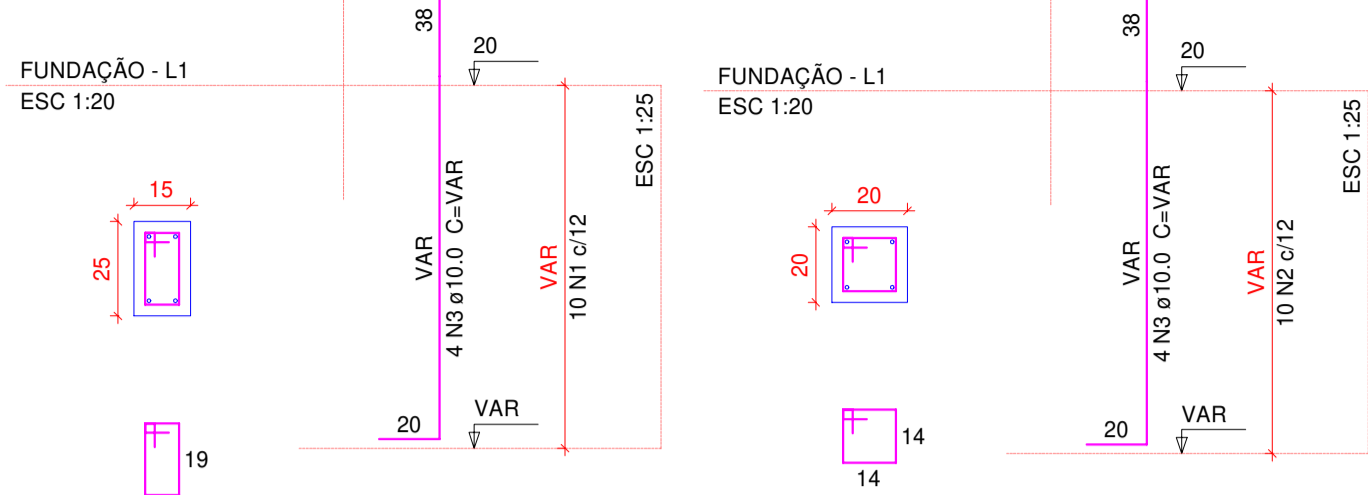


P1=P2=P3=P4=P5=P6=P7=P8=P9=P10=P11=P12
=P13=P14=P15 P16=P18=P19=P20=P21=P23=P24=P25=P26



Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	150	68	10200
CA50	2	5.0	110	68	7480
	3	10.0	96	VAR	VAR
	4	10.0	8	VAR	VAR

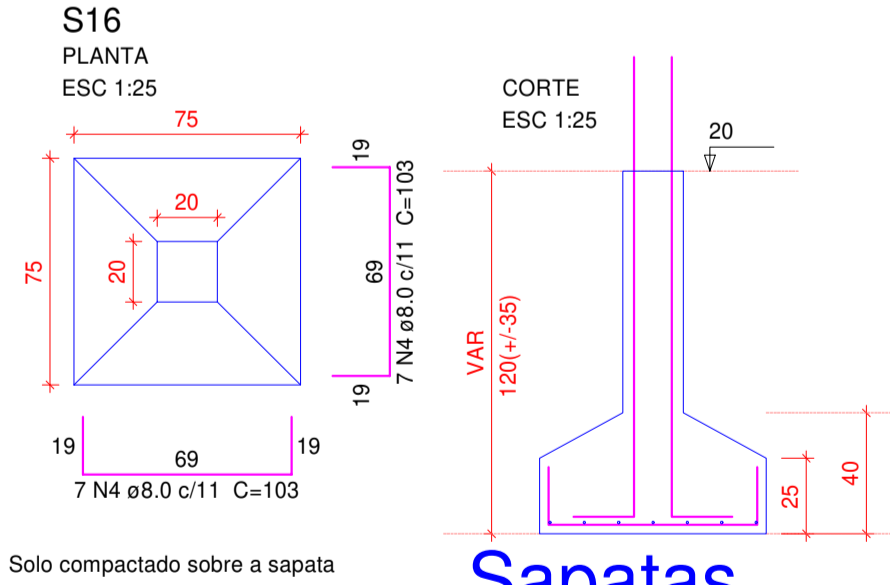
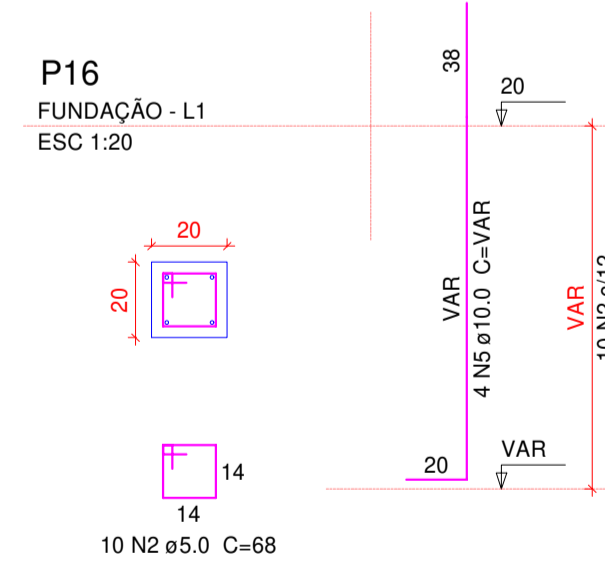
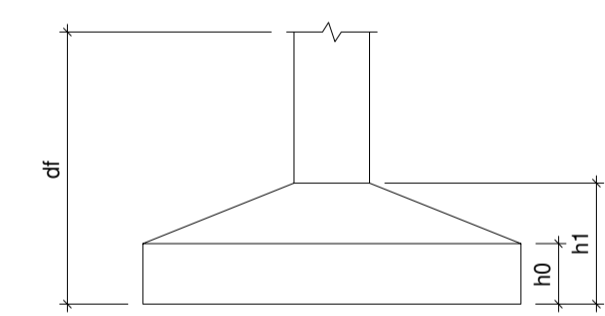
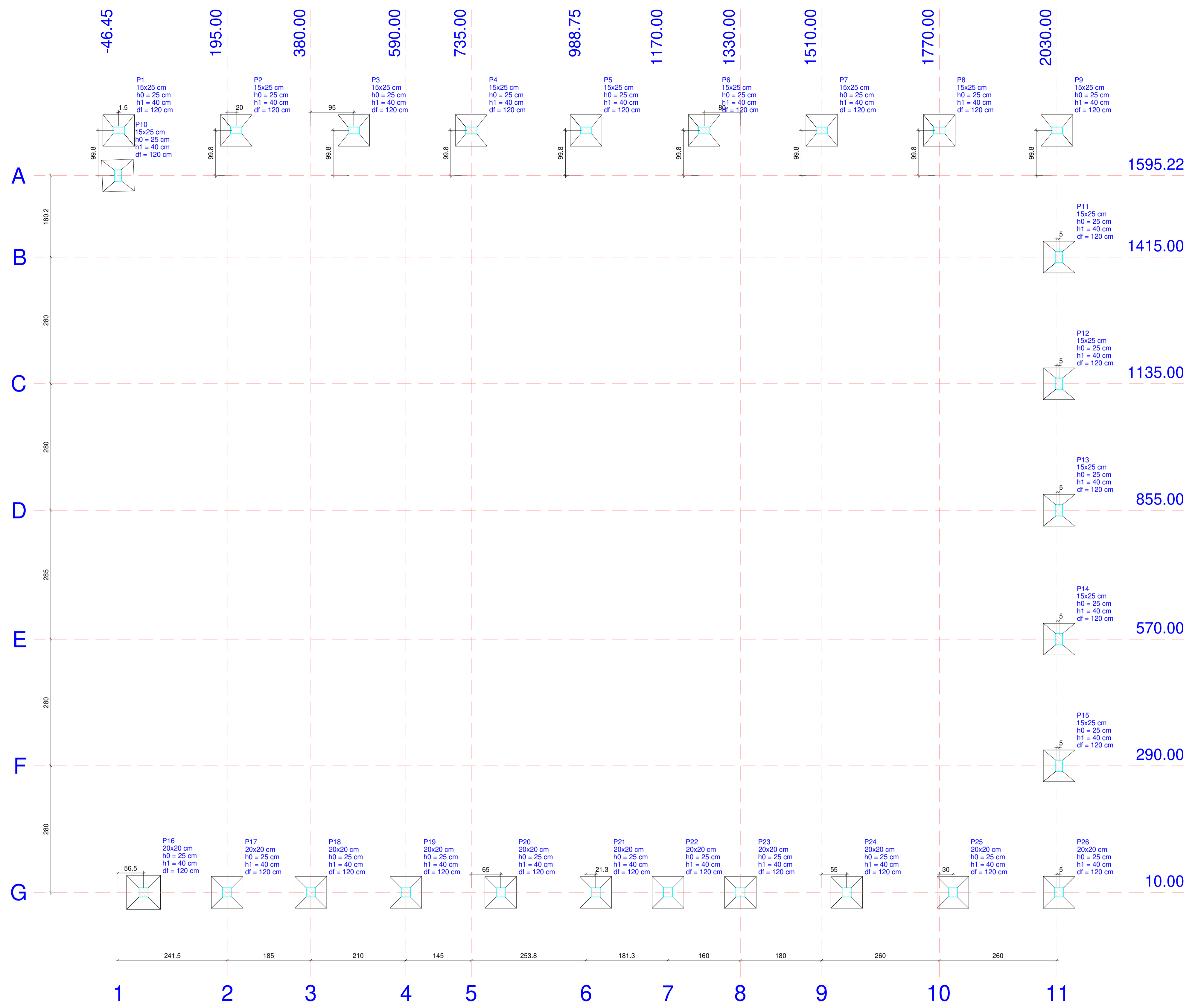
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	179.8	121.9
CA60	5.0	176.8	30
PESO TOTAL (kg)			
CA50		121.9	
CA60		30	

Volume de concreto (C-25) = 1.2 m³
Área de forma = 24.96 m²

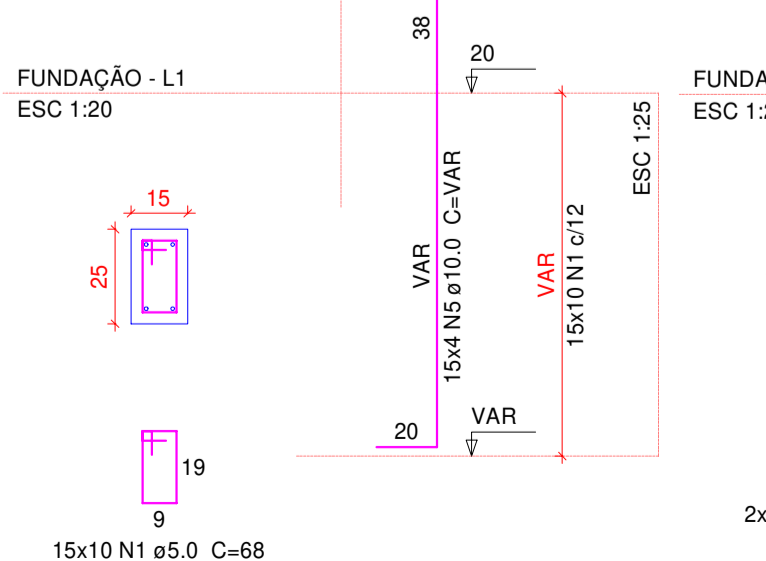
Pilaretes
escala 1:50

Nome	Seção (cm)	X (cm)	Y (cm)	Pilar		Fundação									
				Carga Máx. (tf)	Carga Min. (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	15x25	-45.00	1695.00	1.4	0.6	100	200	0.3	0.1	70	70	25	40	120	
P2	15x25	215.00	1695.00	1.4	0.6	100	200	0.2	0.1	70	70	25	40	120	
P3	15x25	475.00	1695.00	1.5	1.4	300	100	0.2	0.1	70	70	25	40	120	
P4	15x25	735.00	1695.00	1.5	1.4	300	100	0.2	0.1	70	70	25	40	120	
P5	15x25	988.75	1695.00	1.5	1.4	300	100	0.2	0.1	70	70	25	40	120	
P6	15x25	1250.00	1695.00	1.5	1.4	300	100	0.1	0.1	70	70	25	40	120	
P7	15x25	1510.00	1695.00	1.5	1.4	300	100	0.2	0.1	70	70	25	40	120	
P8	15x25	1770.00	1695.00	1.6	1.4	300	200	0.2	0.1	70	70	25	40	120	
P9	15x25	2030.00	1695.00	1.5	1.2	100	200	0.3	0.2	70	70	25	40	120	
P10	15x25	-46.45	1595.22	0.9	0.1	200	200	0.1	0.2	70	70	25	40	120	
P11	15x25	2035.00	1415.00	1.7	1.6	200	200	0.1	0.3	70	70	25	40	120	
P12	15x25	2035.00	1135.00	1.6	1.5	200	300	0.1	0.2	70	70	25	40	120	
P13	15x25	2035.00	855.00	1.6	1.5	200	200	0.1	0.2	70	70	25	40	120	
P14	15x25	2035.00	570.00	1.6	1.5	200	300	0.1	0.2	70	70	25	40	120	
P15	15x25	2035.00	290.00	1.7	1.5	200	200	0.1	0.3	70	70	25	40	120	
P16	20x20	10.00	10.00	0.8	0.5	300	100	0.1	0.1	75	75	25	40	120	
P17	20x20	185.00	10.00	1.1	0.9	100	100	0.2	0.1	70	70	25	40	120	
P18	20x20	380.00	10.00	1.3	1.1	200	100	0.1	0.1	70	70	25	40	120	
P19	20x20	590.00	10.00	1.3	1.2	300	100	0.1	0.1	70	70	25	40	120	
P20	20x20	800.00	10.00	1.3	1.2	300	100	0.1	0.1	70	70	25	40	120	
P21	20x20	1010.00	10.00	1.2	1.1	200	100	0.1	0.1	70	70	25	40	120	
P22	20x20	1170.00	10.00	0.8	0.7	200	100	0.2	0.1	70	70	25	40	120	
P23	20x20	1330.00	10.00	1.3	1.1	200	100	0.2	0.1	70	70	25	40	120	
P24	20x20	1565.00	10.00	1.4	1.3	300	100	0.1	0.2	70	70	25	40	120	
P25	20x20	1800.00	10.00	1.5	1.3	300	100	0.2	0.1	70	70	25	40	120	
P26	20x20	2035.00	10.00	1.5	1.2	200	100	0.2	0.3	70	70	25	40	120	

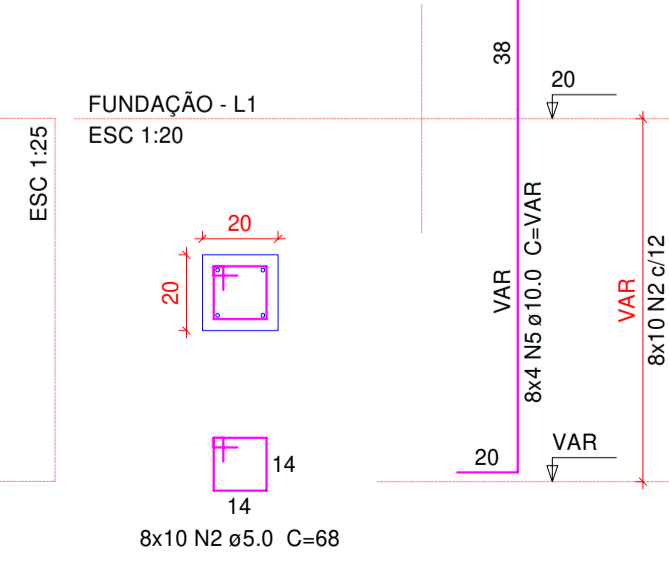


Sapatas
escala 1:50

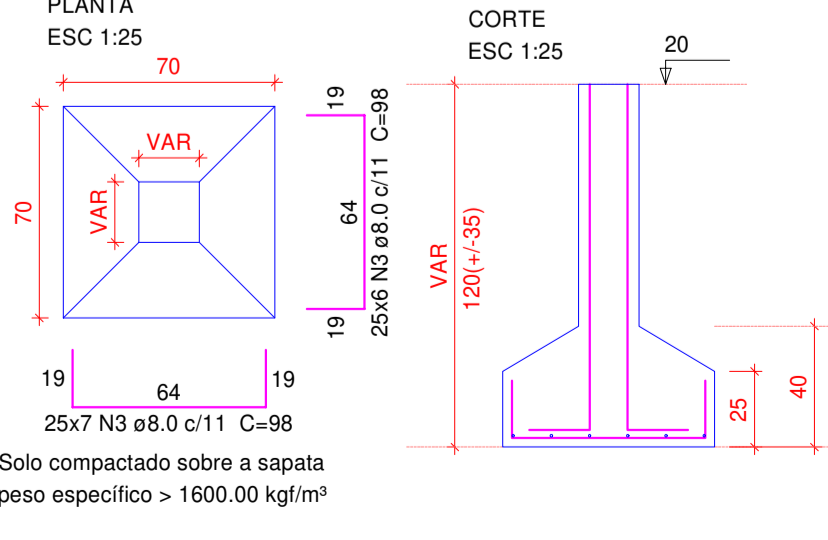
P1=P2=P3=P4=P5=P6=P7=P8=P9=P10=P11=P12
=P13=P14=P15



P18=P19=P20=P21=P23=P24=P25=P26



S1=S2=S3=S4=S5=S6=S7=S8=S9=S10=S11=S12
=S13=S14=S15=S17=S18=S19=S20=S21=S22
=S23=S24=S25=S26



Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

Relação do aço

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	150	68	10200
CA50	2	5.0	110	68	7480
	3	8.0	325	96	31850
	4	8.0	14	103	1442
	5	10.0	96	VAR	VAR
	6	10.0	8	VAR	VAR

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	333	144.5
	10.0	179.8	121.9
CA60	5.0	176.8	30
PESO TOTAL (kg)			
CA50		266.4	
CA60		30	

Volume de concreto (C-25) = 5.28 m³
Área de forma = 43.21 m²

Planta de locação
escala 1:50

PREFEITURA MUNICIPAL DE PARANAGUA
SECRETARIA MUNICIPAL DE PLANEJAMENTO E GESTÃO
ADMINISTRAÇÃO MARCELO ELIAS ROQUE

TÍTULO		PROJETO ESTRUTURAL	
OBRA		SEDE ADMINISTRATIVA ILHA DOS VALADARES	
CONTEUDO		PLANTA DE LOCAÇÃO DE SAPATAS E PILARETES - / - SAPATAS DO MURO	
AUTOR DO PROJETO	PROPRIETÁRIO		
RUY JOSÉ RIBEIRO LICENCIADO	MUNICÍPIO DE PARANAGUA PREFEITO MARCELO ELIAS ROQUE		
DATA	ESCALA	DESENHO	PRANCHA
MARÇO/2019	INDICADA	Ruy	06/07