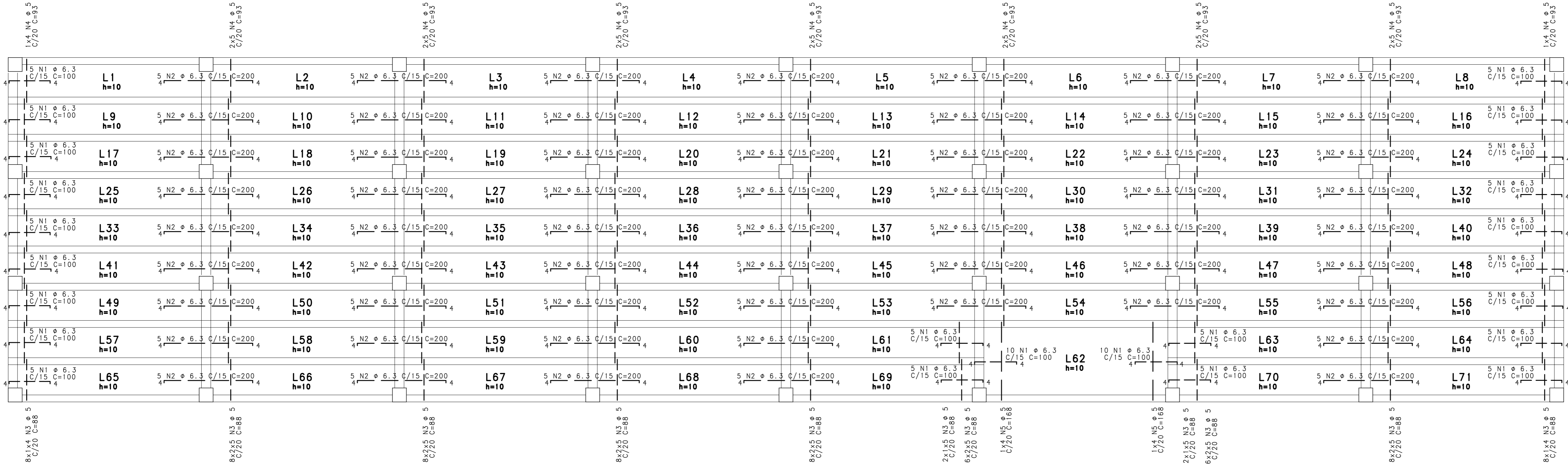


ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
ARM. NEG. DA ARQUIBANCADA - SETOR 1					
50	1	6.3	130	100	13000
50	2	6.3	295	200	59000
60	3	5	604	88	53152
60	4	5	78	93	7254
60	5	5	8	168	1344
ARM. POSITIVA DA ARQUIBANCADA - SETOR 1					
50	1	6.3	90	435	39150
50	2	6.3	270	430	116100
50	3	6.3	1430	88	125840
50	4	6.3	182	92	16744
50	5	6.3	208	97	20176
50	6	6.3	26	172	4472

RESUMO AÇO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	618	99
50	6.3	3945	986
Peso Total		60 =	99 kg
Peso Total		50 =	986 kg

ARM. NEG. DA ARQUIBANCADA - SETOR 1

ESCALA 1/50

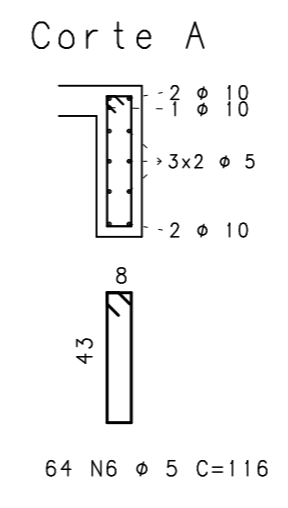
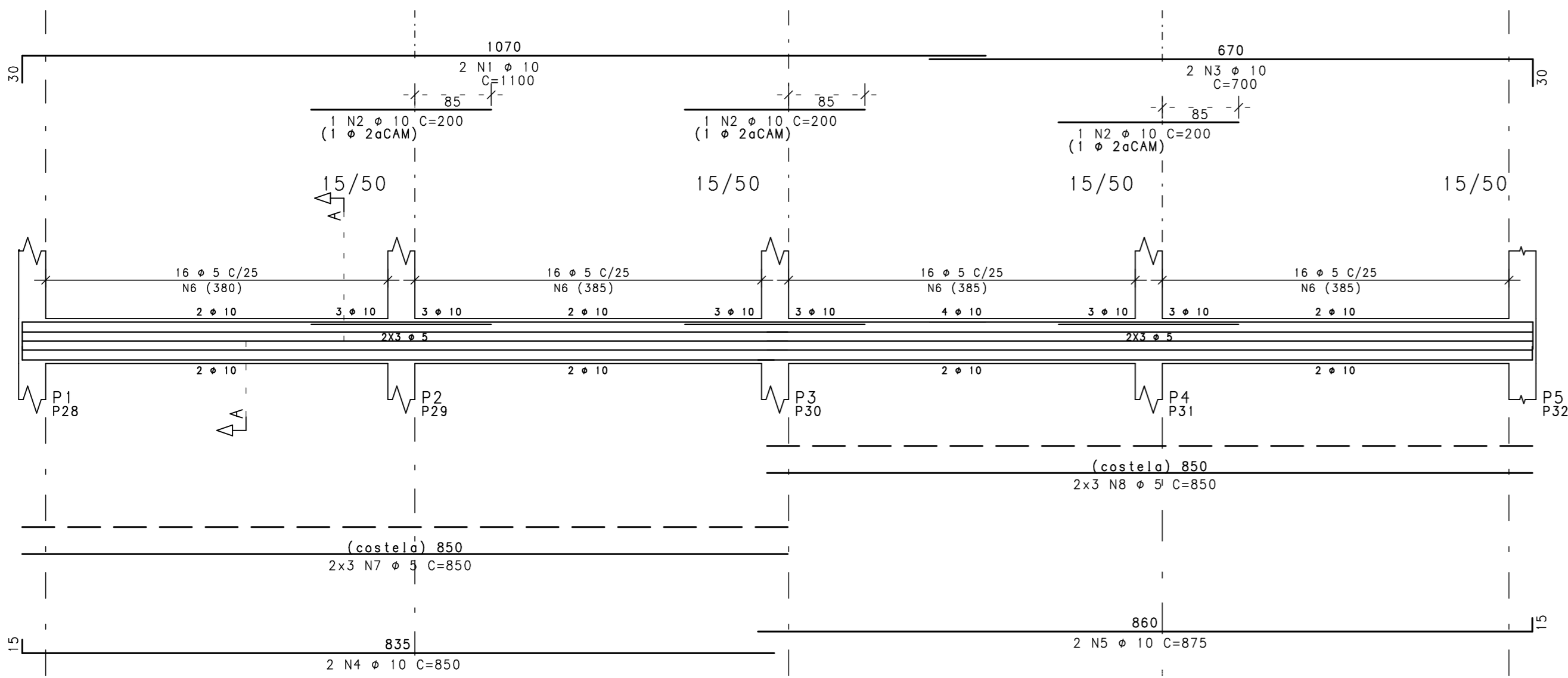


DIÂMETROS DE CURVATURA

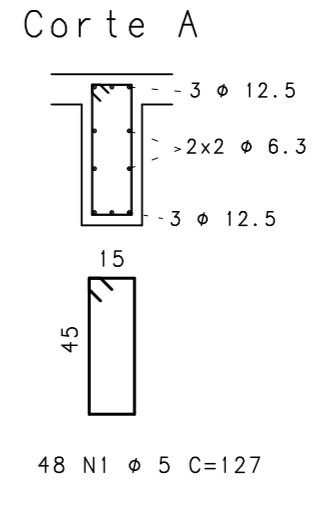
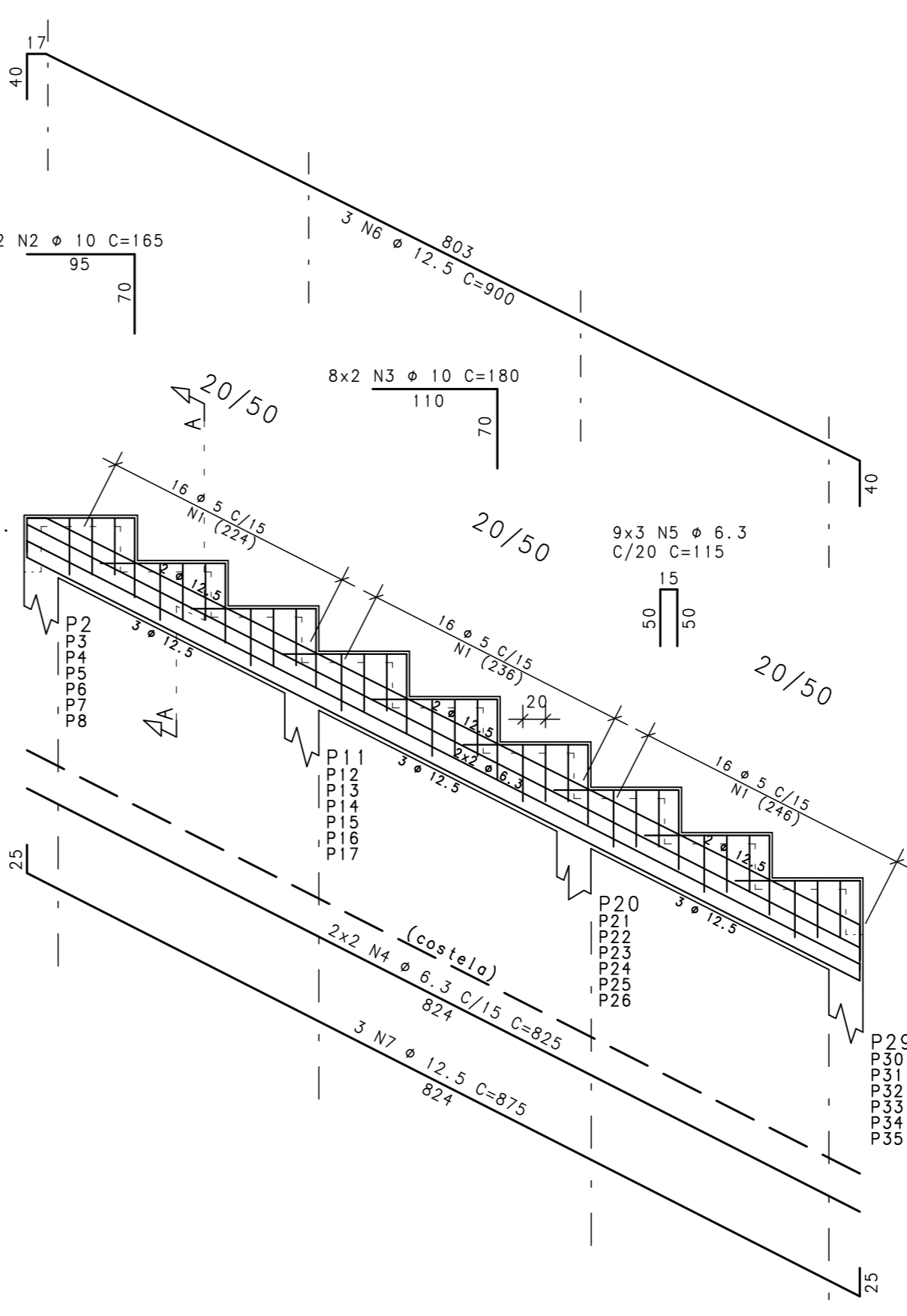
φ	8	10	12*	16	20	22*	25
db (mm)	4	5	6.5	8	16	18	20

ENG. CIVIL / PROJETA ESTRUCTURAL SÉRGIO COSTA DE SOUZA		RNP 060624371-2
CLIENTE GEOPAC / PREF. MUN. DE PARACURU		DES. N.º 07/11
OBRA ESTÁDIO MUNICIPAL DE PARACURU		REV. N.º 00
TÍTULO ARQUIBANCADA - ARM. POS. LAJES ARQUIBANCADA - ARM. NEG. LAJES		
DATA 10/08/2015	ESCALA 1:50	FOR 30 MPa
DESENHO SCS	VERIF. SCS	

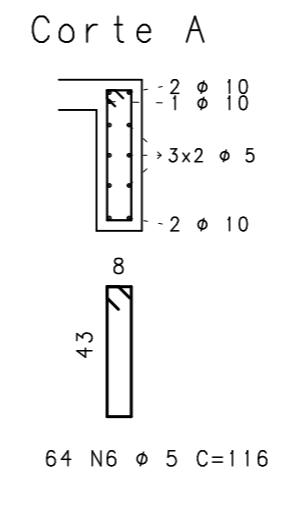
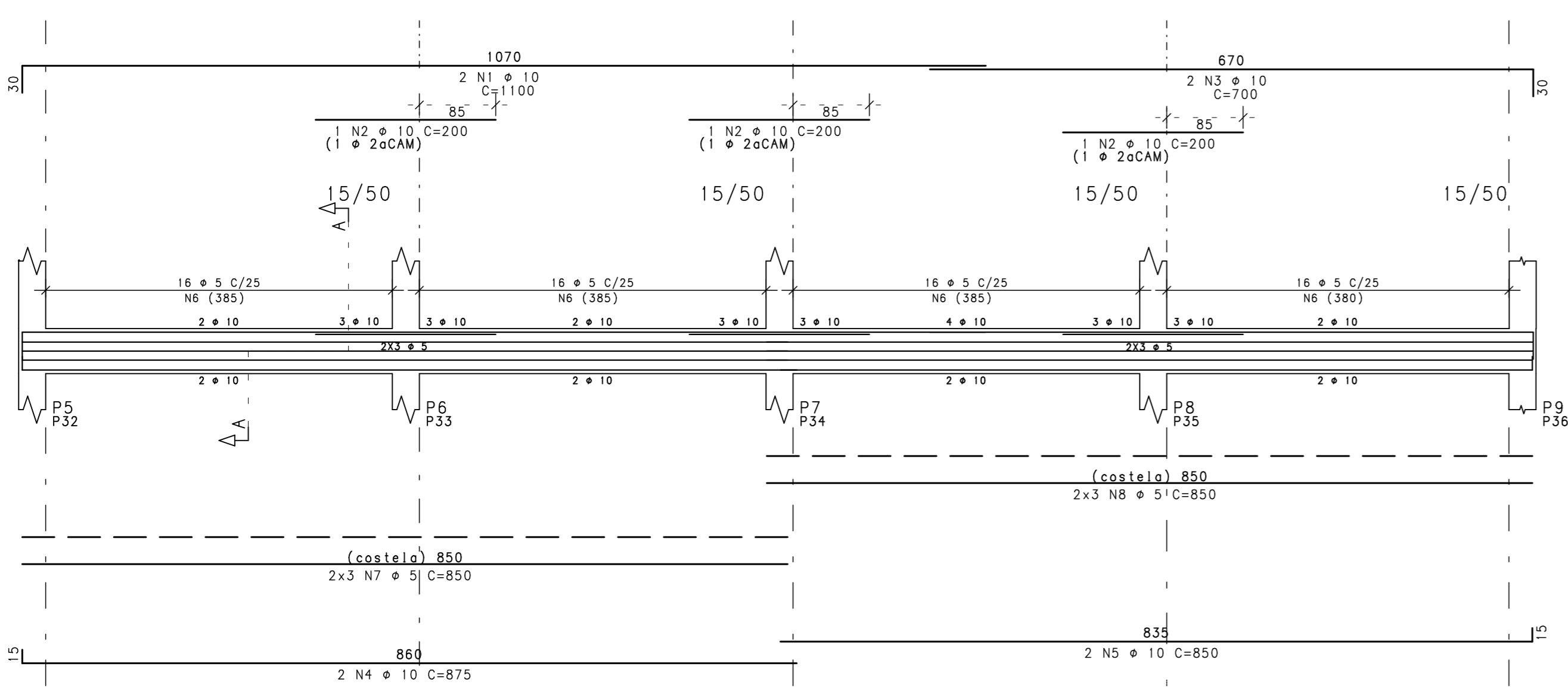
V1=V20



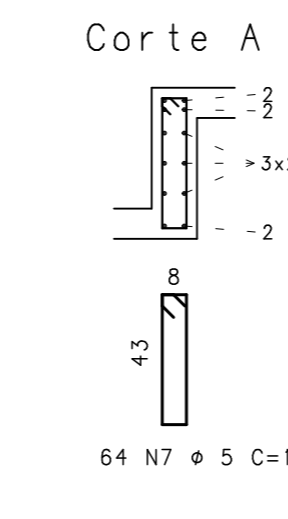
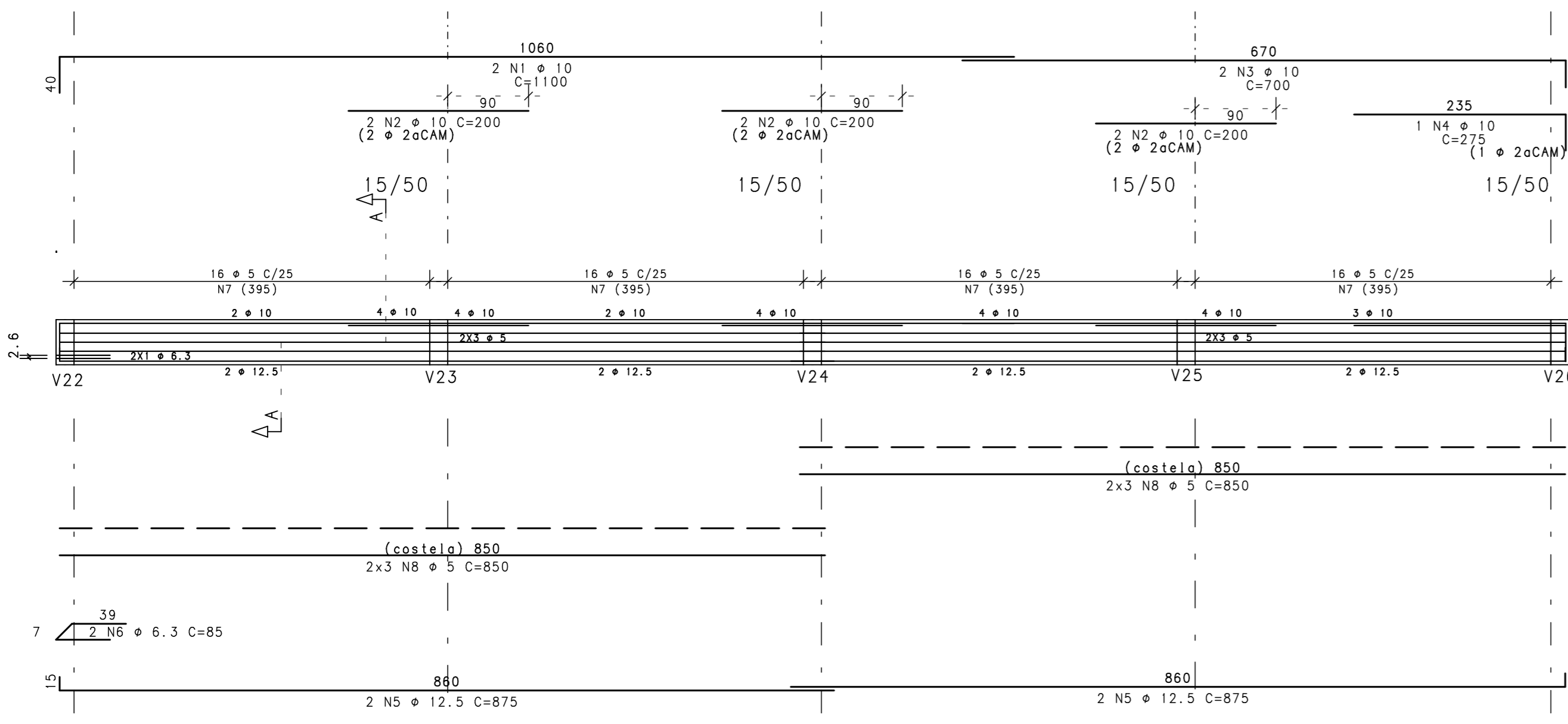
V23 A V29



V2=V21



V3=V5=V9=V11=V15=V17



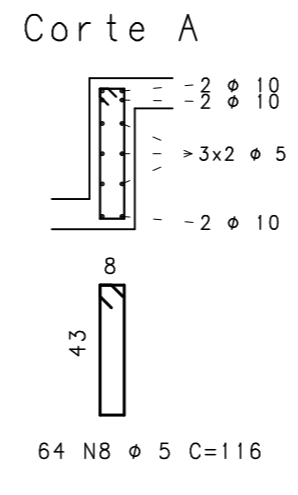
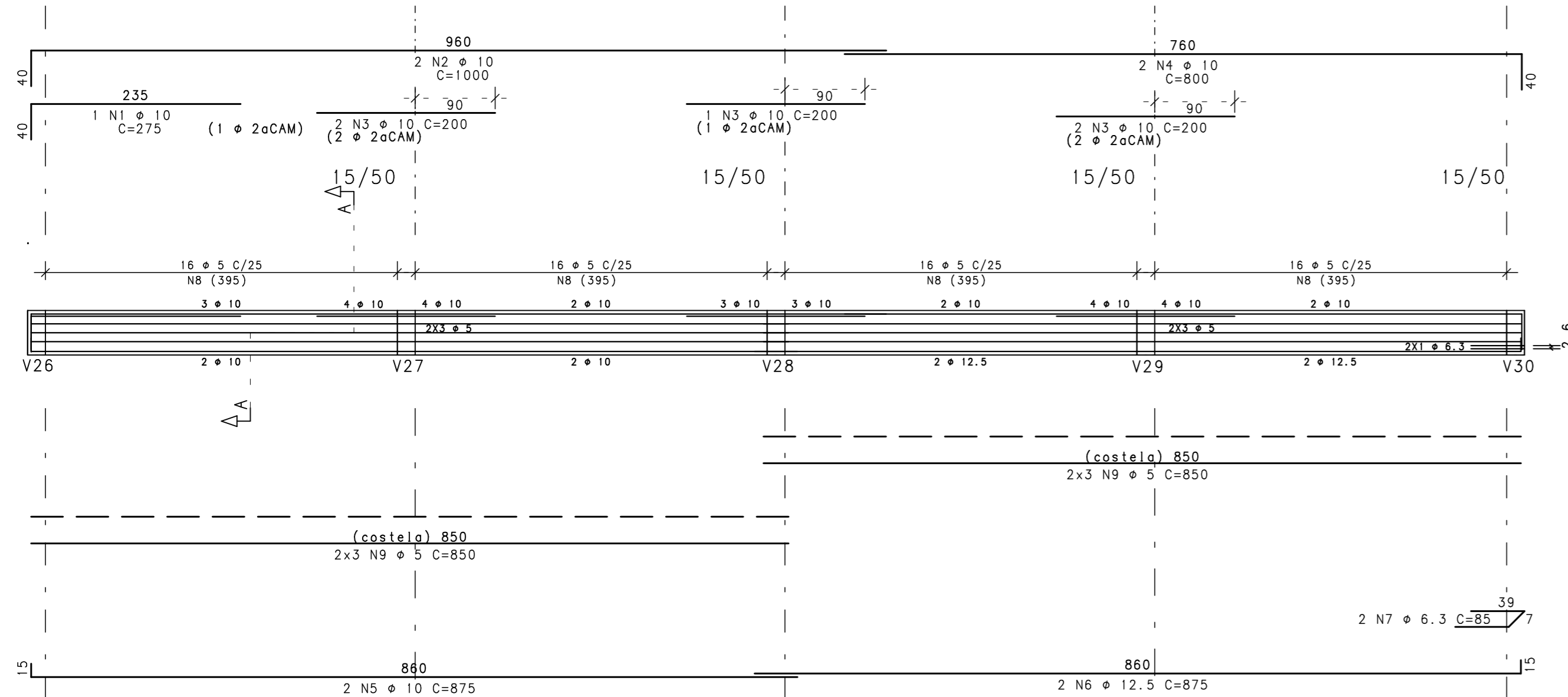
ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
V1=V20 (X2)					
50	1	10	4	1100	4400
50	2	10	6	200	1200
50	3	10	4	700	2800
50	4	10	4	850	3400
50	5	10	4	875	3500
60	6	5	128	116	14848
60	7	5	12	850	10200
60	8	5	12	850	10200
V2=V21 (X2)					
50	1	10	4	1100	4400
50	2	10	6	200	1200
50	3	10	4	700	2800
50	4	10	4	875	3500
50	5	10	4	850	3400
60	6	5	128	116	14848
60	7	5	12	850	10200
60	8	5	12	850	10200
V3=V5=V9=V11=V15=V17 (X6)					
50	1	10	12	1100	13200
50	2	10	36	200	7200
50	3	10	12	700	8400
50	4	10	6	275	1650
50	5	12.5	24	875	21000
50	6	6.3	12	85	1020
60	7	5	384	116	44544
60	8	5	72	850	61200
V23 A V29 (X7)					
60	1	5	336	127	42672
50	2	10	14	185	2310
50	3	10	112	180	20160
50	4	6.3	28	825	23100
50	5	6.3	189	115	21735
50	6	12.5	21	900	18900
50	7	12.5	21	875	18375

RESUMO ACO CA 50-60				
ACO	BIT (mm)	COMPR (m)	PESO (kg)	
60	5	2189	350	
50	6.3	459	115	
50	10	835	526	
50	12.5	583	583	
Peso Total			60	350 kg
Peso Total			50	1224 kg

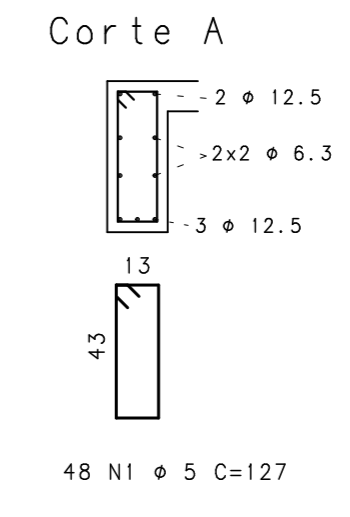
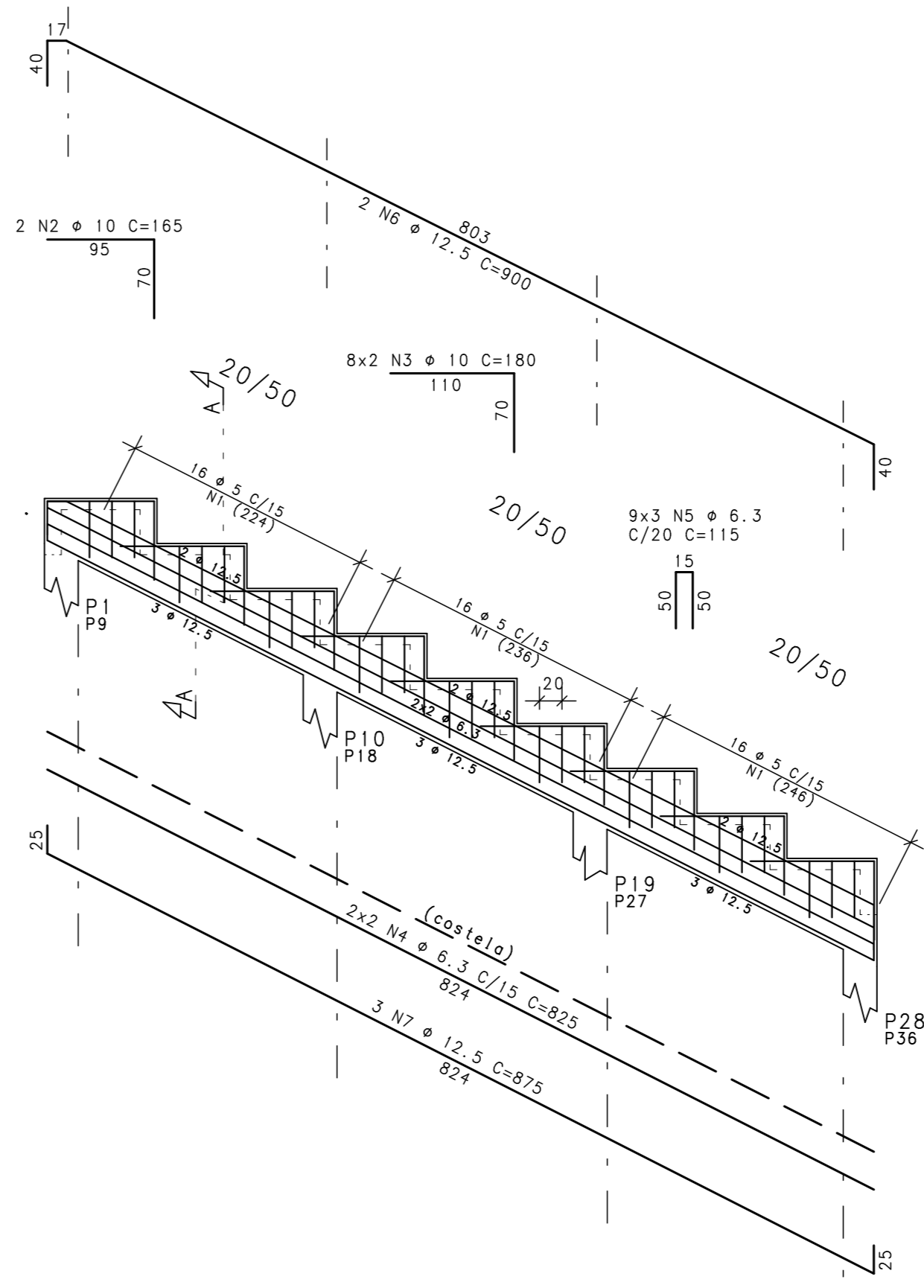
DIÂMETROS DE CURVATURA						
Ø	8	10	12.5	16	20	25
db (mm)	4	5	6.5	8	10	12.5

ENG. CIVIL / PROJETA ESTRUCTURAL		RNP	
SÉRGIO COSTA DE SOUZA		060624371-2	
CLIENTE		DES. N.º	
GEOPAC / PREF. MUN. DE PARACURU		08/11	
OBRA		REV. N.º	
ESTÁDIO MUNICIPAL DE PARACURU		00	
TÍTULO			
ARQUIBANCADA - VIGAS			
ELEMENTOS			
V1=V20 / V2=V21			
V3=V5=V9=V11=V15=V17			
V13 A V19			
DATA	ESCALA	FKR	DESENHO
10/08/2015	1:50	30 MPa	SCS
			VERIF.
			SCS

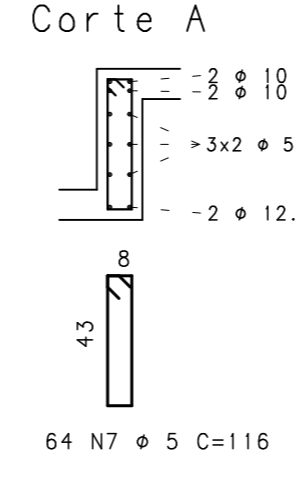
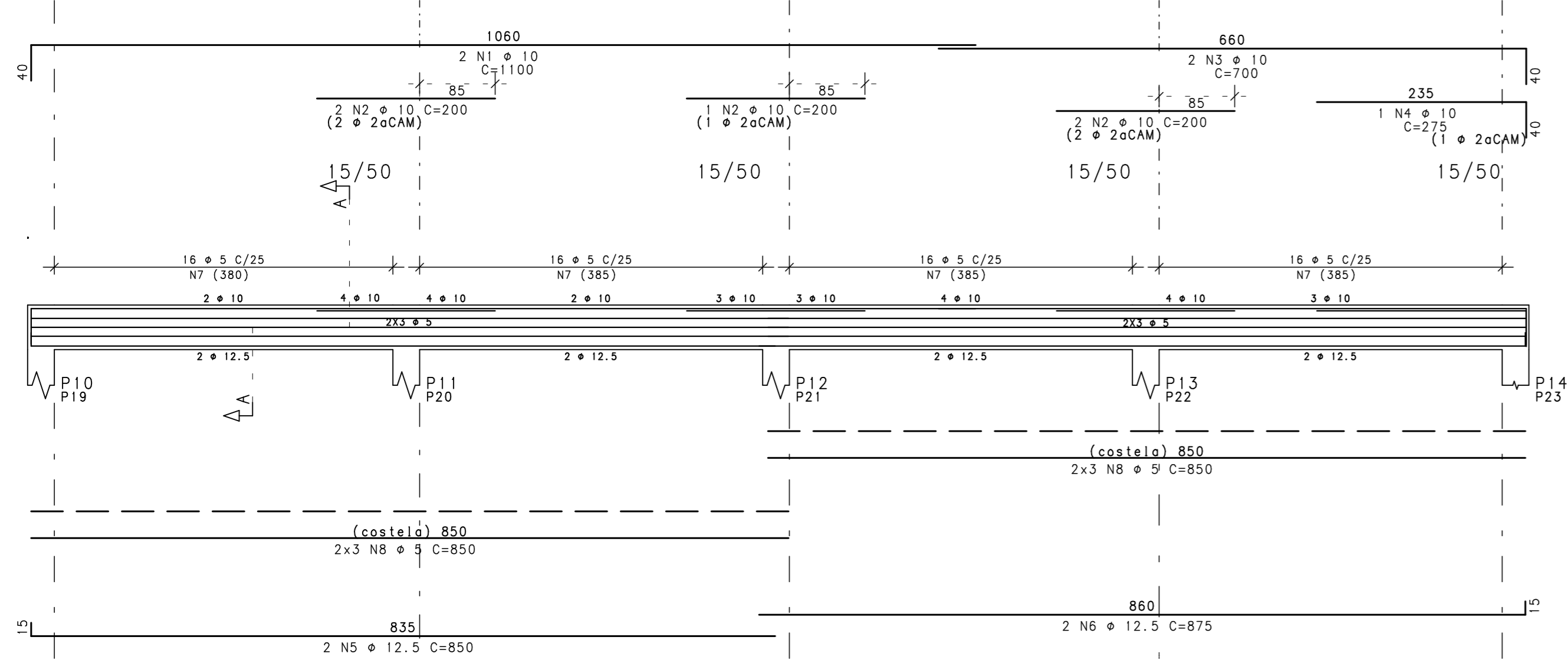
V4=V6=V10=V12



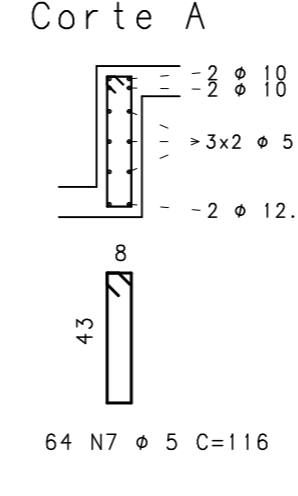
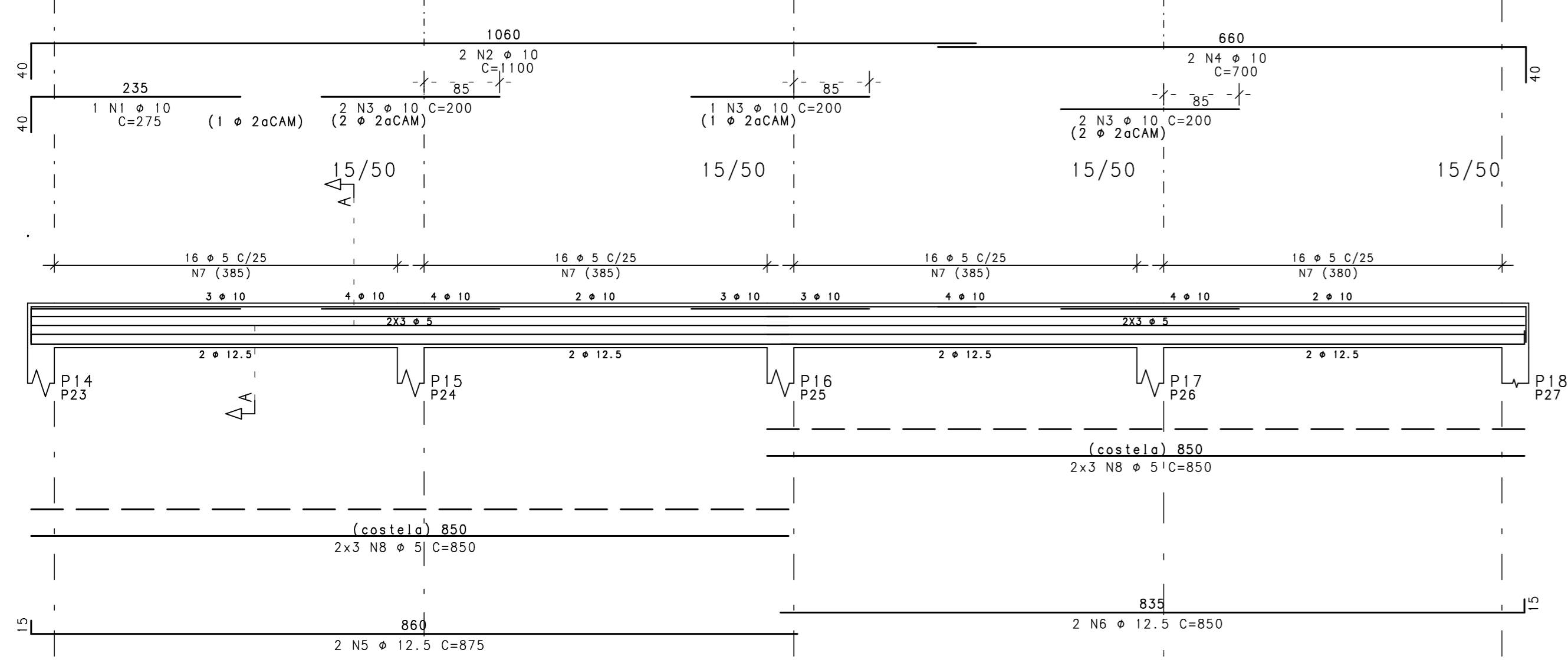
V22=V30



V7=V13



V8=V14



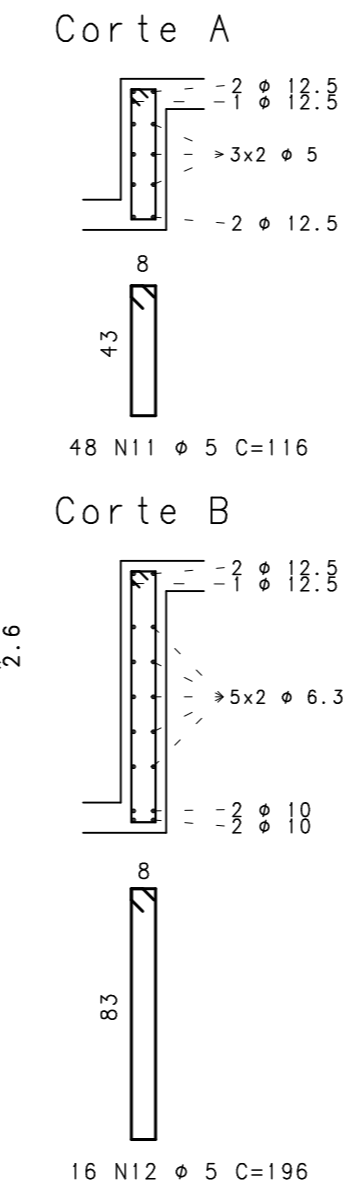
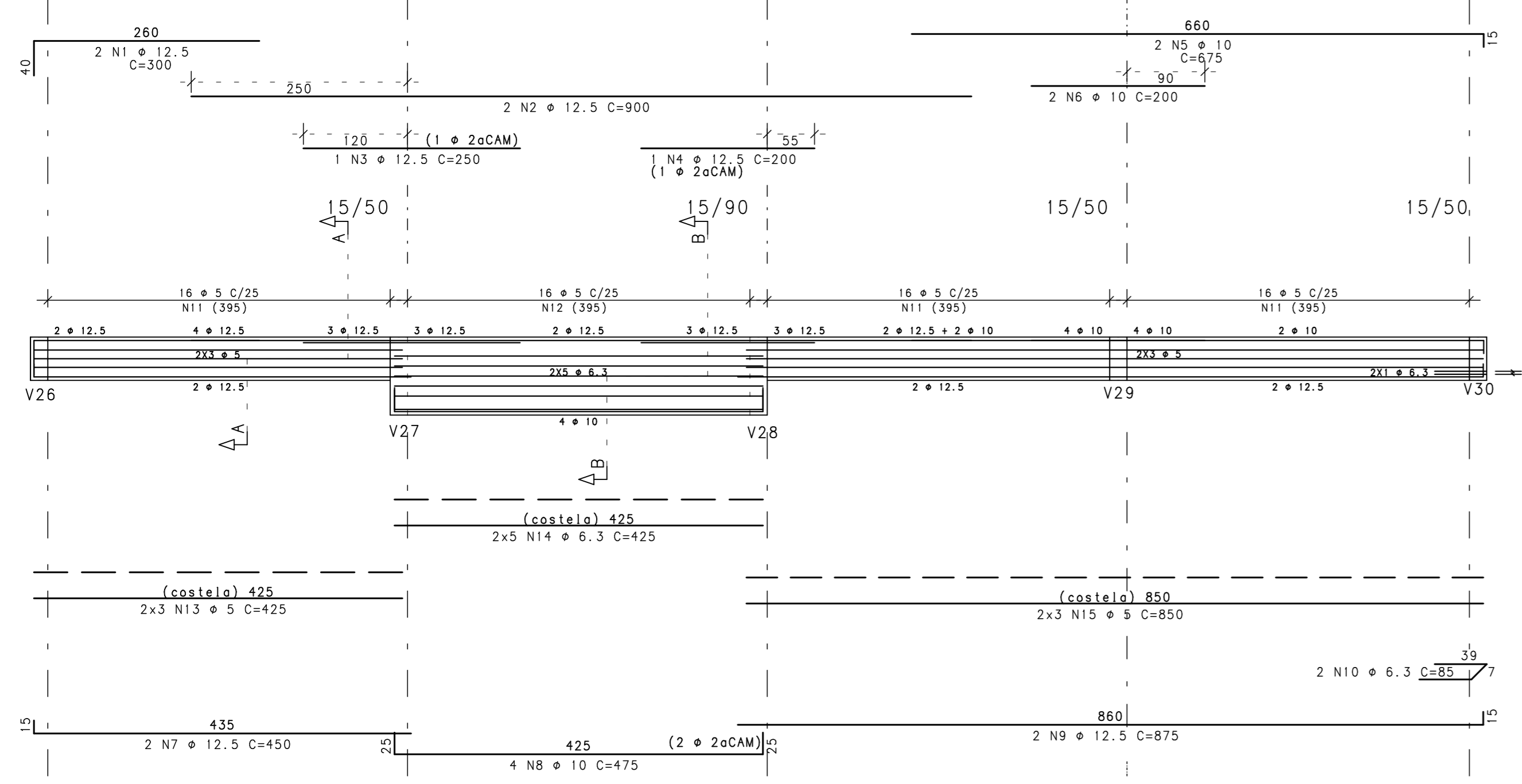
ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
V4=V6=V10=V12 (X4)					
50	1	10	4	275	1100
50	2	10	8	1000	8000
50	3	10	20	200	4000
50	4	10	8	800	6400
50	5	10	8	875	7000
50	6	12.5	8	875	7000
50	7	6.3	8	85	680
60	8	5	256	116	29696
60	9	5	48	850	40800
V7=V13 (X2)					
50	1	10	4	1100	4400
50	2	10	10	200	2000
50	3	10	4	700	2800
50	4	10	2	275	550
50	5	12.5	4	850	3400
50	6	12.5	4	875	3500
60	7	5	128	116	14848
60	8	5	24	850	20400
V8=V14 (X2)					
50	1	10	2	275	550
50	2	10	4	1100	4400
50	3	10	10	200	2000
50	4	10	4	700	2800
50	5	12.5	4	875	3500
50	6	12.5	4	850	3400
60	7	5	128	116	14848
60	8	5	24	850	20400
V22=V30 (X2)					
60	1	5	96	127	12192
50	2	10	4	165	660
50	3	10	32	180	5760
50	4	6.3	8	825	6600
50	5	6.3	54	115	6210
50	6	12.5	4	900	3600
50	7	12.5	6	875	5250

RESUMO AÇO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	1532	245
50	6.3	135	34
50	10	524	330
50	12.5	297	297
Peso Total		60	245 kg
Peso Total		50	660 kg

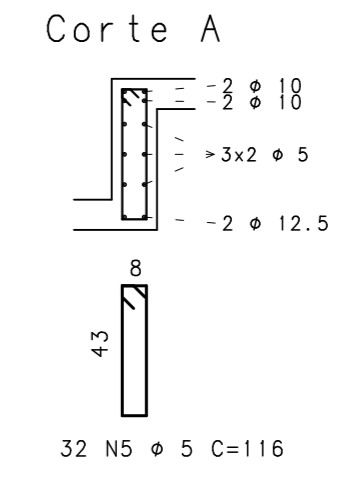
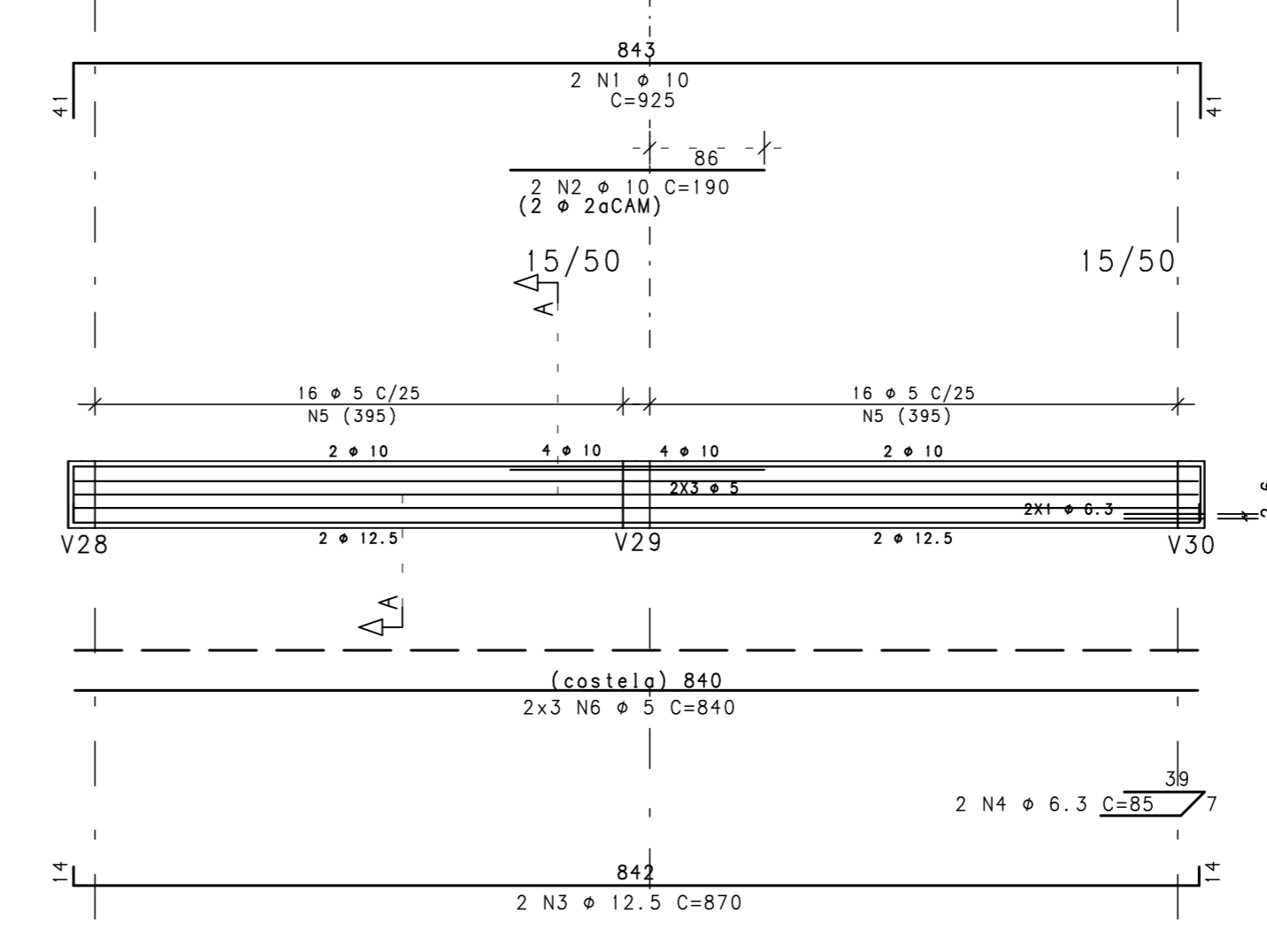
DIÂMETROS DE CURVATURA							
Ø	8	10	12.5	16	20	22.5	25
db (cm)	4	5	6.5	8	16	18	20

ENG. CIVIL / PROJETA ESTRUCTURAL SÉRGIO COSTA DE SOUZA		RNP 060624371-2
CLIENTE GEOPAC / PREF. MUN. DE PARACURU		DES. N.º 09/11
OBRA ESTÁDIO MUNICIPAL DE PARACURU		REV. N.º 00
TÍTULO ARQUIBANCADA - VIGAS		
ELEMENTOS V4=V6=V10=V12 / V7=V13 V8=V14 / V22=V30		
DATA 10/08/2015	ESCALA 1:50	FCK 30 MPa
DESENHO SCS	VERIF. SCS	

V16



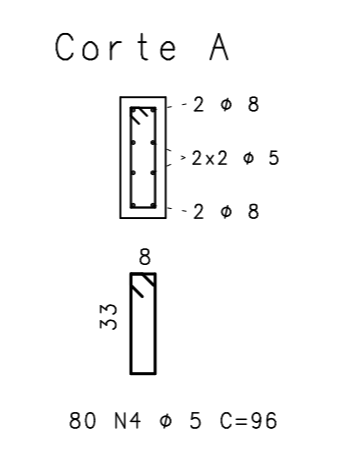
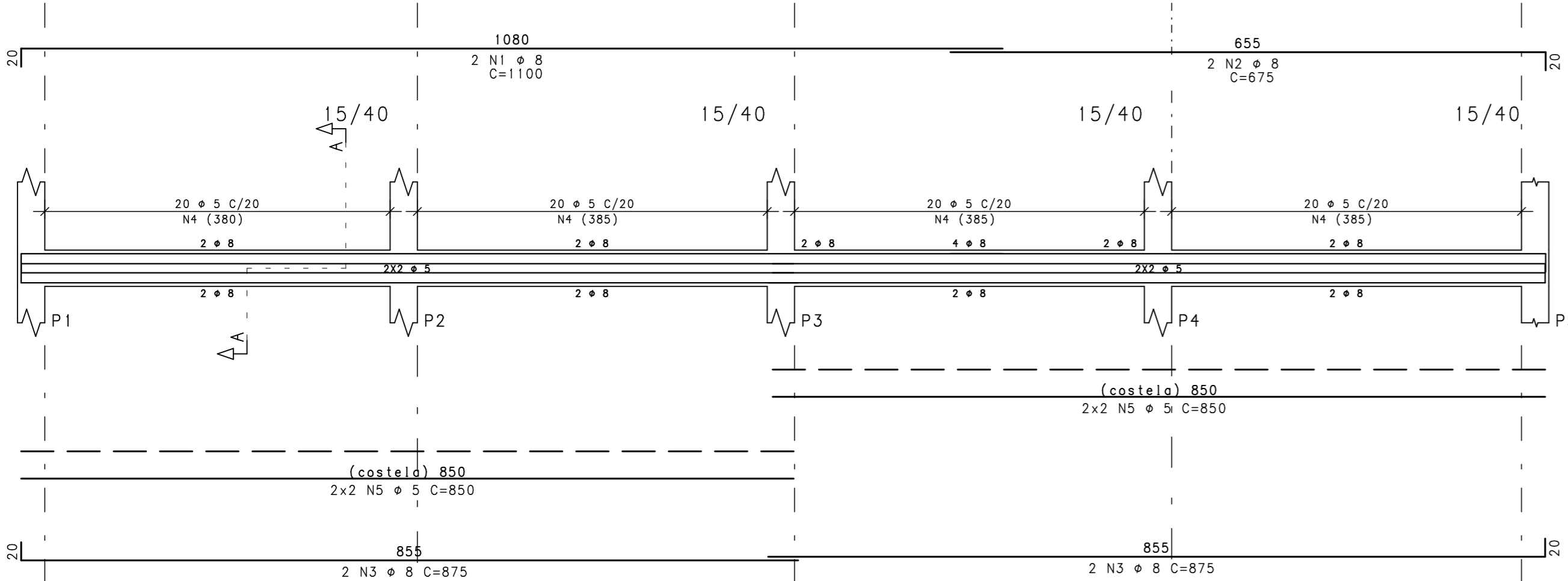
V19



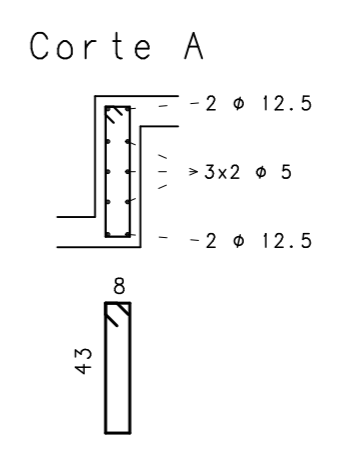
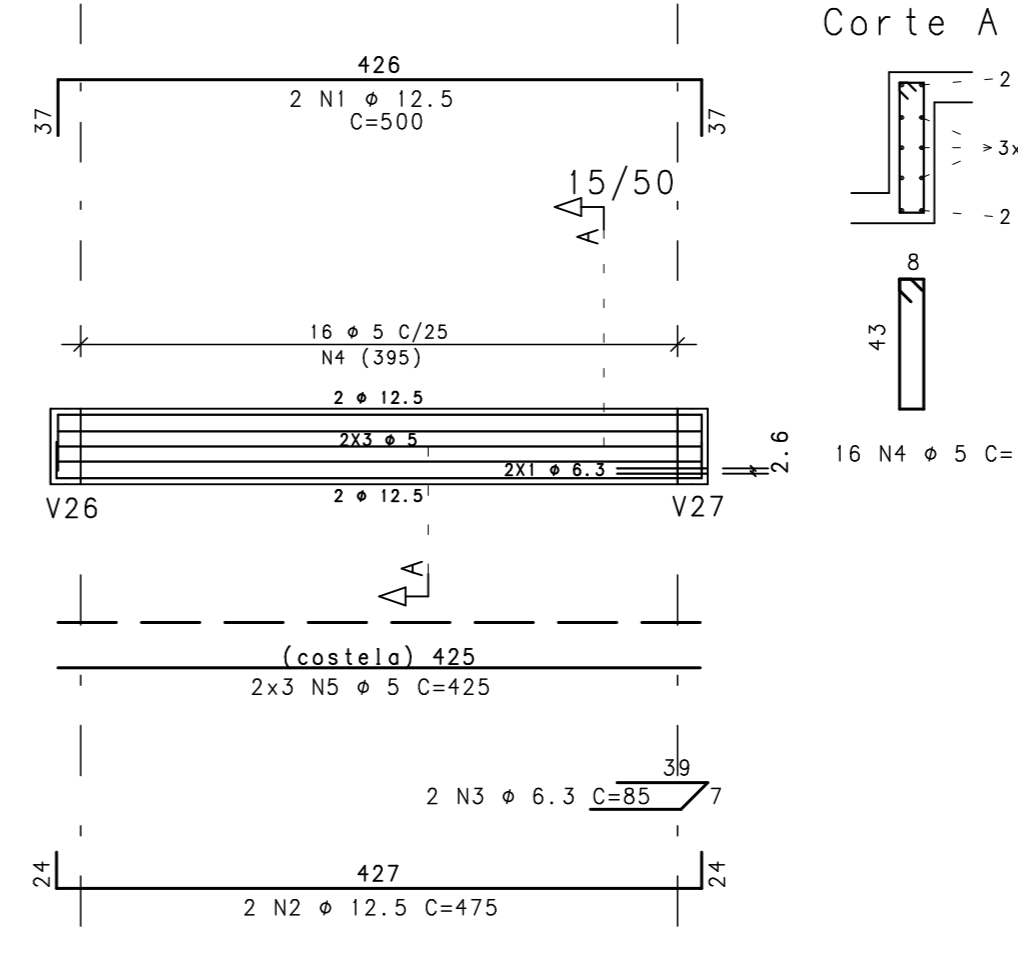
ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
V1. A					
50	1	8	2	1100	2200
50	2	8	2	675	1350
50	3	8	4	875	3500
60	4	5	80	96	7680
60	5	5	8	850	6800
V2. A					
50	1	8	2	1100	2200
50	2	8	2	675	1350
50	3	8	4	875	3500
60	4	5	80	96	7680
60	5	5	4	850	3400
60	6	5	4	850	3400
V16					
50	1	12.5	2	300	600
50	2	12.5	2	900	1800
50	3	12.5	1	250	250
50	4	12.5	1	200	200
50	5	10	2	675	1350
50	6	10	2	200	400
50	7	12.5	2	450	900
50	8	10	4	475	1900
50	9	12.5	2	875	1750
50	10	6.3	2	85	170
60	11	5	48	116	5568
60	12	5	16	196	3136
60	13	5	6	425	2550
50	14	6.3	10	425	4250
60	15	5	6	850	5100
V18					
50	1	12.5	2	500	1000
50	2	12.5	2	475	950
50	3	6.3	2	85	170
60	4	5	16	116	1856
60	5	5	6	425	2550
V19					
50	1	10	2	925	1850
50	2	10	2	190	380
50	3	12.5	2	870	1740
50	4	6.3	2	85	170
60	5	5	32	116	3712
60	6	5	6	840	5040

RESUMO AÇO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	585	94
50	6.3	48	12
50	8	141	56
50	10	59	37
50	12.5	92	92
Peso Total		60	94 kg
Peso Total		50	197 kg

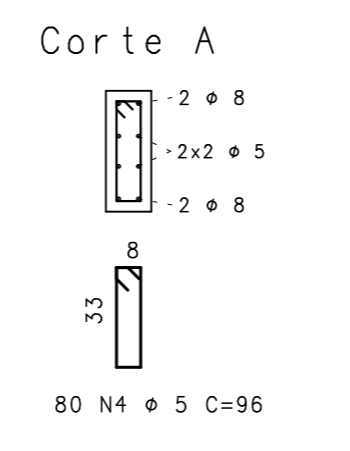
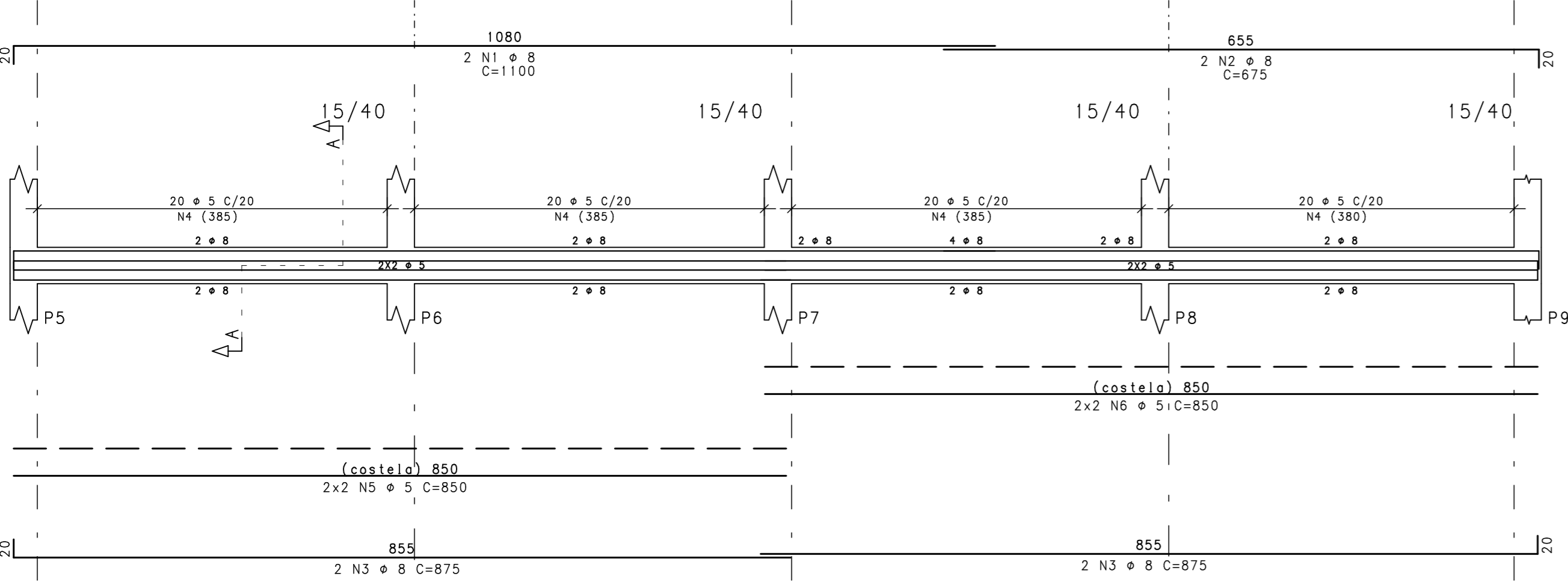
V1. A



V18



V2. A

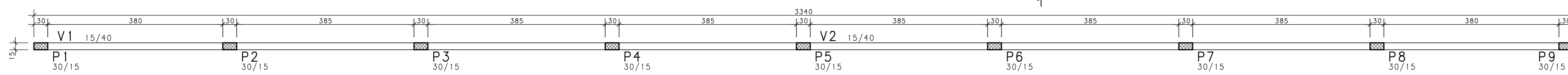


DIÂMETROS DE CURVATURA							
Ø	8	10	12.5	16	20	22.5	25
db (mm)	4	5	6.5	8	16	18	20

ENG. CIVIL / PROJETISTA ESTRUTURAL SÉRGIO COSTA DE SOUZA		RNP 060624371-2
CLIENTE	GEOPAC / PREF. MUN. DE PARACURU	
OBRA	ESTÁDIO MUNICIPAL DE PARACURU	
TÍTULO	ARQUIBANCADA - VIGAS	
ELEMENTOS	V16 / V18 / V19	
DATA	ESCALA	REV. N.º
10/08/2015	1:50	00
FCR	DESENHO	VERIF.
30 MPa	SCS	SCS

FÔRMA DO CINTAMENTO AÉREO - SETOR 1

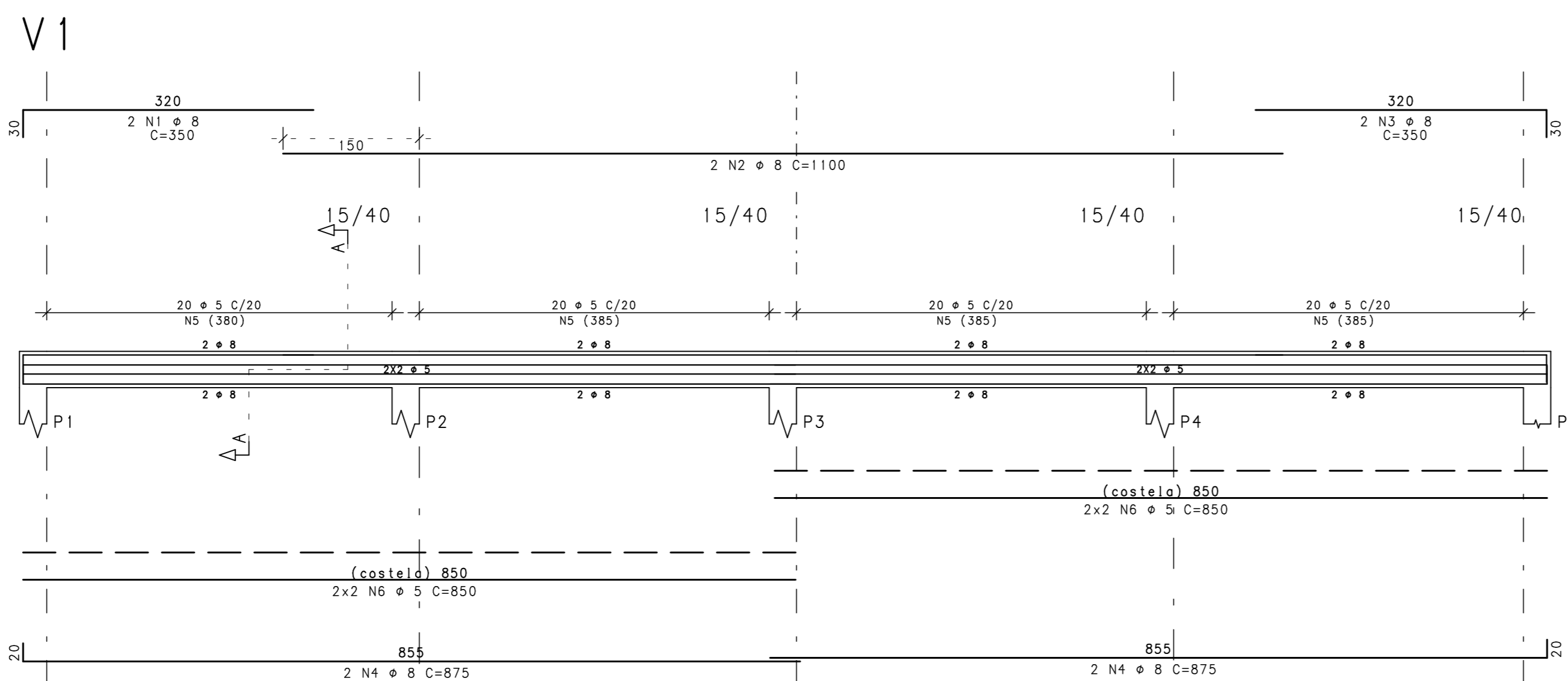
ESCALA 1/50



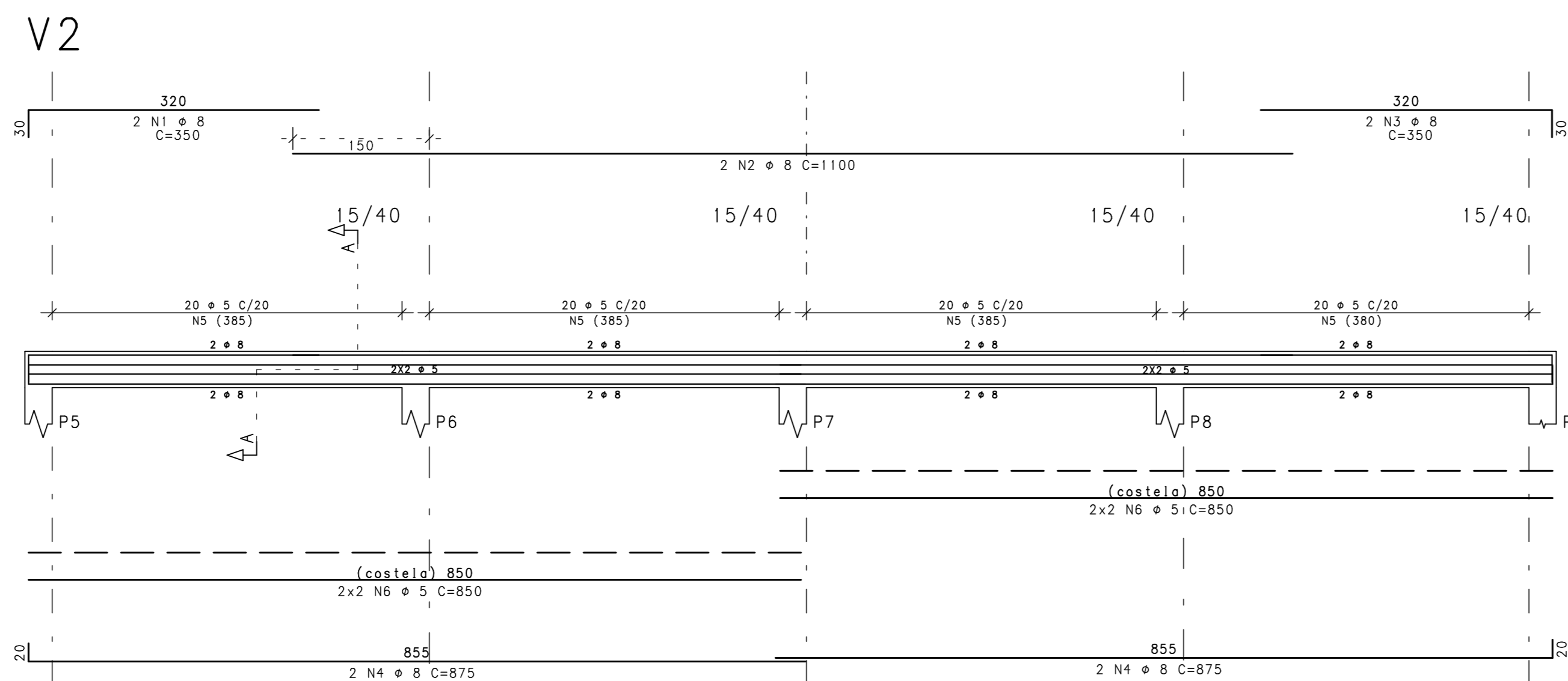
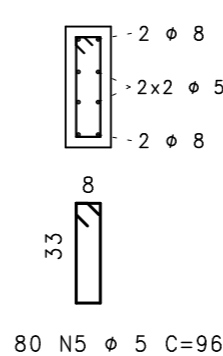
AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
V1					
50	1	8	2	350	700
50	2	8	2	1100	2200
50	3	8	2	350	700
50	4	8	4	875	3500
60	5	5	80	96	7680
60	6	5	8	850	6800
V2					
50	1	8	2	350	700
50	2	8	2	1100	2200
50	3	8	2	350	700
50	4	8	4	875	3500
60	5	5	80	96	7680
60	6	5	8	850	6800

RESUMO AÇO CA 50-60

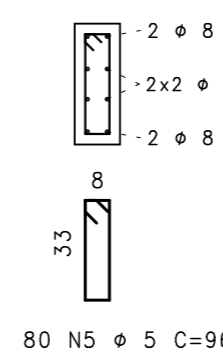
AÇO	BIT (mm)	COMPR (m)	PESO (kg)
60	5	290	46
50	8	142	57
Peso Total		60 =	46 kg
Peso Total		50 =	57 kg



Corte A



Corte A



ENG. CIVIL / PROJETA ESTRUCTURAL				RNP	
SÉRGIO COSTA DE SOUZA				060624371-2	
CLIENTE				DES. N.º	
GEOPAC / PREF. MUN. DE PARACURU				11/11	
OBRA				REV. N.º	
ESTÁDIO MUNICIPAL DE PARACURU				00	
TÍTULO					
CINT. AÉREO - FÔRMA					
CINT. AÉREO - VIGAS					
ELEMENTOS					
V1 / V2					
DATA	ESCALA	FCR	DESENHO	VERIF.	
10/08/2015	1:50	30 MPa	SCS	SCS	