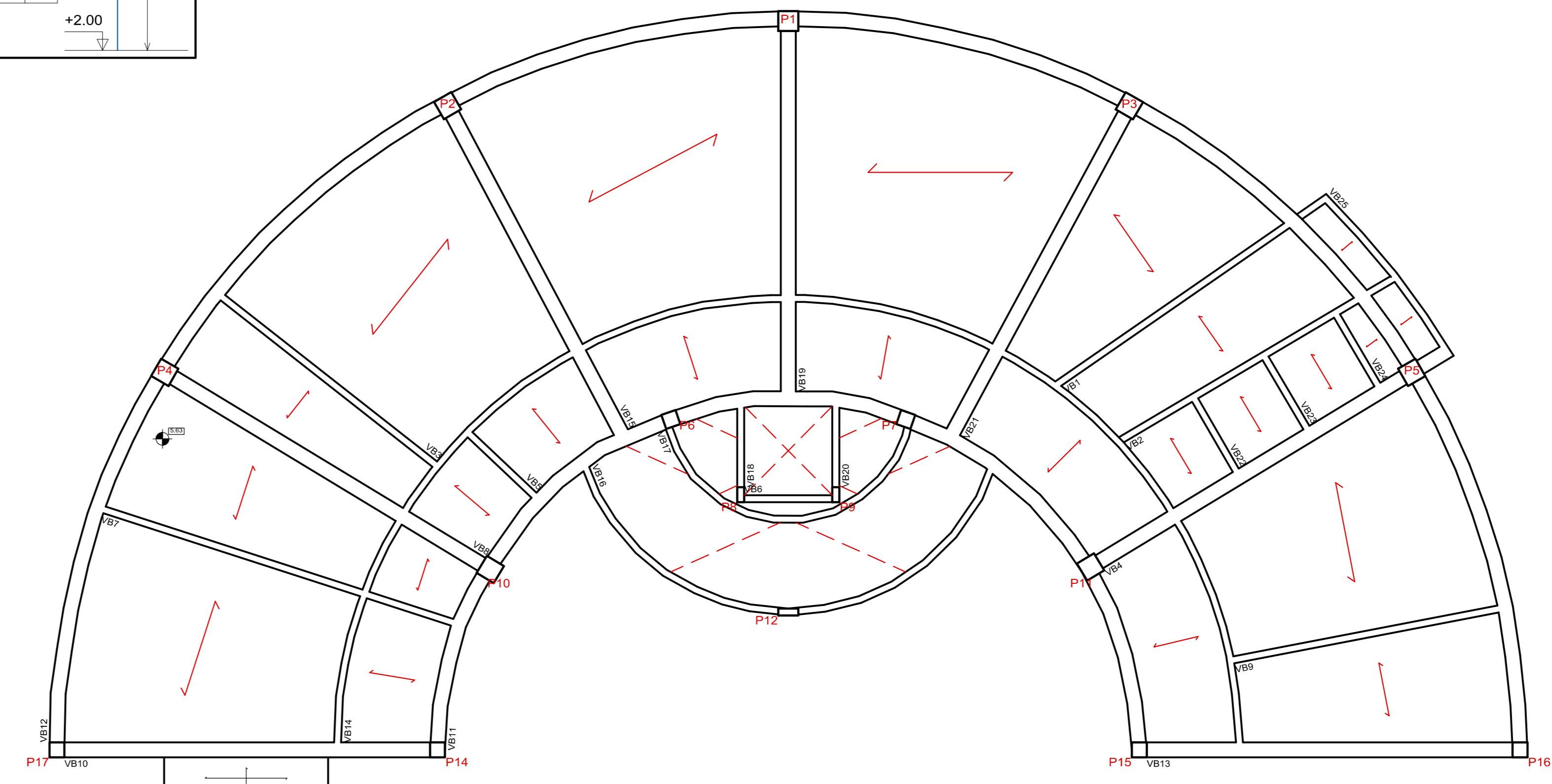
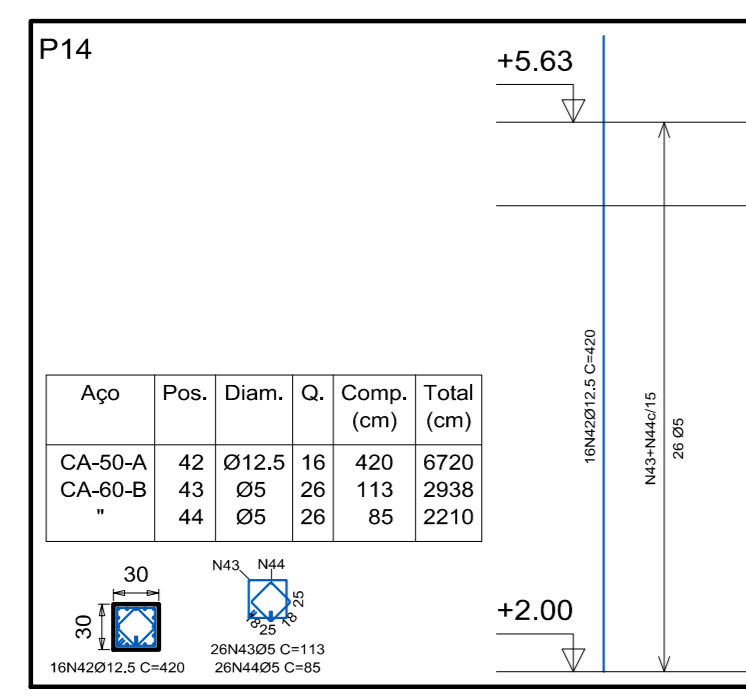
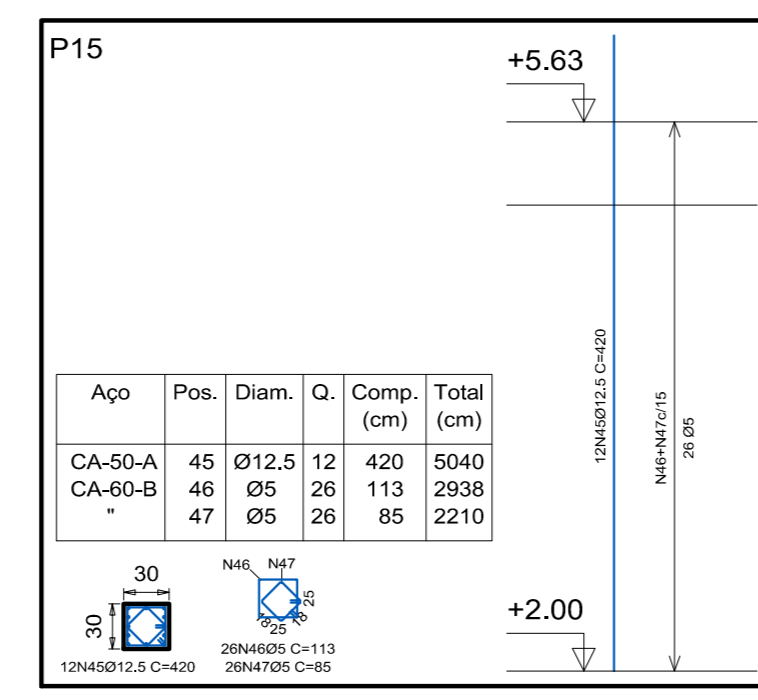
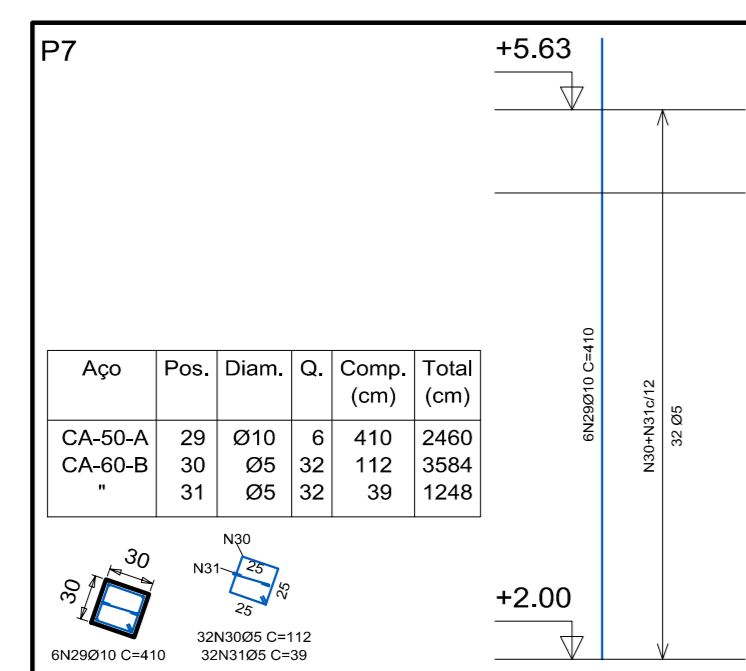
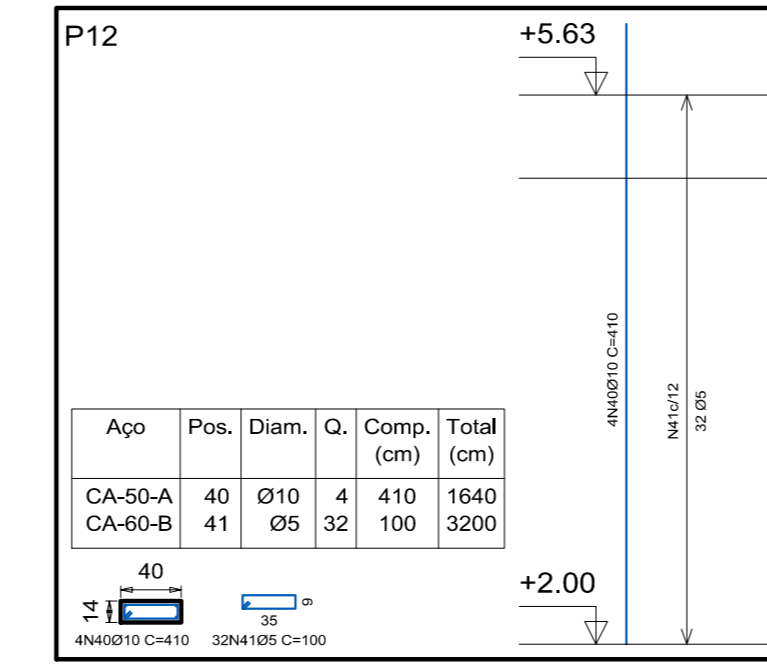
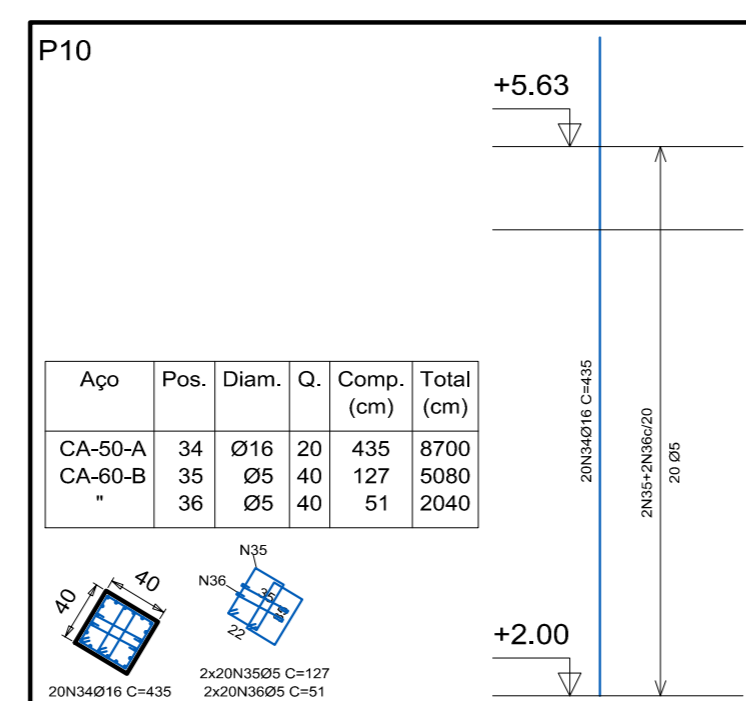
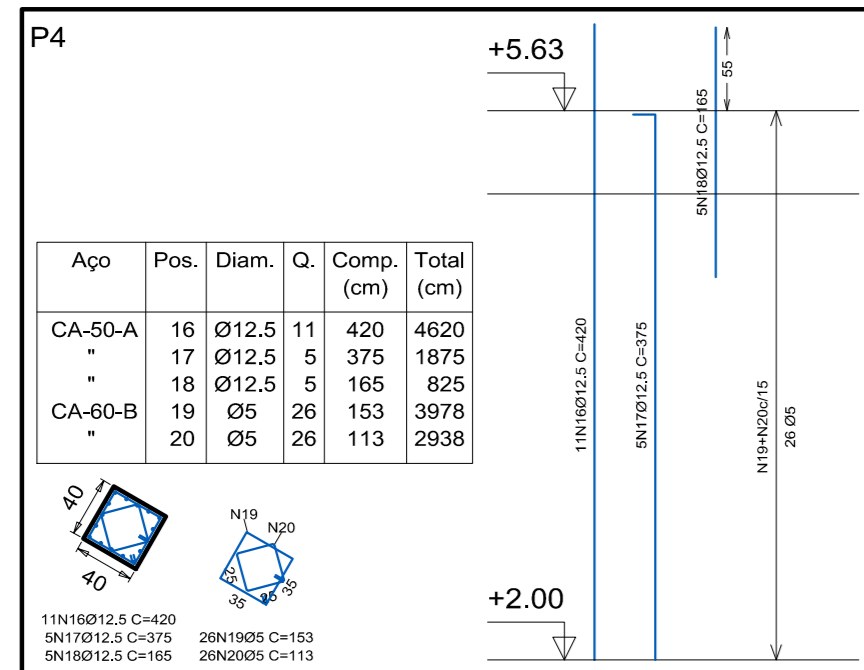
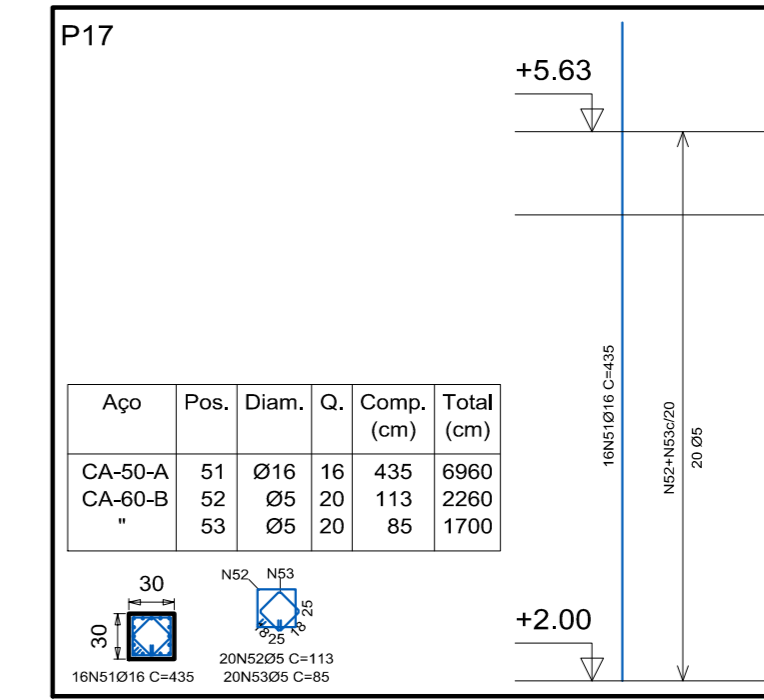
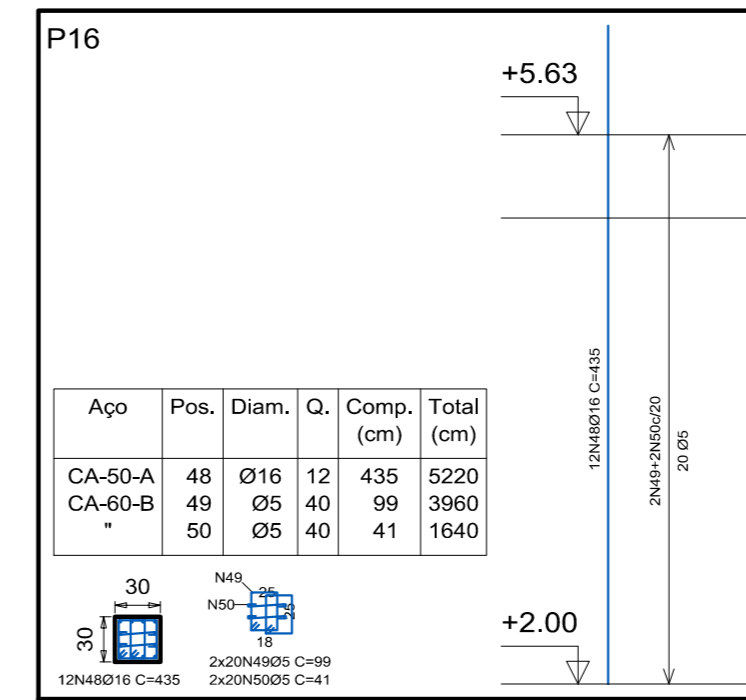
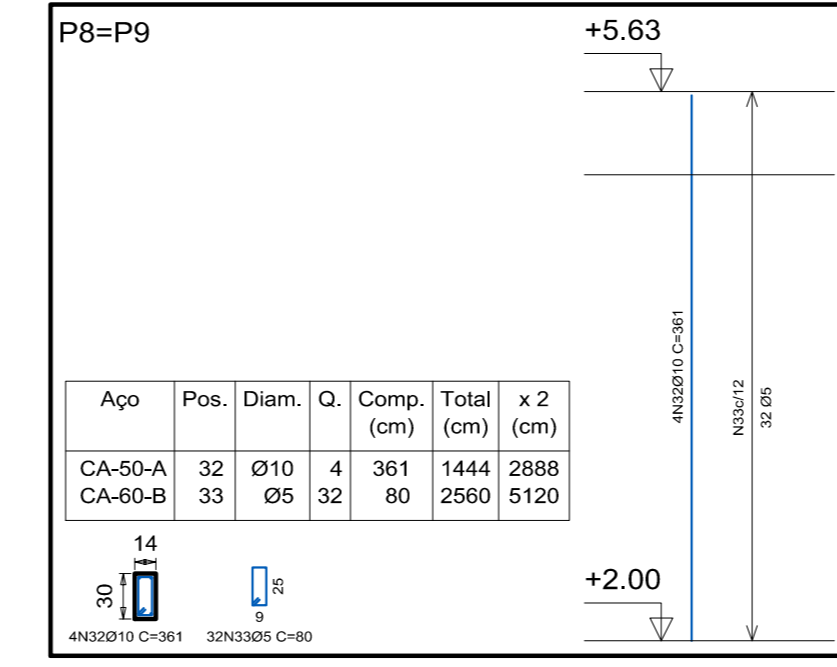
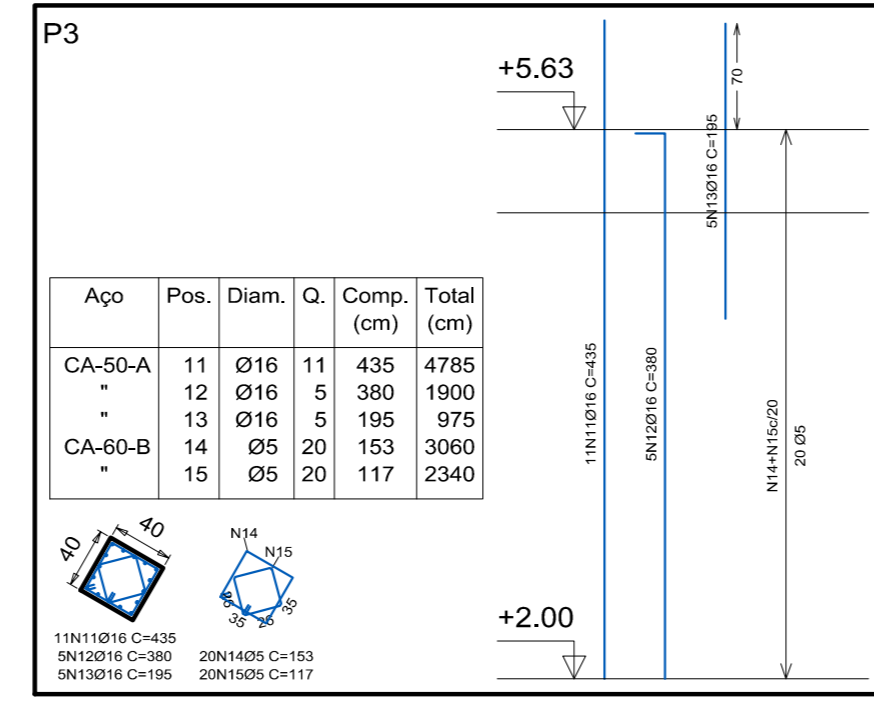
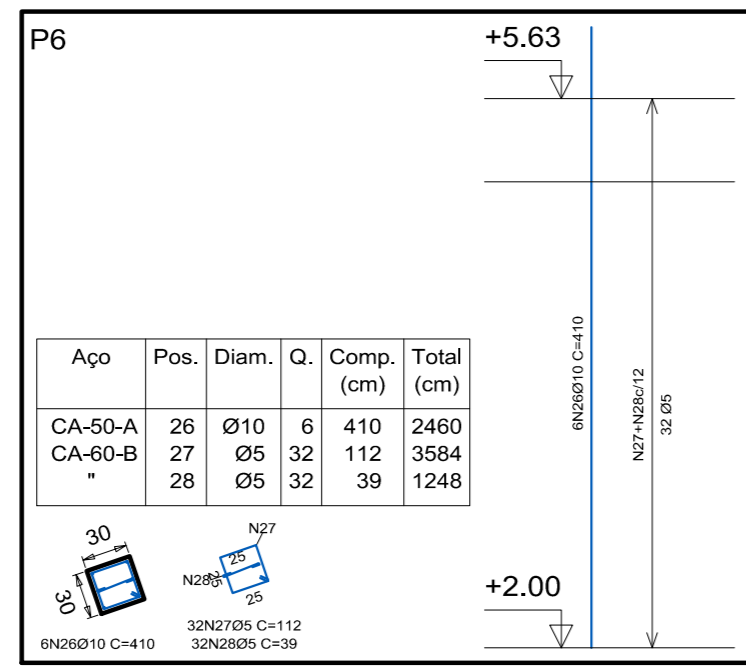
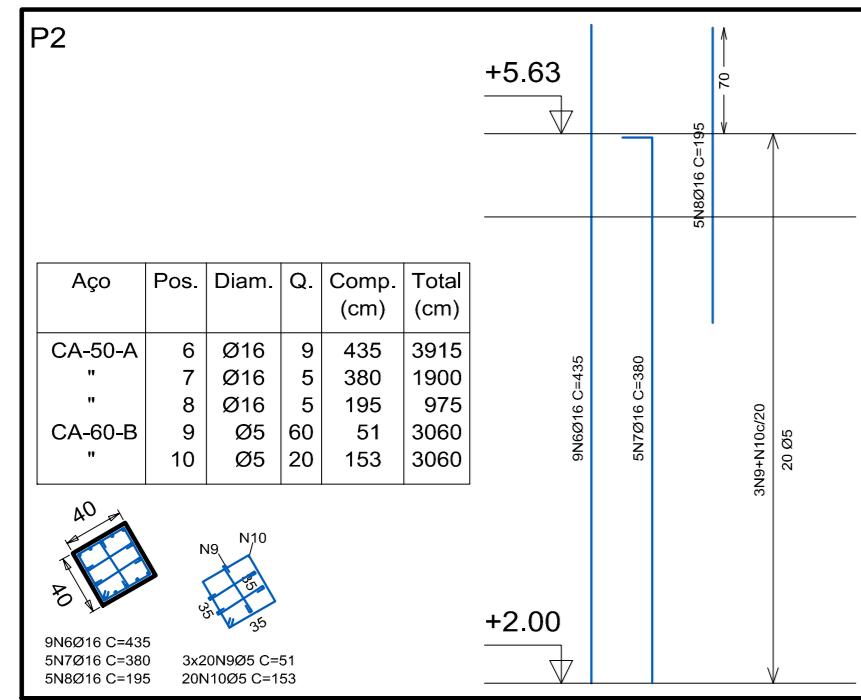


Pilares que terminam em NÍVEL B
 Concreto: C20, em geral
 Aço: CA-50-A e CA-60-B
 Escala: 1:50

NÍVEL B
 Detalhamento fundação
 Concreto: C25, em geral
 Escala: 1:75

NÍVEL B
 Detalhamento de vigas
 Concreto: C25, em geral
 Aço: CA-50-A e CA-60-B
 Escala vigas: 1:75
 Escala sapatas: 1:50

Resumo Aço NÍVEL B	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A Ø10	94.5	65	
Ø12.5	166.8	206	
Ø16	598.9	1027	1296
CA-60-B Ø5	827.4	143	143
Total			1441



Elemento	Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
P1	1	Ø16	9	435	3915	61.5	
	2	Ø16	5	380	1900	29.8	
	3	Ø16	5	195	975	15.3	
	4	Ø5	60	300	1800		4.8
	5	Ø5	20	100	1000		4.8
Total+10%: 117.3 10.6							
P2	6	Ø16	9	435	3915	61.5	
	7	Ø16	5	380	1900	29.8	
	8	Ø16	5	195	975	15.3	
	9	Ø5	60	300	1800		4.8
	10	Ø5	20	100	1000		4.8
Total+10%: 117.3 10.6							
P3	11	Ø16	11	435	4785	75.1	
	12	Ø16	5	380	1900	29.8	
	13	Ø16	5	195	975	15.3	
	14	Ø5	20	100	1000		4.8
	15	Ø5	20	117	2340		9.7
Total+10%: 132.2 9.4							
P4	16	Ø12.5	11	420	4620	45.3	
	17	Ø12.5	5	375	1875	18.4	
	18	Ø12.5	5	165	825	8.1	
	19	Ø5	26	133	3978		6.2
	20	Ø5	26	113	2938		4.6
Total+10%: 79.0 11.9							
P5	21	Ø16	12	435	5220	82.0	
	22	Ø16	6	380	2280	35.6	
	23	Ø16	6	195	1170	18.4	
	24	Ø5	40	127	5080		8.0
	25	Ø5	20	51	2040		1.6
Total+10%: 149.6 10.6							
P6	26	Ø10	6	410	1640	5.6	
	27	Ø5	32	112	3584		5.8
	28	Ø5	32	39	1248		2.0
Total+10%: 16.9 8.4							
P7	29	Ø10	4	410	1640	2.0	
	30	Ø5	32	112	3584		5.6
	31	Ø5	32	39	1248		2.0
Total+10%: 16.9 8.4							
P8-P9	32	Ø10	4	361	1444	9.1	
	33	Ø5	32	80	2560		4.0
Total+10%: 10.0 4.4							
P10	34	Ø16	20	435	8700	8.0	
	35	Ø5	40	127	5080		8.0
	36	Ø5	40	51	2040		3.2
Total+10%: 156.3 12.3							
P11	37	Ø16	20	435	8700	136.6	
	38	Ø5	40	127	5080		8.0
	39	Ø5	40	51	2040		3.2
Total+10%: 150.3 12.3							
P12	40	Ø10	4	410	1640	5.0	
	41	Ø5	32	100	3200		5.0
Total+10%: 11.3 5.5							
P14	42	Ø12.5	16	420	6720	65.9	
	43	Ø5	26	113	2938		4.6
Total+10%: 72.5 8.9							
P15	45	Ø12.5	12	420	5040	48.5	
	46	Ø5	26	113	2938		4.6
Total+10%: 54.5 8.9							
P16	48	Ø16	12	435	5220	82.0	
	49	Ø5	40	127	5080		8.0
Total+10%: 90.2 9.7							
P17	51	Ø16	16	435	6960	3.5	
	52	Ø5	20	113	2260		2.2
	53	Ø5	20	85	1700		3.5
Total+10%: 120.2 6.8							
VB1	54	Ø8	2	58	116	1.0	
	55	Ø8	2	58	116	1.0	
	56	Ø8	2	115	230	1.0	
	57	Ø6.3	1	100	100	0.2	
	58	Ø8	2	215	430	1.8	
	59	Ø10	1	203	215	1.4	
	60	Ø5	6	405	690	1.6	
	61	Ø5	27	128	3456		5.4
Total+10%: 40.6 7.7							
VB2	62	Ø6.3	2	52	104	0.6	
	63	Ø20	2	26	52	0.2	
	64	Ø8	2	210	420	1.7	
	65	Ø8	2	210	420	1.7	
	66	Ø6.3	1	197	197	0.5	
	67	Ø5	2	684	684	1.5	
	68	Ø5	25	128	3200		5.0
	69	Ø5	25	128	3456		5.4
Total+10%: 38.4 7.2							
VB3	69	Ø6.3	6	52	312	1.7	
	70	Ø20	2	26	52	0.2	
	71	Ø8	2	210	420	1.7	
	72	Ø6.3	2	8	16	0.2	
	73	Ø5	2	370	740	1.2	
	74	Ø5	22	128	2816		4.4
	75	Ø20	2	26	52	0.2	
	76	Ø20	2	26	52	0.2	
Total+10%: 39.7 6.2							
VB4	75	Ø20	2	26	52	0.2	
	76	Ø20	2	26	52	0.2	
	77	Ø20	2	480	960	23.1	
	78	Ø10	2	103	103	1.4	
	79	Ø8	2	105	210	0.6	
	80	Ø20	2	209	209	16.6	
	81	Ø20	1	284	284	7.7	
	82	Ø20	2	27	54	0.4	
Total+10%: 54.1 11.1							
VB5	83	Ø20	1	249	249	6.8	
	84	Ø20	2	223	446	12.4	
	85	Ø20	2	26	52	0.5	
	86	Ø8	2	360	720	2.6	
	87	Ø8	62	166	1660	40.4	
	88	Ø6.3	4	163	652	1.6	
	89	Ø6.3	4	163	652	1.6	
	90	Ø6.3	4	163	652	1.6	
Total+10%: 262.0 54.4							
VB6	89	Ø6.3	2	10	20	0.2	
	90	Ø6.3	1	175	175	0.4	
	91	Ø5	8	8	202	0.6	
	92	Ø8	4	10	70	0.1	
	93	Ø5	6	128	1024		1.6
Total+10%: 3.7 2.5							
VB7	94	Ø8	2	10	20	0.5	
	95	Ø6.3	2	200			