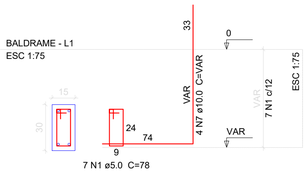
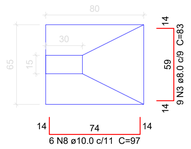
P1=P4



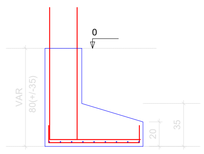
S1=S4

PLANTA
ESC 1:75

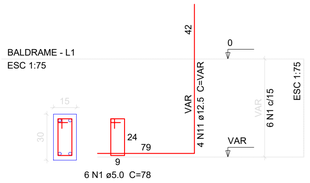


Solo com capacidade de suporte > 2.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:75

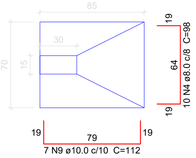


P2=P3



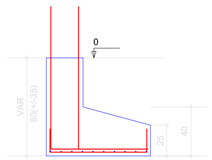
S2=S3

PLANTA
ESC 1:75

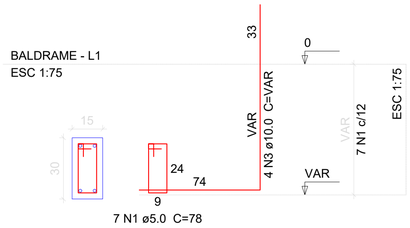


Solo com capacidade de suporte > 2.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

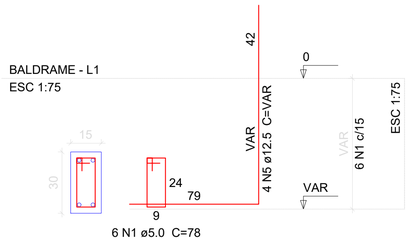
CORTE
ESC 1:75



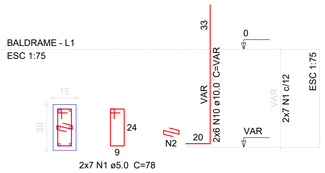
P1=P4



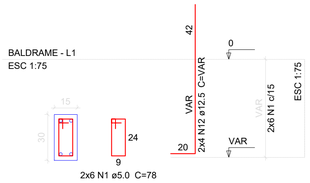
P2=P3=P6=P7



P5=P8

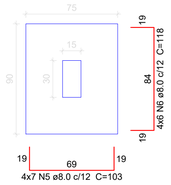


P6=P7



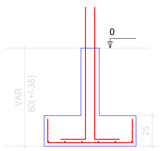
S5=S6=S7=S8

PLANTA
ESC 1:75



Solo com capacidade de suporte > 2.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:75



Relação do aço

2xS1 2xS2 S5

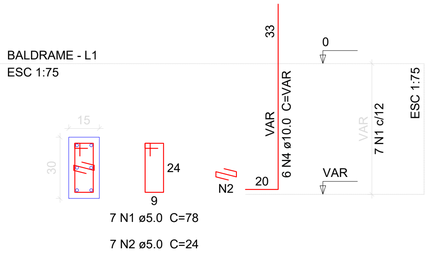
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	52	78	4056
	2	5.0	14	24	336
CA50	3	8.0	18	83	1494
	4	8.0	20	98	1960
	5	8.0	28	103	2884
	6	8.0	24	118	2832
	7	10.0	8	VAR	VAR
	8	10.0	12	97	1164
	9	10.0	14	112	1568
	10	10.0	12	VAR	VAR
	11	12.5	8	VAR	VAR
	12	12.5	8	VAR	VAR

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	91.7	39.8
	10.0	57.9	39.2
	12.5	27	28.6
CA60	5.0	44	7.4
PESO TOTAL			
CA50	107.6		
CA60	7.4		

Vol. de concreto total (C-30) = 1.62 m³
Área de forma total = 12.18 m²

P5=P8



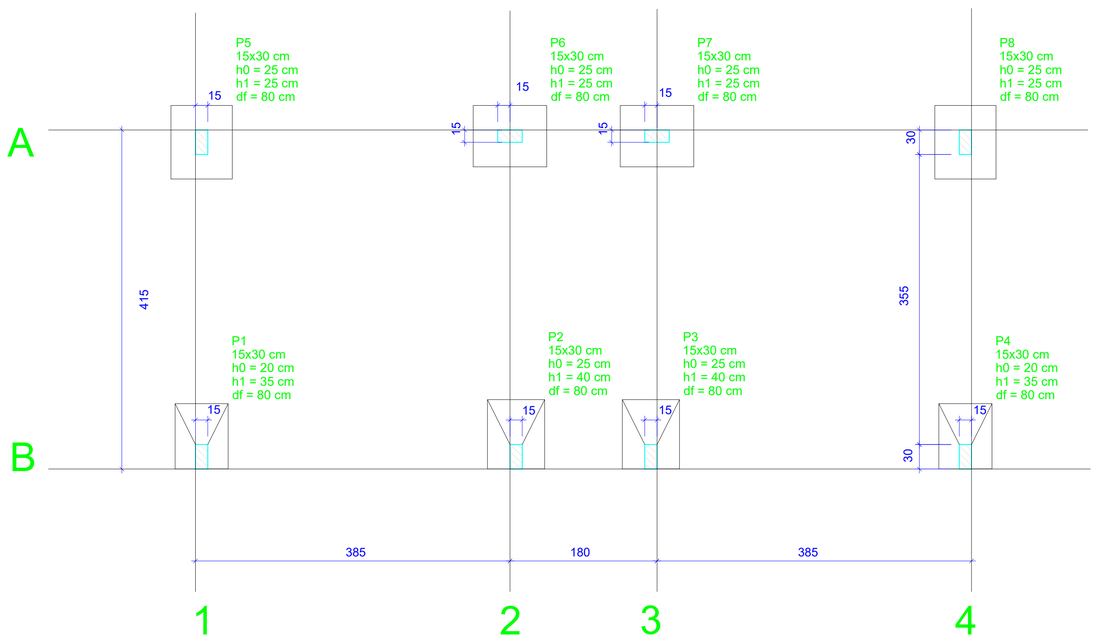
Relação do aço

2xP1 4xP2 2xP5

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	52	78	4056
	2	5.0	14	24	336
CA50	3	10.0	8	VAR	VAR
	4	10.0	12	VAR	VAR
	5	12.5	16	VAR	VAR

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	30.6	20.7
	12.5	31.7	33.6
CA60	5.0	44	7.4
PESO TOTAL			
CA50	54.3		
CA60	7.4		



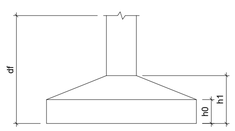
Planta de locação

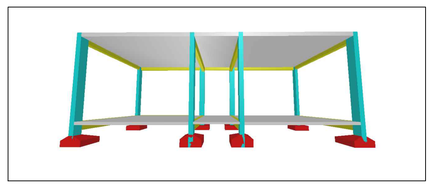
escala 1:75

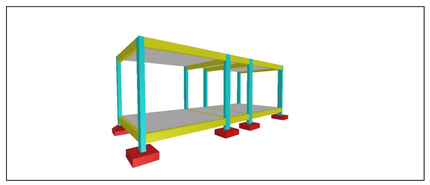
Pilar										Fundação				
Nome	Seção (cm)	X (cm)	Y (cm)	Carga Máx. (tf)	Carga Mín. (tf)	Mx (kgf.m)	My (kgf.m)	Fx (tf)	Fy (tf)	Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)	df (cm)
P1	15x30	7.50	15.00	6.2	4.8	800	0	0.1	0.7	80	65	20	35	80
P2	15x30	392.50	15.00	7.2	5.2	1100	0	0.1	0.1	85	70	25	40	80
P3	15x30	557.50	15.00	7.2	5.2	1100	0	0.1	0.1	85	70	25	40	80
P4	15x30	942.50	15.00	6.2	4.8	800	0	0.1	0.7	80	65	20	35	80
P5	15x30	7.50	400.00	7.7	6.5	600	500	1.7	0.3	75	90	25	25	80
P6	15x30	385.00	407.50	9.1	7.3	100	600	2.0	0.8	75	90	25	25	80
P7	15x30	565.00	407.50	9.1	7.3	100	600	2.0	0.8	75	90	25	25	80
P8	15x30	942.50	400.00	7.7	6.5	600	500	1.7	0.3	75	90	25	25	80

Locação no eixo X	
Coordenadas (cm)	Nome
7.50	P5, P1
385.00	P6
392.50	P2
557.50	P3
565.00	P7
942.50	P8, P4

Locação no eixo Y	
Coordenadas (cm)	Nome
407.50	P6, P7
400.00	P5, P8
15.00	P1, P2, P3, P4







É PROIBIDO A REPRODUÇÃO TOTAL OU PARCIAL DESTE PROJETO, SEM A AUTORIZAÇÃO POR ESCRITO PELO PROJETISTA - LEI Nº9610 (19/02/1998)

PROPRIETÁRIO
PREFEITURA MUNICIPAL DE BANDEIRANTE
Assinatura do Proprietário

Área ampliação 39,43m²
Área reforma 41,85m²

RESPONSÁVEL TÉCNICO
Engº Civil Giovane Miguel Kuhn - CREA/SC nº 186.990-8

DATA
Agosto/2022

UNIDADES
m

PROJETO
AMPLIAÇÃO E REFORMA - PREFEITURA MUNICIPAL

DESENHO
Giovane Kuhn

ESPECIFICAÇÃO
Projeto estrutural - Sapatas e colarinhos

ENDEREÇO
Avenida Santo Antonio, 1069 - Bandeirante/SC

PRANCHA
E1

CONTATO
Av. Santo Antônio, 1069 - Bandeirante/SC / (49) 3626-0012 / E-mail: engenharia@bandeirante.sc.gov.br