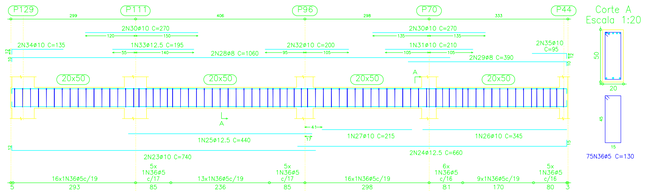
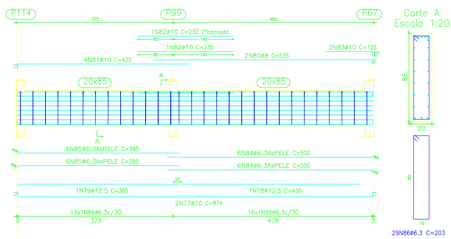
V 50
Escala 1:50



Corte A
Escala 1:20

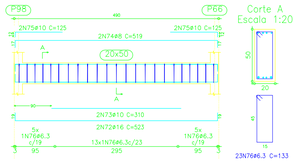
V 54
Escala 1:50



Corte A
Escala 1:20

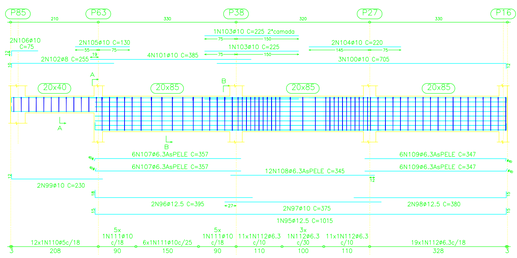
Primeiro piso
Desenho de vigas
Concreto: C25, com desfov.
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

V 53
Escala 1:50



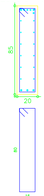
Corte A
Escala 1:20

V 44
Escala 1:50

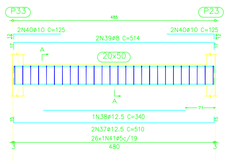


Corte A
Escala 1:20

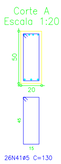
Corte B
Escala 1:20



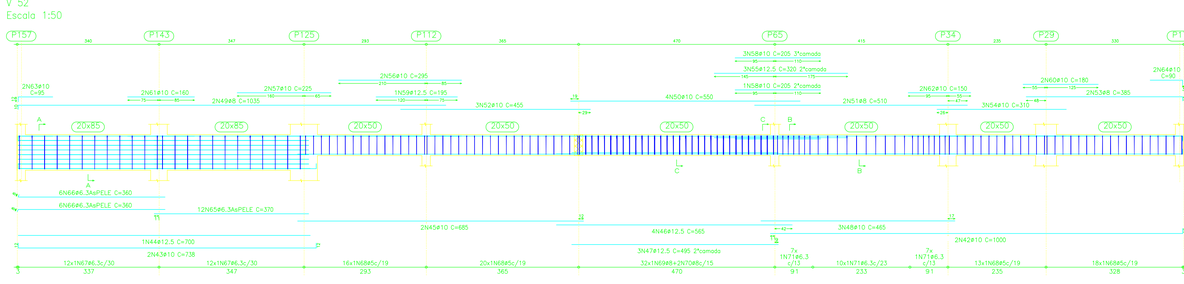
V 51
Escala 1:50



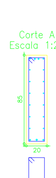
Corte A
Escala 1:20



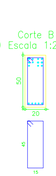
V 52
Escala 1:50



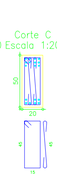
Corte A
Escala 1:20



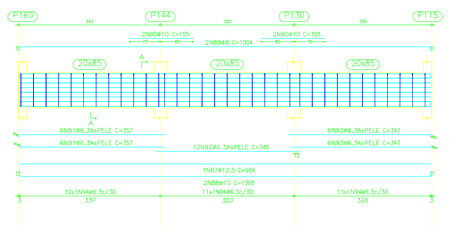
Corte B
Escala 1:20



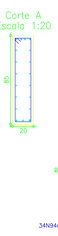
Corte C
Escala 1:20



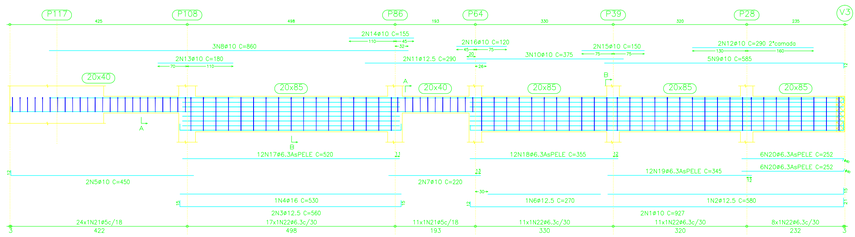
V 56
Escala 1:50



Corte A
Escala 1:20

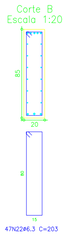


V 46
Escala 1:50



Corte A
Escala 1:20

Corte B
Escala 1:20



Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 133	1	ø10	2	12	894	21	927	1854	11.6	
	2	ø12.5	1		565	15	580	580	5.7	
	3	ø12.5	2	15	530	15	560	1120	11.0	
	4	ø16	1		530		530	530	8.3	
	5	ø10	2	12	438		450	900	5.7	
	6	ø12.5	1		270		270	270	2.6	
	7	ø10	2		220		220	440	2.8	
	8	ø10	3		860		860	2580	16.2	
	9	ø10	3		573	12	585	2925	18.4	
	10	ø10	3		375		375	1125	7.1	
	11	ø12.5	2		290		290	580	5.7	
	12	ø10	2		290		290	580	3.6	
	13	ø10	2		180		180	360	2.3	
	14	ø10	2		155		155	310	1.9	
	15	ø10	2		150		150	300	1.9	
	16	ø10	2		120		120	240	1.5	
	17	ø6.3	12		520		520	6240	15.4	
	18	ø6.3	12		355		355	4260	10.5	
	19	ø6.3	12		345		345	4140	10.2	
	20	ø6.3	12		244	8	252	3024	7.5	
	21	ø5	35				110	3850		6.0
	22	ø6.3	47				203	9541	23.6	
							Total+10%		190.9	6.6

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 140	23	ø10	2	12	728		740	1480	9.3	
	24	ø12.5	2		645	15	660	1320	13.0	
	25	ø12.5	1		440		440	440	4.3	
	26	ø10	1		345		345	345	2.2	
	27	ø10	1		215		215	215	1.4	
	28	ø8	2	10	1050		1060	2120	8.3	
	29	ø8	2		380	10	390	780	3.1	
	30	ø10	4		270		270	1080	6.8	
	31	ø10	1		210		210	210	1.3	
	32	ø10	2		200		200	400	2.5	
	33	ø12.5	1		195		195	195	1.9	
	34	ø10	2	12	123		135	270	1.7	
	35	ø10	2		83	12	95	190	1.2	
	36	ø5	72				130	9750		15.3
							Total+10%		62.7	16.8
V 141	37	ø12.5	2	15	480	15	510	1020	10.0	
	38	ø12.5	1		340		340	340	3.3	
	39	ø8	2	17	480	17	514	1028	4.0	
	40	ø10	4	12	113		125	500	3.1	
	41	ø5	28				130	3380		5.3
							Total+10%		22.4	5.8
V 142	42	ø10	2		988	12	1000	2000	12.6	
	43	ø10	2	12	714	12	738	1476	9.3	
	44	ø12.5	1		700		700	700	6.9	
	45	ø10	2		685		685	1370	8.6	
	46	ø12.5	4		565		565	2260	22.2	
	47	ø12.5	3		495		495	1485	14.6	
	48	ø10	3		465		465	1395	8.8	
	49	ø8	2	10	1025		1035	2070	8.1	
	50	ø10	4		550		550	2200	13.8	
	51	ø8	2		510		510	1020	4.0	
	52	ø10	3		455		455	1365	8.6	
	53	ø8	2		375	10	385	770	3.0	
	54	ø10	3		310		310	930	5.8	
	55	ø12.5	3		320		320	960	9.4	
	56	ø10	2		295		295	590	3.7	
	57	ø10	2		225		225	450	2.8	
	58	ø10	4		205		205	820	5.1	
	59	ø12.5	1		195		195	195	1.9	
	60	ø10	2		180		180	360	2.3	
	61	ø10	2		160		160	320	2.0	
	62	ø10	2		150		150	300	1.9	
	63	ø10	2	12	83		95	190	1.2	
	64	ø10	2		78	12	90	180	1.1	
	65	ø6.3	12		370		370	4440	11.0	
	66	ø6.3	12	8	352		360	4320	10.7	
	67	ø6.3	24				203	4872	12.0	
	68	ø5	67				130	8710		13.7
	69	ø8	32				136	4352	17.1	
	70	ø8	64				70	4480	17.6	
	71	ø6.3	24				133	3192	7.9	
							Total+10%		257.4	15.1
V 146	72	ø16	2	19	485	19	523	1046	16.4	
	73	ø10	2		310		310	620	3.9	
	74	ø8	2	17	485	17	519	1038	4.1	
	75	ø10	4	12	113		125	500	3.1	
	76	ø6.3	23				133	3059	7.6	
							Total+10%		38.6	
V 147	77	ø10	2	12	850	12	874	1748	11.0	
	78	ø12.5	1		430		430	430	4.2	
	79	ø12.5	1		385		385	385	3.8	
	80	ø8	2		525	10	535	1070	4.2	
	81	ø10	4	12	413		425	1700	10.7	
	82	ø10	2		230		230	460	2.9	
	83	ø10	2		113	12	125	250	1.6	
	84	ø6.3	12		492	8	500	6000	14.8	
	85	ø6.3	12	8	387		395	4740	11.7	
	86	ø6.3	29				203	5887	14.6	
							Total+10%		87.5	
V 148	87	ø12.5	1		984		984	984	9.7	
	88	ø10	2	12	984	12	1008	2016	12.7	
	89	ø8	2	10	984	10	1004	2008	7.9	
	90	ø10	4		155		155	620	3.9	
	91	ø6.3	12	8	349		357	4284	10.6	
	92	ø6.3	12		345		345	4140	10.2	
	93	ø6.3	12		339	8	347	4164	10.3	
	94	ø6.3	34				203	6902	17.1	
							Total+10%		90.6	
V 132	95	ø12.5	1	15	985	15	1015	1015	10.0	
	96	ø12.5	2		377		395	790	7.8	
	97	ø10	2		375		375	750	4.7	
	98	ø12.5	2		365	15	380	760	7.5	
	99	ø10	2	12	218		230	460	2.9	
	100	ø10	3		693	12	705	2115	13.3	
	101	ø10	4		385		385	1540	9.7	
	102	ø8	2	10	245		255	510	2.0	
	103	ø10	2		225		225	450	2.8	
	104	ø10	2		220		220	440	2.8	
	105	ø10	2		130		130	260	1.6	
	106	ø10	2	12	63		75	150	0.9	
	107	ø6.3	12	8	349		357	4284	10.6	
	108	ø6.3	12		345		345	4140	10.2	
	109	ø6.3	12		339	8	347	4164	10.3	
	110	ø5	12				110	1320		2.1
	111	ø10	16				210	3360	21.1	
	112	ø6.3	44				203	8932	22.1	
							Total+10%		154.3	2.3
								ø5:	0.0	46.6
								ø6.3:	284.9	0.0
								ø8:	91.7	0.0
								ø10:	329.6	0.0
								ø12.5:	171.1	0.0
								ø16:	27.1	0.0
								Total:	904.4	46.6

OBSERVAÇÕES:

- Medidas das cotas em cm (exceto onde indicado)
- Verificar medidas na obra
- Molhar as formas antes da concretagem
- Usar espaçadores para garantir recobrimento da aço
- Nas armações negativas das lajes – usar "caranguejos"
- Cura mínima = 7 dias
- Desenformante(formas) = mínimo de 28 dias
- Todas as peças de concreto em contato com o solo devem ser executadas sobre lastro de concreto magro c/ e=5cm
- Em caso de dúvidas, contactar o Calculista

Classe de Agress.:	C II	Cobertura (cm):	Agreg. Graúdo: Brita 01
CONCRETO(Fck):	25 MPa	AÇO: CA 50	SLUMP: (mm): 100+-10
Fator A/C (máx.):	< 0.60	FORMAS: C. Res.	ADITIVO:

Nº	DATA	DESCRIÇÃO	VISTO

QUADRO DE REVISÕES:

ASS:

PROJETO EXECUTIVO DE ESTRUTURAL

PAVILHÃO DE SALAS DE AULA II

CAMPUS JK / DIAMANTINA

RODOVIA MG 367, KM 583, Nº 5000 – ALTO DA JACUBA – DIAMANTINA/MG

PROPRIETÁRIO: UNIVERSIDADE FEDERAL DOS VALES DO JEQUITINHONHA E MUCURI — CNPJ: 18.668.313/0001-09

TÍTULO:

ARMAÇÃO DE VIGAS – PRIMEIRO PISO – 06

AUTOR PROJETO ARQUITETÔNICO / RT:

ALESSANDRO DE OLIVEIRA ALVES
RT CIVIL CREA ALESSANDRO DE OLIVEIRA ALVES – CREA 121.977/D-MG
RUA A 210, 151, APARECIDA – GOVERNADOR VALADARES/MG
FONE: (33) 8837-0611 / 8803-8041

VERSÃO:	DATA:	AUTOCAD	FOLHA:
VERSÃO 1	17.10.2012		25