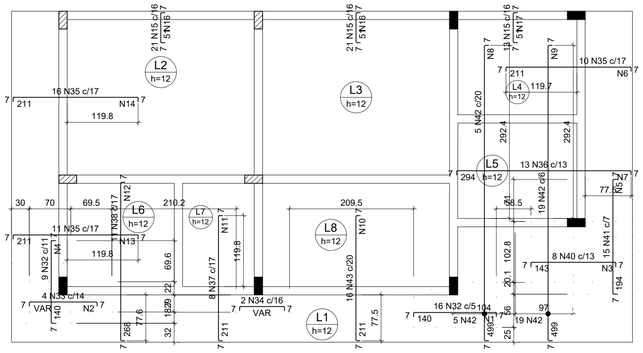
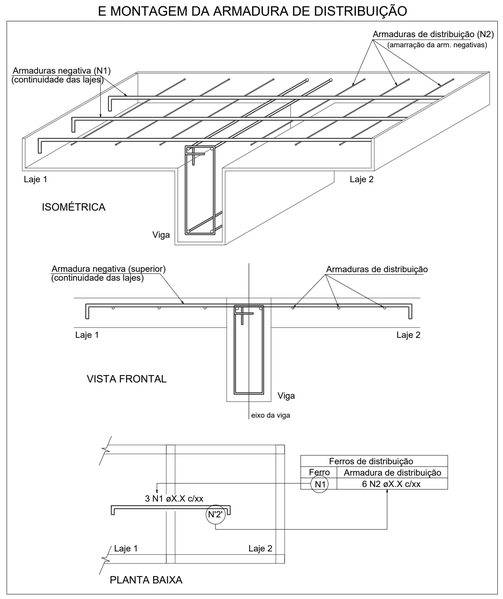


Armação negativa das lajes do pavimento Pavimento 1

escala 1:50

Armaduras de distribuição	
Armadura	Armadura de distribuição
N32	10 N1 ø5.0 c/15 C=76
N33	6 N2 ø5.0 c/20 C=VAR
N40	8 N3 ø5.0 c/20 C=102
N32	7 N4 ø5.0 c/20 C=100
N41	15 N5 ø5.0 c/13 C=100
N35	11 N6 ø5.0 c/20 C=175
N36	15 N7 ø5.0 c/20 C=175
N42	25 N8 ø5.0 c/20 C=104
N42	46 N9 ø5.0 c/11 C=111
N43	11 N10 ø5.0 c/20 C=330
N37	11 N11 ø5.0 c/20 C=135
N38	14 N12 ø5.0 c/20 C=195
N35	11 N13 ø5.0 c/20 C=188
N35	11 N14 ø5.0 c/20 C=277
N15	3 N16 ø5.0 c/20 C=330
N15	3 N16 ø5.0 c/20 C=330
N15	3 N17 ø5.0 c/20 C=201

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



RELAÇÃO DO AÇO

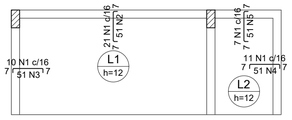
Negativos Positivos

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	10	76	760
	2	5.0	6	VAR	VAR
	3	5.0	8	102	816
	4	5.0	7	100	700
	5	5.0	15	100	1500
	6	5.0	11	175	1925
	7	5.0	15	175	2625
	8	5.0	25	104	2600
	9	5.0	46	111	5106
	10	5.0	11	330	3630
	11	5.0	11	135	1485
	12	5.0	14	195	2730
	13	5.0	11	188	2068
	14	5.0	11	277	3047
	15	5.0	55	62	3410
	16	5.0	6	330	1980
	17	5.0	3	201	603
	18	5.0	93	129	11997
	19	5.0	7	344	2408
	20	5.0	7	635	4445
	21	5.0	13	244	3172
	22	5.0	20	285	5700
	23	5.0	17	338	5746
	24	5.0	28	338	9464
	25	5.0	13	183	2379
	26	5.0	10	223	2230
	27	5.0	13	183	2379
	28	5.0	10	223	2230
	29	5.0	40	196	7840
	30	5.0	11	203	2233
	31	5.0	11	143	1573
CA50	32	6.3	25	151	3775
	33	6.3	4	VAR	VAR
	34	6.3	2	VAR	VAR
	35	6.3	37	222	8214
	36	6.3	13	305	3965
	37	6.3	8	222	1776
	38	6.3	11	279	3069
	39	6.3	17	285	4845
	40	8.0	8	153	1224
	41	8.0	15	204	3060
	42	8.0	24	509	12216
	43	8.0	16	221	3536
	44	8.0	5	1111	5555
	45	8.0	5	621	3105
	46	8.0	4	554	2216
	47	8.0	2	105	210
	48	8.0	2	89	178
	49	8.0	2	1044	2088

RESUMO DO AÇO

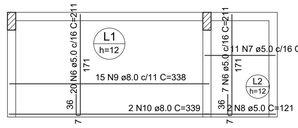
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	263.2	64.4
	8.0	333.9	131.7
CA60	5.0	989.4	152.5
PESO TOTAL (kg)			
CA50	196.1		
CA60	152.5		

Volume de concreto (C-25) = 6.27 m³
Área de forma = 55.08 m²



Armação negativa das lajes do pav. Caixa dágua

escala 1:50



Armação positiva das lajes do pav Caixa dágua

escala 1:50

RELAÇÃO DO AÇO

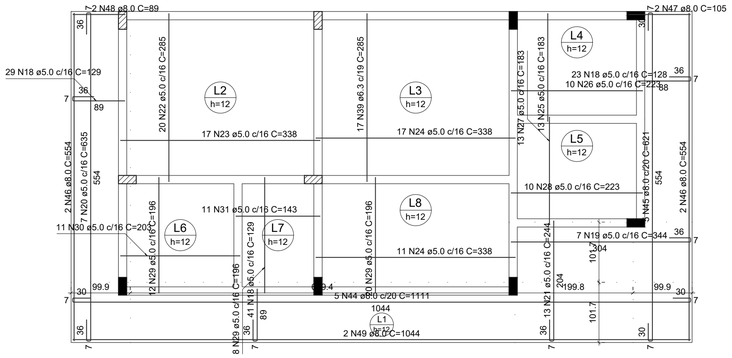
Negativos Positivos

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	49	62	3038
	2	5.0	3	330	990
	3	5.0	3	156	468
	4	5.0	3	170	510
	5	5.0	3	112	336
	6	5.0	27	211	5697
	7	5.0	11	120	1320
	8	5.0	2	121	242
CA50	9	8.0	15	338	5070
	10	8.0	2	339	678

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	57.5	22.7
CA60	5.0	126	19.4
PESO TOTAL (kg)			
CA50	22.7		
CA60	19.4		

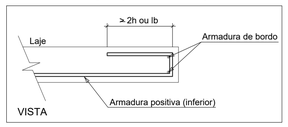
Volume de concreto (C-25) = 0.81 m³
Área de forma = 7.25 m²



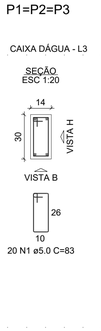
Armação positiva das lajes do pavimento Pavimento 1

escala 1:50

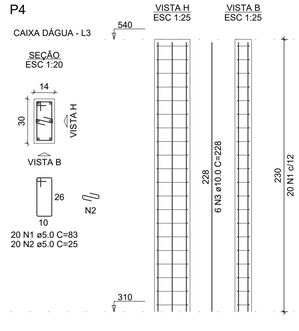
DETALHE DA ARMADURA DE BORDO LIVRE DA LAJE



P1=P2=P3



P4



RELAÇÃO DO AÇO

3xP1 P4

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	80	83	6640
	2	5.0	20	25	500
CA50	3	10.0	18	228	4104

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	41	25.3
CA60	5.0	71.4	11
PESO TOTAL (kg)			
CA50	25.3		
CA60	11		

Volume de concreto (C-25) = 0.39 m³
Área de forma = 8.10 m²

RELAÇÃO DO AÇO

V1 V2 V3
V4 V5 V6
V7 V8 V9

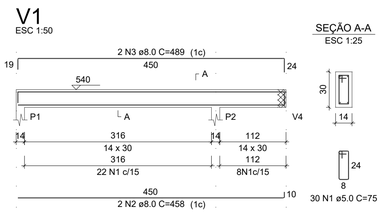
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	203	75	15225
CA50	2	8.0	4	458	1832
	3	8.0	4	489	1956
	4	8.0	10	285	2850
	5	8.0	6	319	1914
	6	8.0	2	458	916
	7	8.0	1	155	155
	8	8.0	2	489	978
	9	8.0	2	466	932
	10	8.0	2	494	988
	11	8.0	2	303	606
	12	8.0	2	313	626

RESUMO DO AÇO

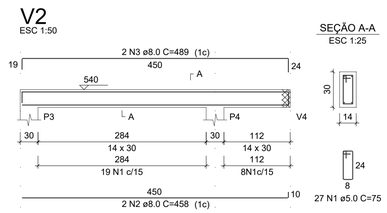
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	8.0	137.5	54.3
CA60	5.0	152.3	23.5
PESO TOTAL (kg)			
CA50	54.3		
CA60	23.5		

Volume de concreto (C-25) = 1.22 m³
Área de forma = 20.32 m²

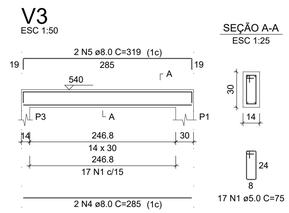
V1



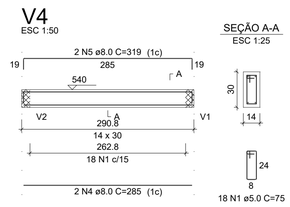
V2



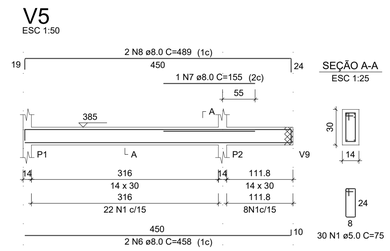
V3



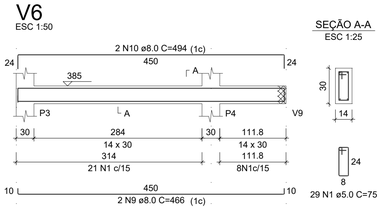
V4



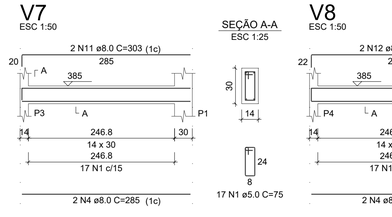
V5



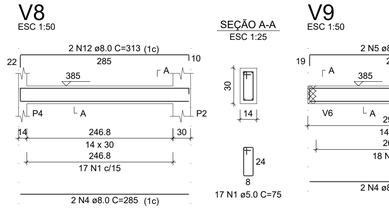
V6



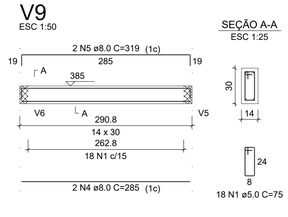
V7



V8



V9



PROJETO ESTRUTURAL

DATA: JAN/26

BANHEIROS

LAJES DO PAVIMENTO 1 E PILARES, VIGAS E LAJES DA CAIXA DÁGUA

RESP. TÉC.: LUIZ PAULO DE CARVALHO LOPES
CREA 133.888/D- MG

PREFEITURA MUNICIPAL DE CAPITÃO ANDRADE
CNPJ: 66.229.105/0001-25

ÁREA: 42,72 m²

END: RUA JOSÉ DE ESTEVÃO DE BARROS, S/N - CENTRO - CAPITÃO ANDRADE/MG

folha 05/05