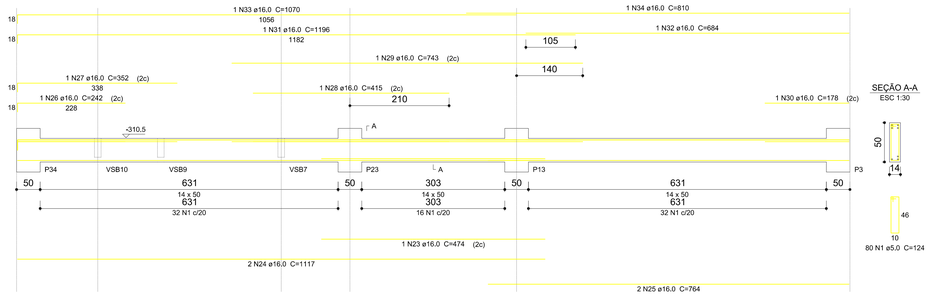
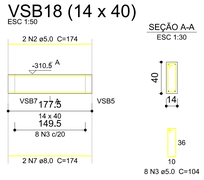
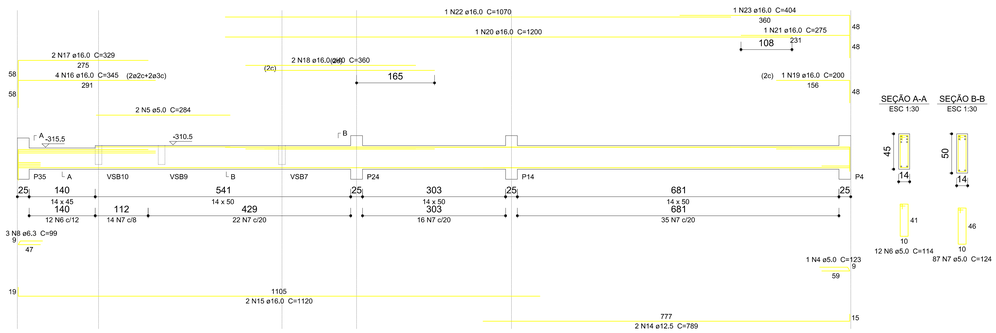
VSB15 (14 x 50)
ESC 1:50



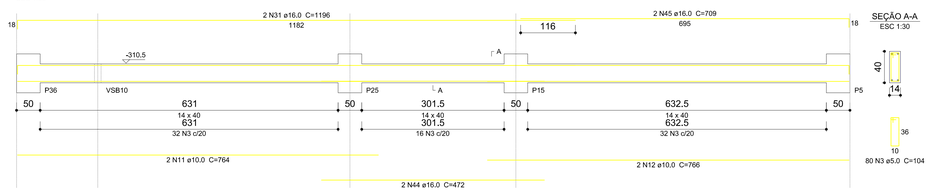
VSB18 (14 x 40)
ESC 1:50



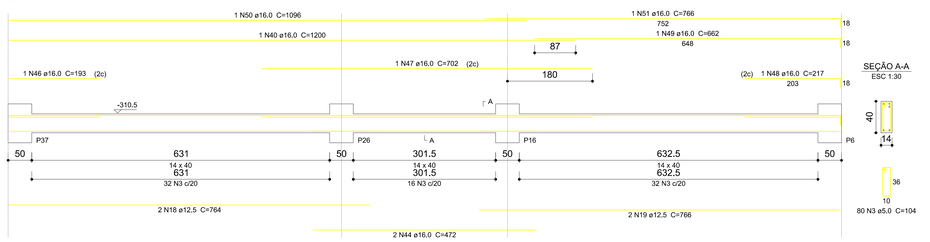
VSB19 (var)
ESC 1:50



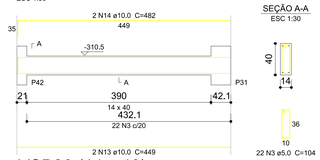
VSB20 (14 x 40)
ESC 1:50



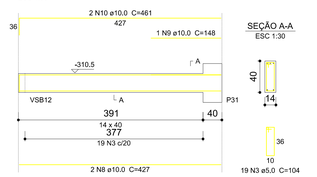
VSB21 (14 x 40)
ESC 1:50



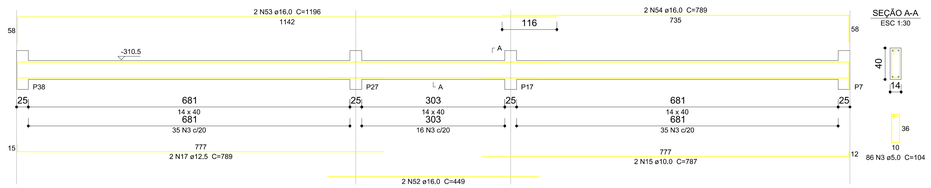
VSB27 (14 x 40)
ESC 1:50



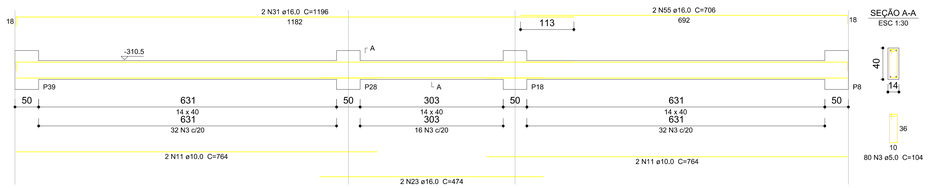
VSB26 (14 x 40)
ESC 1:50



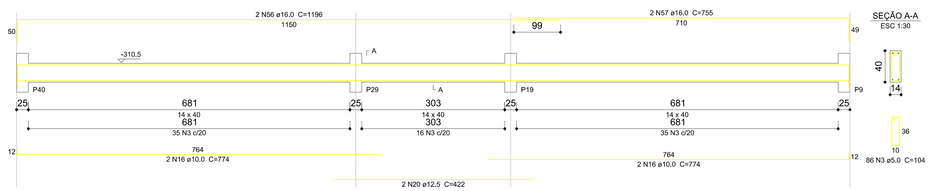
VSB22 (14 x 40)
ESC 1:50



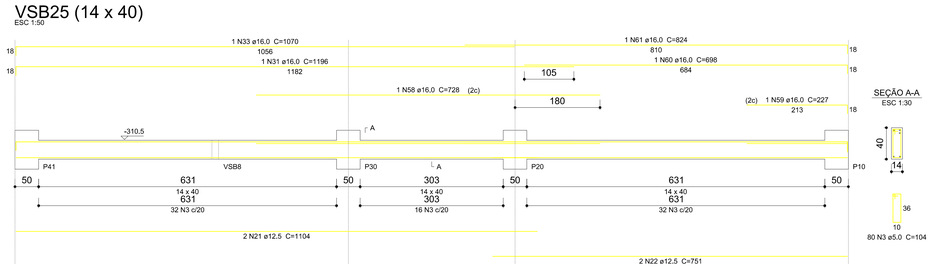
VSB23 (14 x 40)
ESC 1:50



VSB24 (14 x 40)
ESC 1:50



VSB25 (14 x 40)
ESC 1:50



Relação do aço

VSB15	VSB18	VSB19
VSB20	VSB21	VSB22
VSB23	VSB24	VSB25
VSB26	VSB27	

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	168	124	20832
	2	5.0	2	174	348
	3	5.0	541	104	56264
	4	5.0	1	123	123
	5	5.0	2	154	308
CA50	6	6.3	3	99	297
	7	8.0	2	174	348
	8	10.0	2	427	854
	9	10.0	1	148	148
	10	10.0	2	461	922
	11	10.0	6	764	4584
	12	10.0	2	766	1532
	13	10.0	2	449	898
	14	10.0	2	482	964
	15	10.0	2	787	1574
	16	10.0	4	774	3096
	17	12.5	4	789	3156
	18	12.5	2	764	1528
	19	12.5	2	766	1532
	20	12.5	2	422	844
	21	12.5	2	1104	2208
	22	12.5	2	751	1502
	23	16.0	3	474	1422
	24	16.0	2	1117	2234
	25	16.0	2	764	1528
	26	16.0	1	242	242
	27	16.0	1	352	352
	28	16.0	1	415	415
	29	16.0	1	743	743
	30	16.0	1	178	178
	31	16.0	6	1196	7176
	32	16.0	1	684	684
	33	16.0	2	1070	2140
	34	16.0	1	810	810
	35	16.0	2	1120	2240
	36	16.0	3	317	951
	37	16.0	2	361	722
	38	16.0	2	360	720
	39	16.0	1	200	200
	40	16.0	2	1200	2400
	41	16.0	1	275	275
	42	16.0	1	1070	1070
	43	16.0	1	404	404
	44	16.0	4	472	1888
	45	16.0	2	709	1418
	46	16.0	1	193	193
	47	16.0	1	702	702
	48	16.0	1	217	217
	49	16.0	1	662	662
	50	16.0	1	1096	1096
	51	16.0	1	766	766
	52	16.0	2	449	898
	53	16.0	2	1196	2392
	54	16.0	2	789	1578
	55	16.0	2	706	1412
	56	16.0	2	1196	2392
	57	16.0	2	755	1510
	58	16.0	1	728	728
	59	16.0	1	227	227
	60	16.0	1	698	698
	61	16.0	1	824	824

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	3	0.8
	8.0	3.5	1.5
	10.0	145.8	98.8
	12.5	107.7	114.1
	16.0	465.1	807.4
CA60	5.0	778.8	132
PESO TOTAL			
CA50	1022.7		
CA60	132		

Vol. de concreto total (C-25) = 9 m³
Área de forma total = 149,77 m²

FB ENGENHARIA LTDA
Felisberto & Biava Associados

FB ENGENHARIA LTDA
CNPJ: 08.582.028/0001-96
CREA-SC - 82.125-1 - VIDEIRA-SC

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Fone: (49) 3566.5862

Cliente
INSTITUTO FEDERAL CATARINENSE

Projeto **425**

Obra **EDIFICAÇÃO PARA SALAS DE AULA E OFICINAS**
Local **RODOVIA SC 303 - VIDEIRA - SC**

Prancha **08/32**

Resp. técnico
Eng. Civil FABIANO BIAVA
CREA SC - 67691-9

Assinatura Proprietário

Descrição
VIGAS SUBSOLO (02/02)

Projeto **ESTRUTURAL**

Desenho	Unidade	Data	Escala	Área
FB ENGENHARIA	CENTÍMETROS	FEVEREIRO/2013	INDICADA	2.546,18m²