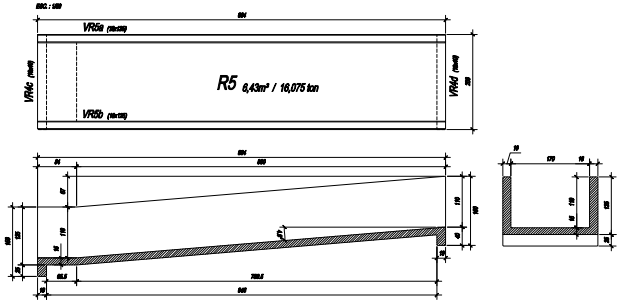
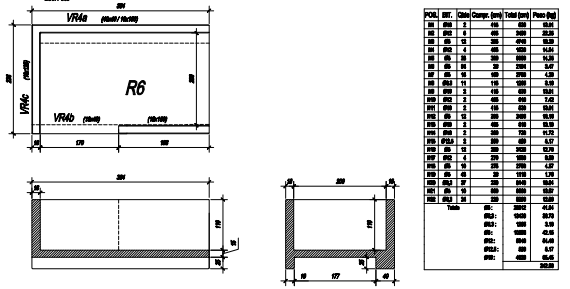
Folha formato A1 (841x594mm) – NBR 16752–2020

RAMPA R5 (x1)



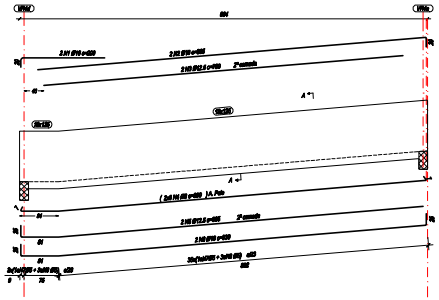
POS.	BIT.	Cobr.	Comp. (cm)	Total (cm)	Peso (kg)
N1	Ø10	4	899	899	13,83
N2	Ø10	4	899	3400	48,89
N3	Ø12,5	4	899	3420	76,65
N4	Ø5	34	899	30600	48,84
N5	Ø12,5	4	899	3600	80,69
N6	Ø12,5	4	899	3600	80,69
N7	Ø5	26	275	10000	39,81
N8	Ø5	252	39	9900	9,83
N9	Ø10	6	899	1400	20,33
N10	Ø12,5	4	899	900	8,10
N11	Ø12,5	4	911	900	7,29
N12	Ø5,0	34	199	3760	6,45
N13	Ø5	12	899	9900	58,83
N14	Ø5,0	65	899	10000	44,39
N15	Ø5	6	899	7600	11,52
N16	Ø5,0	65	899	12700	56,52
Totais		Ø5:		61400	63,97
		Ø5,0:		22100	19,69
		Ø12,5:		32100	0,00
		Ø10:		23300	34,04
		Ø12,5:		9400	15,67
		Ø10:		9400	100,16
					433,37

RAMPA R6 (x1)

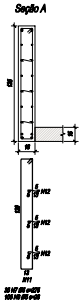


POS.	BIT.	Cobr.	Comp. (cm)	Total (cm)	Peso (kg)
N1	Ø10	2	499	999	13,81
N2	Ø12	6	499	3000	22,20
N3	Ø5	12	399	4740	18,39
N4	Ø12	4	499	1999	14,81
N5	Ø5	36	399	1999	14,39
N6	Ø5	84	39	3300	5,47
N7	Ø5	18	499	2700	4,25
N8	Ø12	11	110	1207	5,35
N9	Ø10	2	410	820	10,81
N10	Ø12	2	499	998	7,40
N11	Ø10	2	110	220	10,81
N12	Ø5	12	399	2400	10,10
N13	Ø10	2	499	998	13,78
N14	Ø10	2	399	799	11,72
N15	Ø10,0	2	399	699	8,17
N16	Ø5	12	399	3400	12,74
N17	Ø12	4	370	1999	8,89
N18	Ø5	10	370	3700	4,57
N19	Ø5	48	39	1918	1,79
N20	Ø5,0	37	399	9949	10,91
N21	Ø5	10	899	9900	10,97
N22	Ø12	31	399	9999	13,69
Totais		Ø5:		39900	41,04
		Ø5,0:		10400	20,70
		Ø12,5:		1399	3,10
		Ø5:		19900	43,91
		Ø12:		9949	64,49
		Ø12,5:		999	0,17
		Ø10:		4999	65,45
					349,99

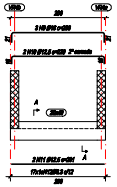
VR5a = VR5b



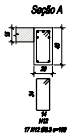
Seção A



VR4c = VR4d

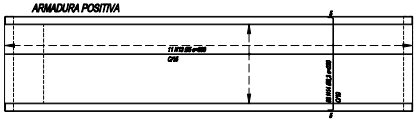


Seção A

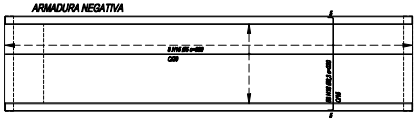


RAMPA
DET. ARMAÇÃO
Concreto: C40, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60
Escala vigas 1:50
Escala seções vigas 1:25
Escala seções rampa 1:50

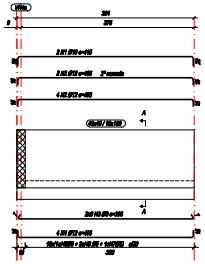
ARMADURA POSITIVA



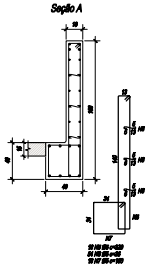
ARMADURA NEGATIVA



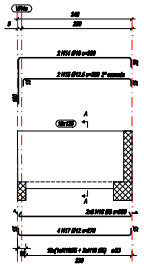
VR6a



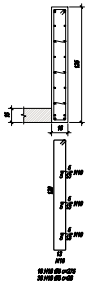
Seção A



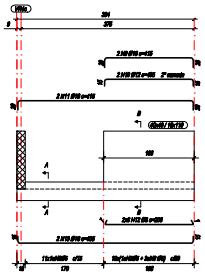
VR6c



Seção A

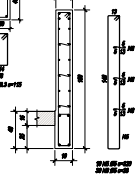


VR6b

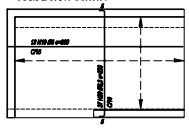


Seção A

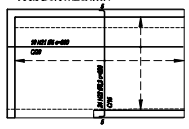
Seção B



ARMADURA POSITIVA



ARMADURA NEGATIVA



VIDE NOTA FOLHA 02

PROJETO DE PROPRIEDADE INTELECTUAL DO Eng.º MÁRCIO SULZBACH, COM DIREITOS RESERVADOS E REGISTRADOS NO CONFEA SOB Nº 020694 PROIBIDA A UTILIZAÇÃO TOTAL OU PARCIAL SEM AUTORIZAÇÃO DO AUTOR.

REVISÃO	DATA	DESCRIÇÃO	APROVAÇÃO
04	-/-/-	-/-	
03	-/-/-	-/-	
02	-/-/-	-/-	
01	20/03/20	EXECUTIVO	
00	03/03/20	LIBERAÇÃO INICIAL	

HELICAL
Eng.º Márcio Sulzbach
Eng. Responsável CREA 060031694/D Lic. 182165
A.R.T. 2620260554006
R. POUSO ALEGRE, 324 - Bq. EUCALIPTOS
CEP: 12233-340 - SÃO JOSÉ DOS CAMPOS - SP
FONE: (12) 991291078
e-mail: marcio@helical.com.br

PROJETO: ESTRUTURA	EMPREENDIMENTO: EFETI - PEDRO DE ALCÂNTARA	ESCALA: indicadas
DESENHISTA: MÁRCIO	CLIENTE: URBAM - URBANIZADORA MUNICIPAL	OBRA Nº: M023
ARQUIVO DIGITAL: M023a_.dwg	LOCAL: Av. Adilson José da Cruz, 7581 - Conj. Res. Dom Pedro I, São José dos Campos - SP, 12232-750	
TÍTULO: ESTRUTURAS - CONCRETO ARMADO / PRÉMOLDADO DET ARMAÇÃO RAMPA (3 / 3)		DESENHO Nº: S10