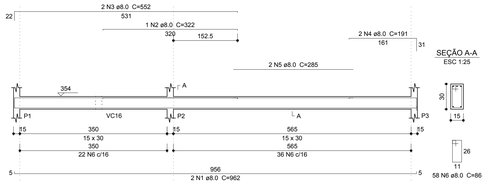
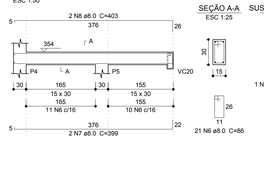
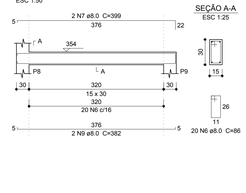
VC1 (15 x 30)
ESC 1:50



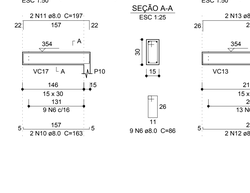
VC2 (15 x 30)
ESC 1:50



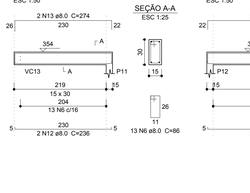
VC3 (15 x 30)
ESC 1:50



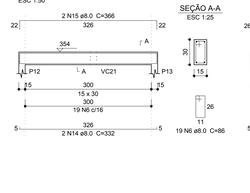
VC4 (15 x 30)
ESC 1:50



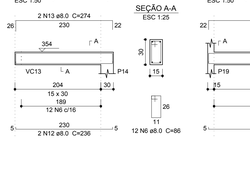
VC5 (15 x 30)
ESC 1:50



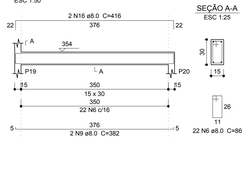
VC6 (15 x 30)
ESC 1:50



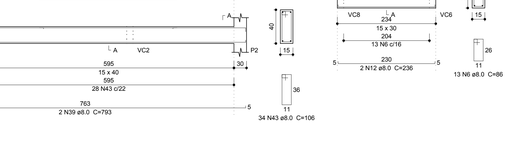
VC7 (15 x 30)
ESC 1:50



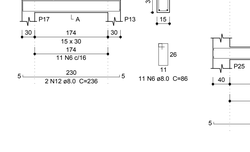
VC9 (15 x 30)
ESC 1:50



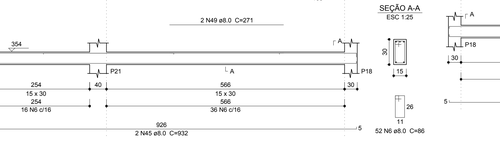
VC8 (15 x 30)
ESC 1:50



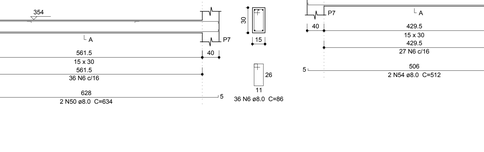
VC10 (15 x 30)
ESC 1:50



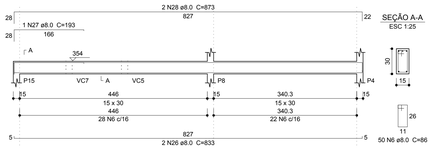
VC11 (15 x 30)
ESC 1:50



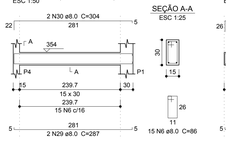
VC12 (15 x 30)
ESC 1:50



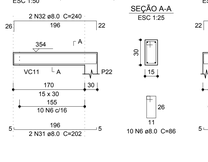
VC13 (15 x 30)
ESC 1:50



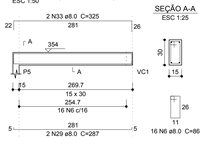
VC14 (15 x 30)
ESC 1:50



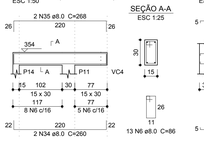
VC15 (15 x 30)
ESC 1:50



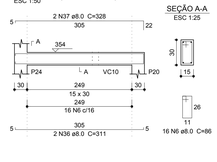
VC16 (15 x 30)
ESC 1:50



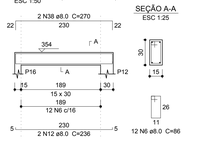
VC17 (15 x 30)
ESC 1:50



VC18 (15 x 30)
ESC 1:50



VC19 (15 x 30)
ESC 1:50



VC20 (15 x 40)
ESC 1:50

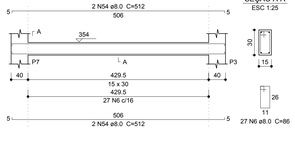
VC21 (15 x 30)
ESC 1:50

VC22 (15 x 30)
ESC 1:50

VC23 (15 x 30)
ESC 1:50

VC24 (15 x 30)
ESC 1:50

VC25 (15 x 30)
ESC 1:50



Relação do aço

VC1	VC2	VC3
VC4	VC5	VC6
VC7	VC8	VC9
VC10	VC11	VC12
VC13	VC14	VC15
VC16	VC17	VC18
VC19	VC20	VC21
VC22	VC23	VC24
VC25		

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA50	1	8.0	6	962	5772
	2	8.0	2	322	644
	3	8.0	2	552	1104
	4	8.0	4	191	764
	5	8.0	2	285	570
	6	8.0	633	86	54438
	7	8.0	4	399	1596
	8	8.0	2	403	806
	9	8.0	6	382	2292
	10	8.0	2	163	326
	11	8.0	2	197	394
	12	8.0	10	236	2360
	13	8.0	4	274	1096
	14	8.0	2	332	664
	15	8.0	2	366	732
	16	8.0	2	416	832
	17	8.0	2	996	1992
	18	8.0	2	424	848
	19	8.0	2	567	1134
	20	8.0	2	270	540
	21	8.0	2	912	1824
	22	8.0	1	297	297
	23	8.0	2	466	932
	24	8.0	3	199	597
	25	8.0	2	294	588
	26	8.0	2	833	1666
	27	8.0	1	193	193
	28	8.0	2	873	1746
	29	8.0	4	287	1148
	30	8.0	2	304	608
	31	8.0	2	202	404
	32	8.0	2	240	480
	33	8.0	2	325	650
	34	8.0	2	260	520
	35	8.0	2	268	536
	36	8.0	2	311	622
	37	8.0	2	328	656
	38	8.0	4	270	1080
	39	8.0	2	793	1586
	40	8.0	2	318	636
	41	8.0	2	181	362
	42	8.0	2	328	656
	43	8.0	34	106	3604
	44	8.0	2	230	460
	45	8.0	2	932	1864
	46	8.0	1	312	312
	47	8.0	2	496	992
	48	8.0	3	191	573
	49	8.0	2	271	542
	50	8.0	2	634	1268
	51	8.0	3	187	561
	52	8.0	3	202	606
	53	8.0	2	267	534
	54	8.0	4	512	2048
	55	10.0	1	107	107

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	8.0	1100.6	434.74
	10.0	1.1	0.68
PESO TOTAL (kg)			
CA50	435.42		

Volume de concreto (C-20) = 5.49 m³
Área de forma = 91.1 m²

APROVAÇÃO:

APROVAÇÃO:

Governo do Estado do Tocantins
Secretaria de Estado da Saúde

Diretoria de Arquitetura e Engenharia dos Estabelecimentos de Saúde

OBRA:
AMPLIAÇÃO DO REFEITÓRIO DO HOSPITAL REGIONAL DE GURUPI

ENDEREÇO:
GURUPI / TO

PROJETO:
ESTRUTURA EM CONCRETO ARMADO

CONTEÚDO:
VIGAS DE COBERTURA

AUTOR(A) DO PROJETO:
MARCELO CAMPOS MONTEIRO
Engenheiro Civil
CREA 5061327006/D-SP

DIRETOR(A):

SECRETÁRIO(A):

ÁREA EXISTENTE:	ÁREA A AMPLIAR:	ÁREA A REFORMAR:	ÁREA TOTAL:	
VER PROJETO ARQUITETÔNICO	VER PROJETO ARQUITETÔNICO	VER PROJETO ARQUITETÔNICO	VER PROJETO ARQUITETÔNICO	10/11
TERRENO: VER PROJETO ARQUITETÔNICO	NOME DO ARQUIVO: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	DATA: 25/05/2018	DESENHISTA: MARCELO CAMPOS MONTEIRO	A0