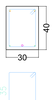
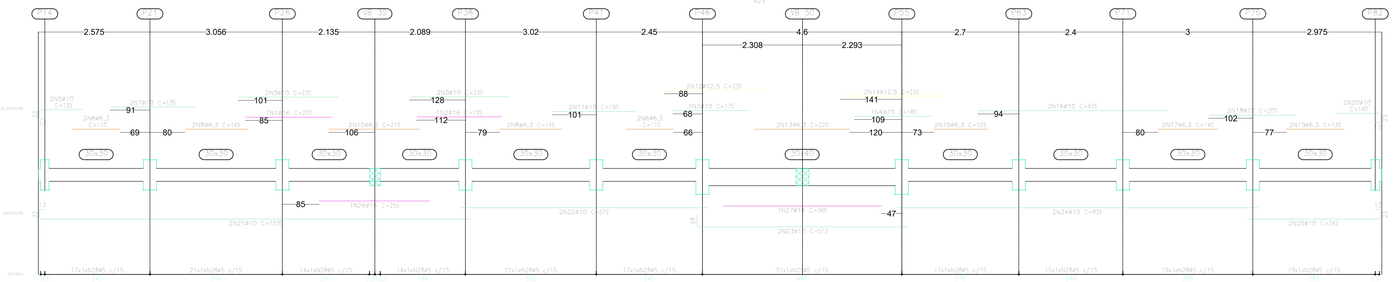
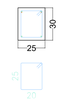
VB 1
Escala vigas 1:50
Escala seções 1:20

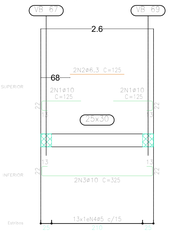




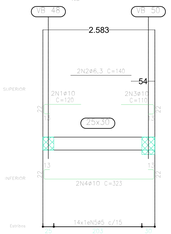
VB 3
Escala vigas 1:50
Escala seções 1:20

VB 7
Escala vigas 1:50
Escala seções 1:20

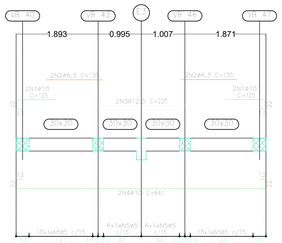


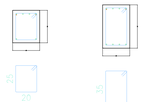


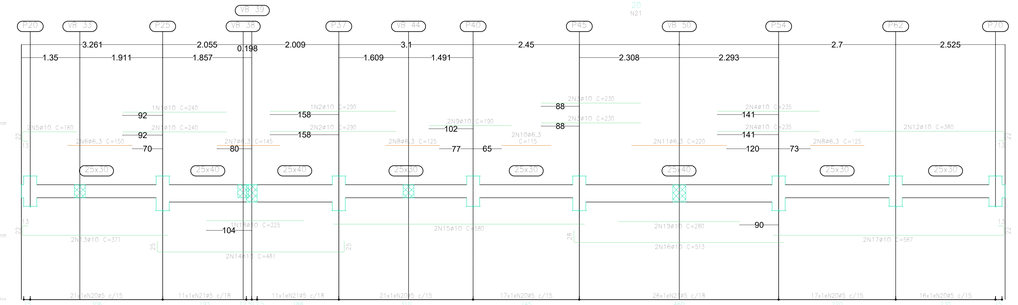
VB 2
Escala vigas 1:50
Escala seções 1:20



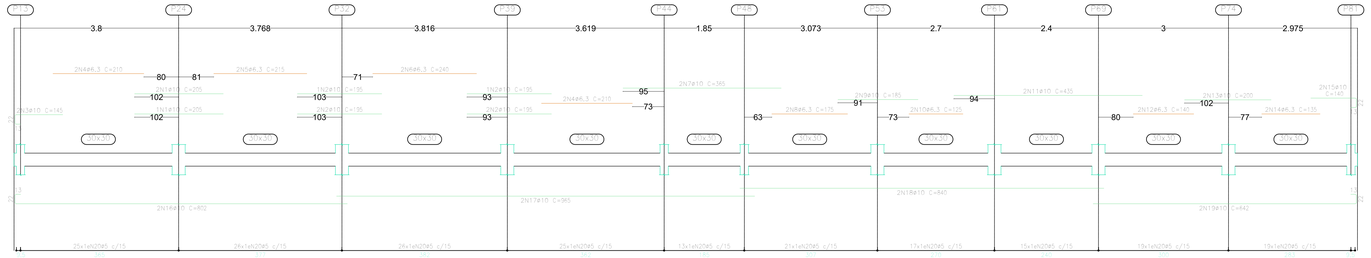
VB 8
Escala vigas 1:50
Escala seções 1:20



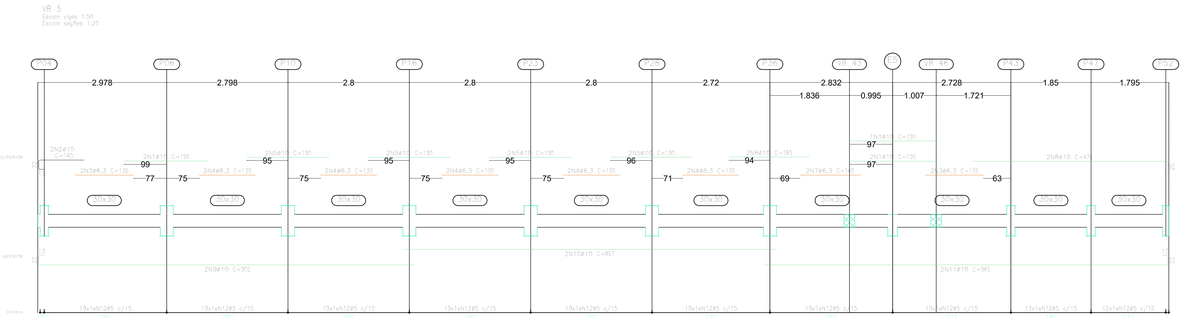




VB 4
Escala vigas 1:50
Escala seções 1:20



VB 5
Escala vigas 1:50
Escala seções 1:20



BALDRAMES
Desenho de vigas
Concreto: C30, usinado,rigor
Aço dos barros: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções 1:20
Escala aberturas 1:20

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
VB 1	1	ø16	4		200	200	3.2	
	2	ø16	4		190	190	3.1	
	3	ø10	4		175	175	1.1	
	4	ø10	4		180	180	1.1	
	5	ø10	4		135	270	1.7	
	6	ø6.3	4		110	440	1.1	
	7	ø10	4		195	195	2.4	
	8	ø6.3	4		145	580	1.4	
	9	ø10	4		150	600	3.7	
	10	ø6.3	4		210	420	1.0	
	11	ø10	2		190	380	2.3	
	12	ø12.5	2		230	460	4.4	
	13	ø6.3	4		220	440	1.1	
	14	ø12.5	2		235	470	4.5	
	15	ø6.3	4		125	250	0.6	
	16	ø10	4		435	870	5.4	
	17	ø6.3	4		140	280	0.7	
	18	ø10	2		200	400	2.5	
	19	ø6.3	4		135	270	0.7	
	20	ø10	1		140	280	1.7	
	21	ø10	4		1530	2040	12.7	
	22	ø10	2		572	1144	7.0	
	23	ø10	1		513	1026	6.3	
	24	ø10	2		835	1670	10.3	
	25	ø10	1		542	884	4.2	
	26	ø16	1		255	510	4.0	
	27	ø16	1		365	365	5.8	
	28	ø5	174		108	18792		23.5
	29	ø5	31		128	3968		6.2
					Total+10%:		95.4	59.3
VB 2	1	ø10	1		120	240	1.5	
	2	ø6.3	1		140	280	0.7	
	3	ø10	1		410	820	5.1	
	4	ø10	2		323	646	4.0	
	5	ø5	134		98	13132		2.2
					Total+10%:		8.4	2.4
VB 3	1	ø10	1		240	720	4.4	
	2	ø10	1		230	870	5.4	
	3	ø10	1		230	920	5.7	
	4	ø10	1		235	940	5.8	
	5	ø10	2		185	370	2.3	
	6	ø6.3	1		150	300	0.7	
	7	ø6.3	1		145	290	0.7	
	8	ø6.3	1		125	500	1.2	
	9	ø10	1		190	380	2.3	
	10	ø6.3	1		155	620	0.6	
	11	ø6.3	1		220	440	1.1	
	12	ø10	2		380	760	4.7	
	13	ø10	1		371	742	4.6	
	14	ø10	1		481	962	5.9	
	15	ø10	1		580	1160	7.1	
	16	ø10	1		513	1026	6.3	
	17	ø10	1		567	1134	7.0	
	18	ø10	1		225	225	1.4	
	19	ø10	1		280	280	3.5	
	20	ø5	92		98	9016		14.2
	21	ø5	48		118	5664		8.9
					Total+10%:		77.4	45.4
VB 4	1	ø10	1		205	615	3.8	
	2	ø10	1		190	1330	7.2	
	3	ø10	1		145	290	1.8	
	4	ø6.3	4		110	440	1.1	
	5	ø6.3	4		215	430	1.1	
	6	ø6.3	4		240	480	1.2	
	7	ø10	4		565	720	4.5	
	8	ø6.3	4		175	350	0.9	
	9	ø10	4		185	740	4.7	
	10	ø6.3	4		125	250	0.6	
	11	ø10	4		435	870	5.4	
	12	ø6.3	4		140	280	0.7	
	13	ø10	4		200	400	2.5	
	14	ø6.3	4		135	270	0.7	
	15	ø10	4		140	280	1.7	
	16	ø10	1		802	1604	9.9	
	17	ø10	4		985	1940	11.9	
	18	ø10	4		840	1680	10.4	
	19	ø10	4		642	1284	7.9	
	20	ø5	204		108	22248		34.9
					Total+10%:		94.3	38.4
VB 5	1	ø10	4		195	975	6.0	
	2	ø10	4		140	280	1.7	
	3	ø6.3	4		135	540	1.3	
	4	ø6.3	16		130	1300	3.2	
	5	ø10	4		100	400	2.4	
	6	ø10	4		185	370	2.3	
	7	ø6.3	4		140	280	0.7	
	8	ø10	4		875	500	3.0	
	9	ø10	1		502	604	11.3	
	10	ø10	4		857	1714	10.6	
	11	ø10	4		965	1930	11.9	
	12	ø5	177		108	19116		30.0
					Total+10%:		70.5	33.0
VB 7	1	ø10	4		125	500	3.1	
	2	ø6.3	4		125	250	0.6	
	3	ø10	1		525	605	4.0	
	4	ø5	11		98	1274		2.0
					Total+10%:		8.5	2.2
VB 8	1	ø10	4		125	500	3.1	
	2	ø6.3	4		130	520	1.3	
	3	ø12.5	4		225	450	4.2	
	4	ø10	4		641	1282	7.9	
	5	ø5	33		108	3456		5.4
					Total+10%:		18.2	5.9
					ø5:		0.0	66.6
					ø6.3:		28.6	0.0
					ø10:		324.2	0.0
					ø12.5:		14.5	0.0
					ø16:		17.3	0.0
					Total:		372.9	166.6

REVISÃO			
Nº	DESCRIÇÃO	DATA	AUTOR

PREFEITURA MUNICIPAL DE ITAPEVI
SECRETARIA DE OBRAS

OBRA/TITULO
UBS COHAB

PROJETO BÁSICO
ARMAÇÃO DOS BALDRAMES 1

ENDEREÇO/LOCAL
ESTRADA LUCINDA DE JESUS SILVA Nº 441

BAIRRO
CONJUNTO HABITACIONAL - SETOR A

ESCALA
S. ESC.

FOLHA
05/13

REVISÃO
R00

DESENHO
DIAGRAMAS

NOME DO ARQUIVO
F05_13_aRM_VIG_BALDRAMES_1