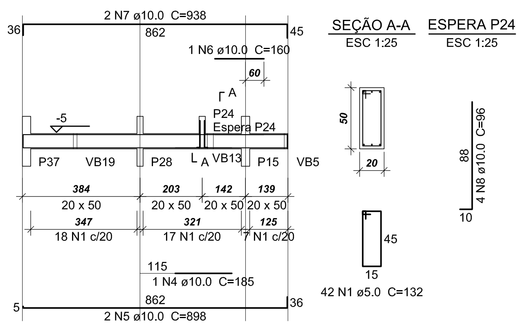
VB69 (20 x 50)
ESC 1:100

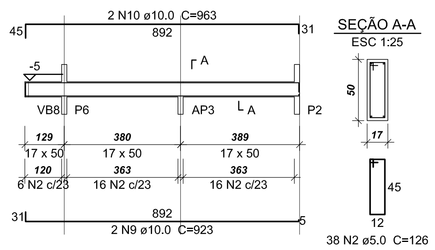


SEÇÃO A-A
ESC 1:25

42 N1 ø5.0 C=132

ESPERA P24
ESC 1:25

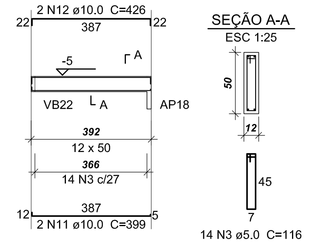
VB70 (17 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

38 N2 ø5.0 C=126

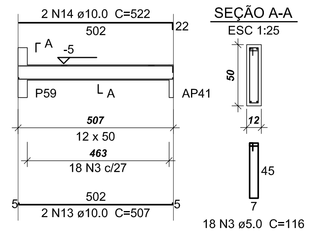
VB71 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

14 N3 ø5.0 C=116

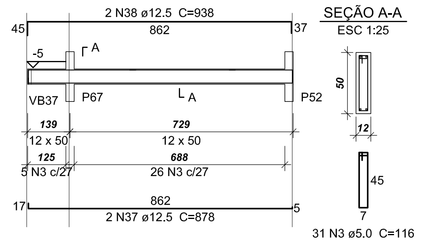
VB72 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

18 N3 ø5.0 C=116

VB73 (12 x 50)
ESC 1:100



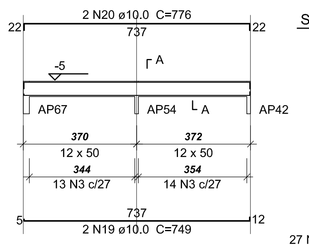
SEÇÃO A-A
ESC 1:25

31 N3 ø5.0 C=116

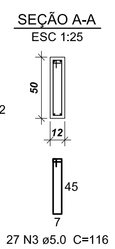
Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	138	132	18216
	2	5.0	38	126	4788
	3	5.0	532	116	61712
CA50	4	10.0	1	185	185
	5	10.0	2	898	1796
	6	10.0	1	160	160
	7	10.0	2	938	1876
	8	10.0	4	96	384
	9	10.0	2	923	1846
	10	10.0	2	963	1926
	11	10.0	2	399	798
	12	10.0	2	426	852
	13	10.0	2	507	1014
	14	10.0	2	522	1044
	15	10.0	14	742	10388
	16	10.0	2	737	1474
	17	10.0	4	145	580
	18	10.0	2	179	358
	19	10.0	8	749	5992
	20	10.0	8	776	6208
	21	10.0	8	742	5936
	22	10.0	8	769	6152
	23	10.0	12	747	8964
	24	10.0	2	202	404
	25	10.0	2	152	304
	26	10.0	2	209	418
	27	10.0	4	727	2908
	28	10.0	4	722	2888
	29	10.0	2	1172	2344
	30	10.0	2	882	1764
	31	10.0	2	1198	2396
	32	10.0	2	951	1902
	33	10.0	2	151	302
	34	10.0	2	208	416
	35	10.0	2	154	308
	36	10.0	2	211	422
	37	12.5	2	878	1756
	38	12.5	2	938	1876

VB76 (12 x 50)
ESC 1:100

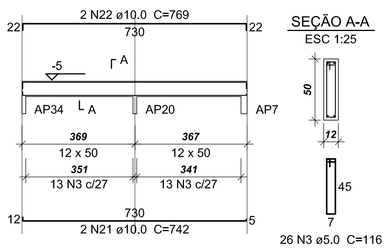


SEÇÃO A-A
ESC 1:25



27 N3 ø5.0 C=116

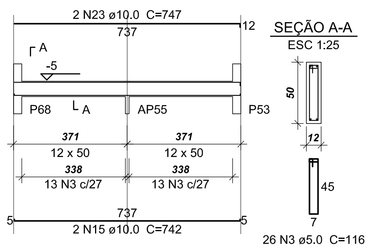
VB77 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

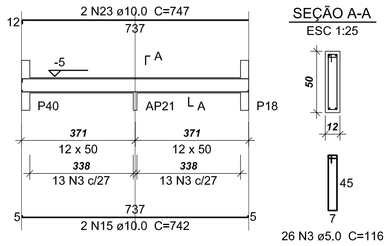
VB78 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

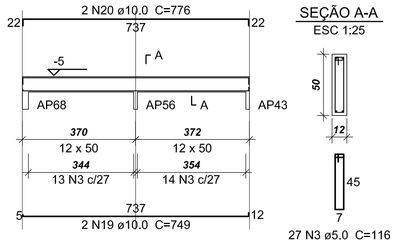
VB79 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

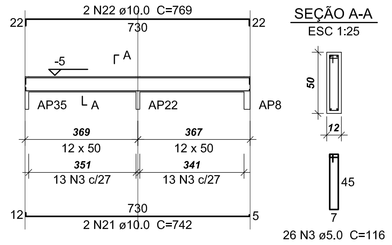
VB80 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

27 N3 ø5.0 C=116

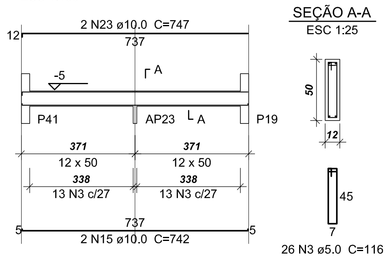
VB81 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

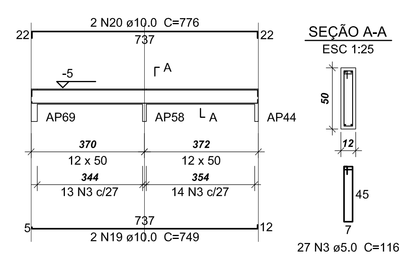
VB83 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

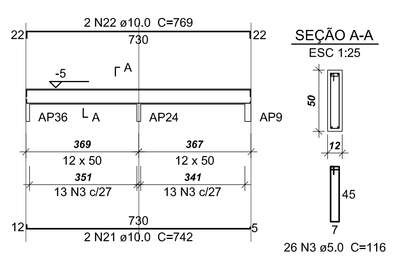
VB84 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

27 N3 ø5.0 C=116

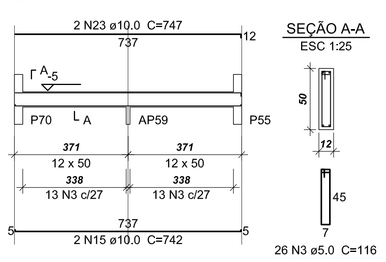
VB85 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

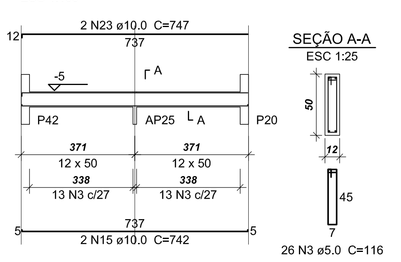
VB86 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

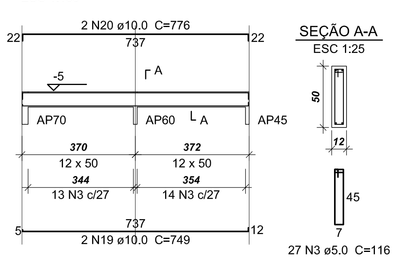
VB87 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

VB88 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

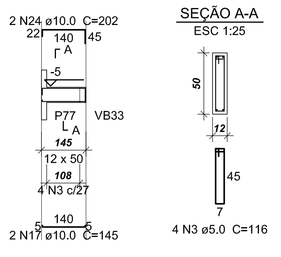
27 N3 ø5.0 C=116

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	10.0	747.1	460.6
	12.5	36.4	35
CA60	5.0	847.2	130.6
PESO TOTAL			
CA50	495.6		
CA60	130.6		

Vol. de concreto total (C-25) = 12.67 m³
Área de forma total = 213.64 m²

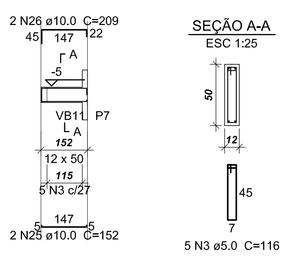
VB90 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

4 N3 ø5.0 C=116

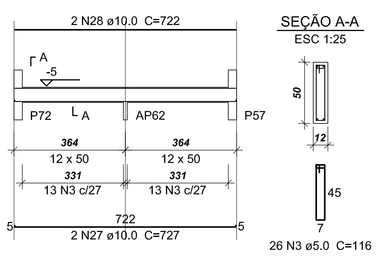
VB91 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

5 N3 ø5.0 C=116

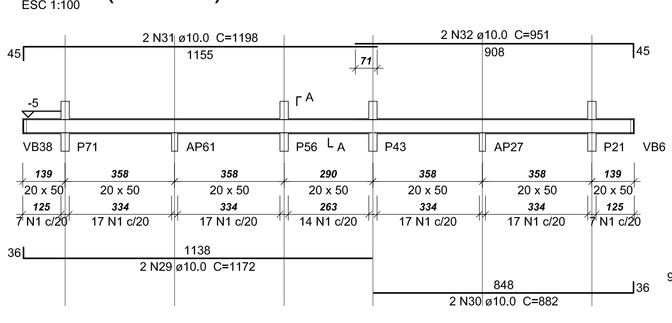
VB95 (12 x 50)
ESC 1:100



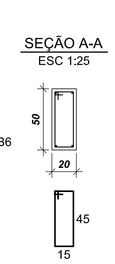
SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

VB92 (20 x 50)
ESC 1:100

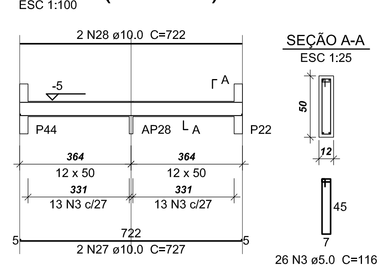


SEÇÃO A-A
ESC 1:25



96 N1 ø5.0 C=132

VB96 (12 x 50)
ESC 1:100

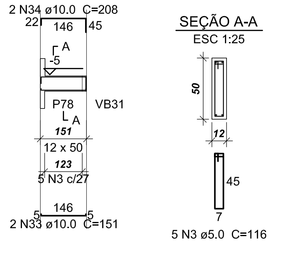


SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

VB69 VB70 VB71
VB72 VB73 VB74
VB75 VB76 VB77
VB78 VB79 VB80
VB81 VB82 VB83
VB84 VB85 VB86
VB87 VB88 VB89
VB90 VB91 VB92
VB95 VB96 VB97
VB98

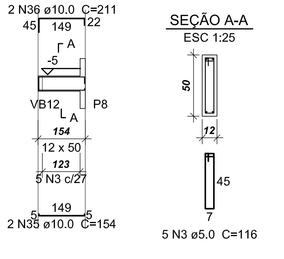
VB97 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

5 N3 ø5.0 C=116

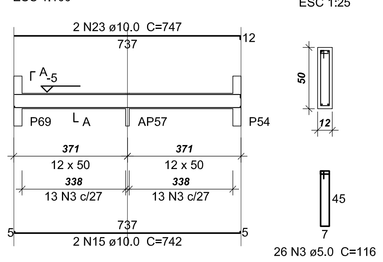
VB98 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

5 N3 ø5.0 C=116

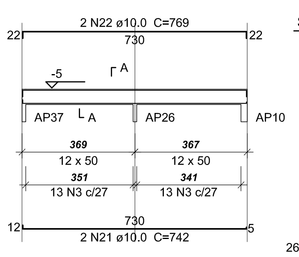
VB82 (12 x 50)
ESC 1:100



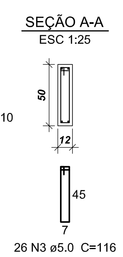
SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

VB89 (12 x 50)
ESC 1:100

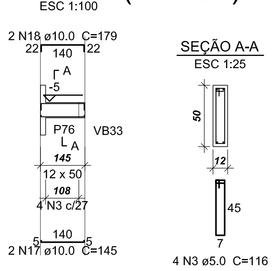


SEÇÃO A-A
ESC 1:25



26 N3 ø5.0 C=116

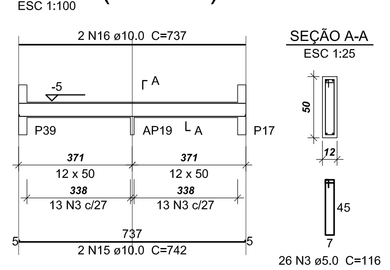
VB75 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

4 N3 ø5.0 C=116

VB74 (12 x 50)
ESC 1:100



SEÇÃO A-A
ESC 1:25

26 N3 ø5.0 C=116

01	18.06.2013		PROJETO ESTRUTURAL	
Nº	DATA	RESPONSÁVEL	DESCRIÇÃO DA REVISÃO:	

AS BUILT ENGENHARIA DE PROJETOS LTDA
Rua Jovino do Rosário, 1564 - Boa Vista
CEP 82560-435 - Curitiba - Paraná
asbuiltprojetos@gmail.com - (41)3088-4949

FASE:
PROJETO ESTRUTURAL

CONFERIR MEDIDAS NA OBRA

OBRA:
ADMINISTRAÇÃO
CAMPUS JANAÚBA

PROPRIETÁRIO: UNIVERSIDADE FEDERAL DOS VALES DO JEQUITINHONHA E MUCURI — CNPJ: 16.886.315/0001-57

PRANCHA:
FERRAGENS DAS VIGAS:
BALDRAMES (3)

AUTOR PROJETO:
CARLOS HENRIQUE DE SOUZA GONÇALVES
CREA 79612/D - Pr

ESCALA: INDICADA			DESENHO: EQUIPE
VERSÃO: VERSAO 1	DATA: 18/06/2013	ÁREA CONSTRUÍDA: 3056,63m²	FOLHA: EST 07/22

ARQUIVO: