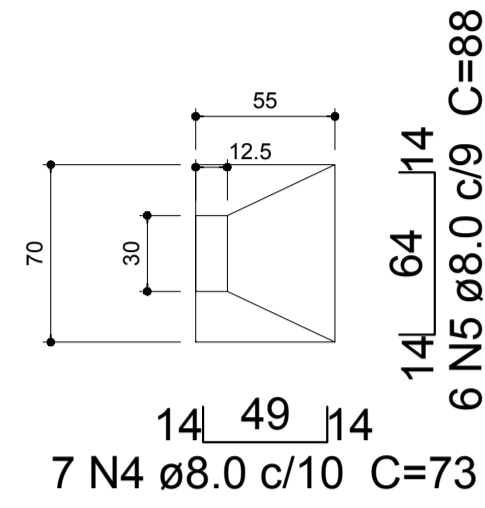
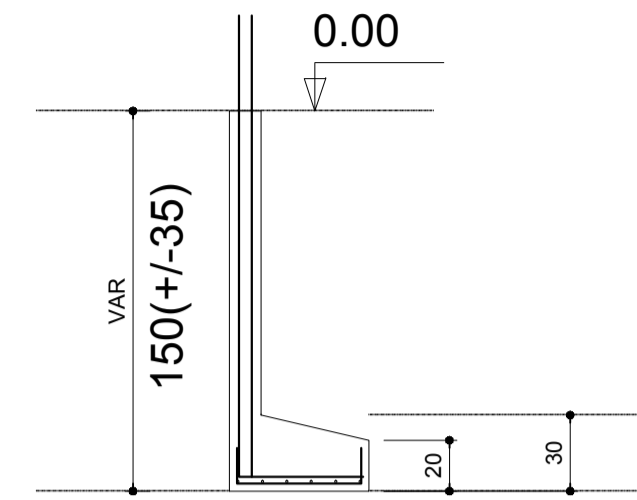


S5

PLANTA
ESC 1:30

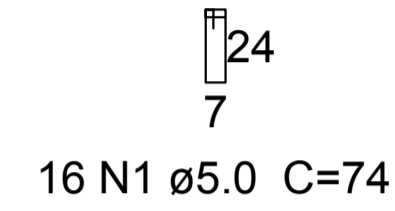
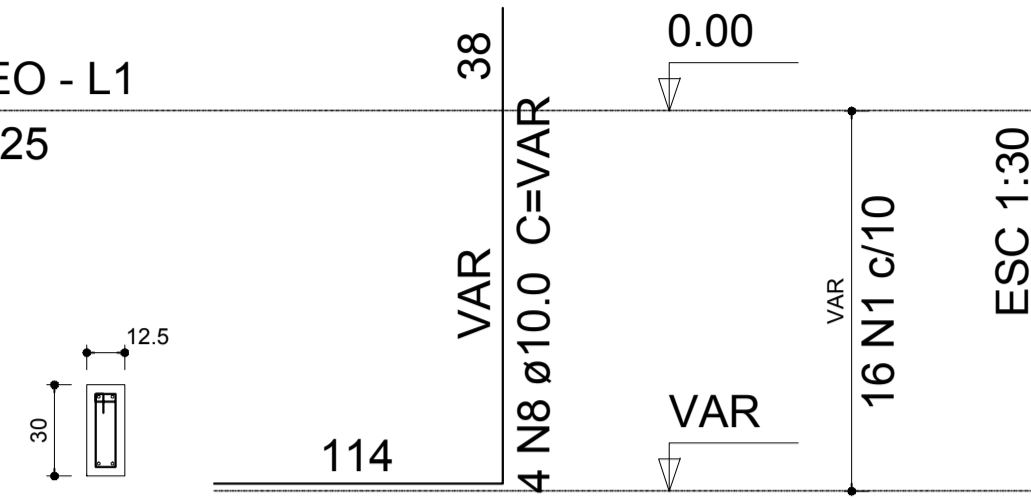


CORTE
ESC 1:30



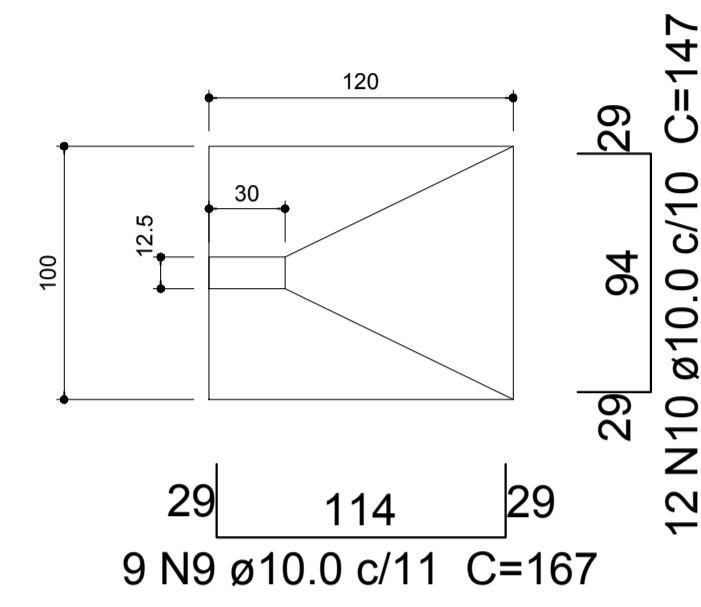
P7=P13

TÉRREO - L1
ESC 1:25

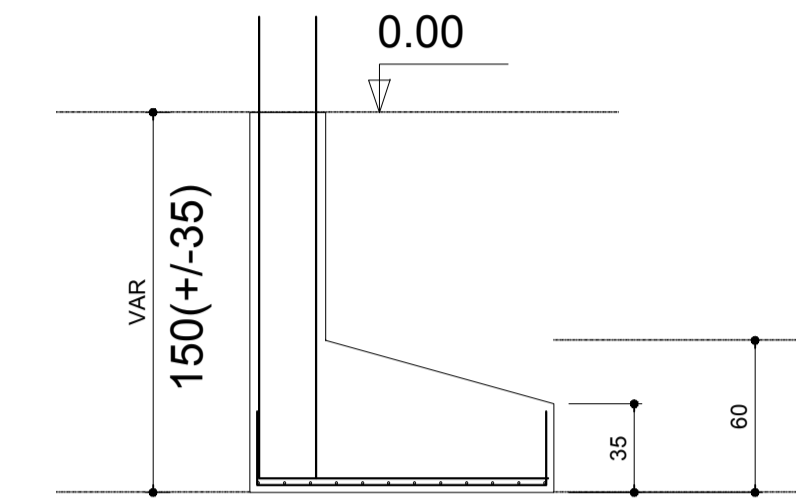


S7=S13

PLANTA
ESC 1:30



CORTE
ESC 1:30



Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	32	74	2368
	2	5.0	32	64	2048
	3	5.0	80	68	5440
CA50	4	8.0	7	73	511
	5	8.0	6	88	528
	6	8.0	12	78	936
	7	8.0	60	68	4080
	8	10.0	8	VAR	VAR
	9	10.0	18	167	3006
	10	10.0	24	147	3528
	11	10.0	8	VAR	VAR
	12	10.0	20	VAR	VAR

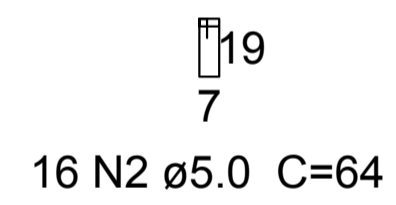
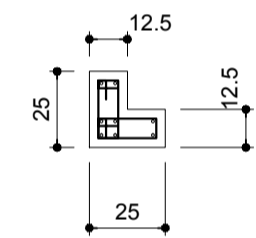
Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	60.6	26.3
	10.0	138.9	94.1
CA60	5.0	98.6	16.7
PESO TOTAL			
CA50		120.4	
CA60		16.7	

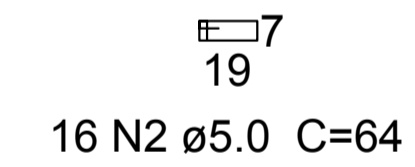
Vol. de concreto total (C-25) = 2.11 m³
Área de forma total = 16.42 m²

P10

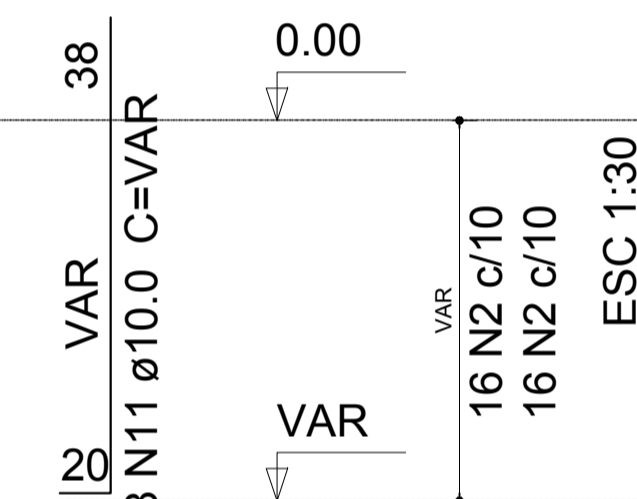
TÉRREO - L1
ESC 1:25



16 N2 ø5.0 C=64

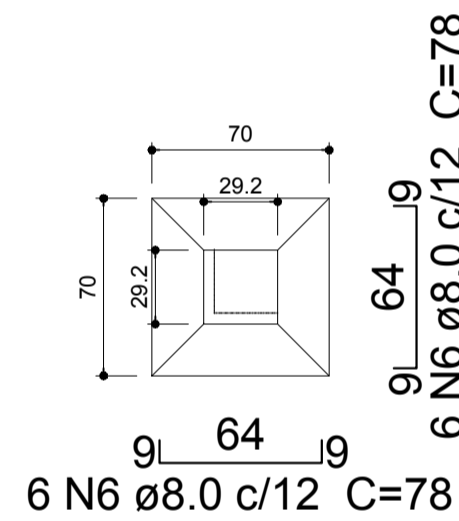


16 N2 ø5.0 C=64



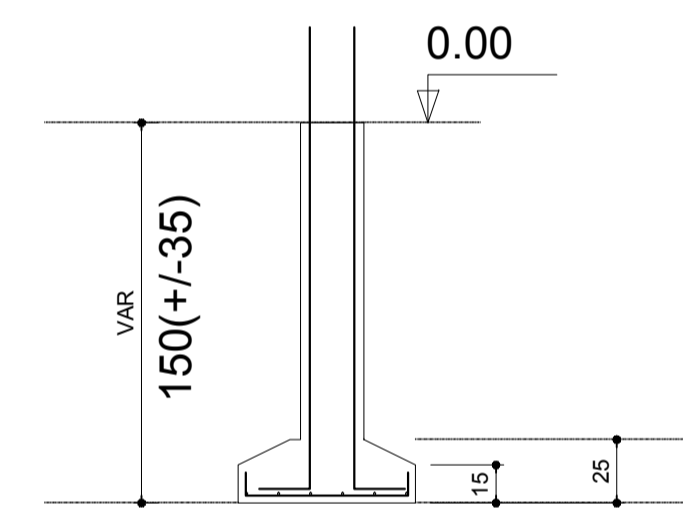
S10

PLANTA
ESC 1:30



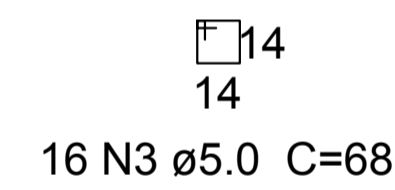
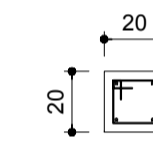
6 N6 ø8.0 c/12 C=78

CORTE
ESC 1:30

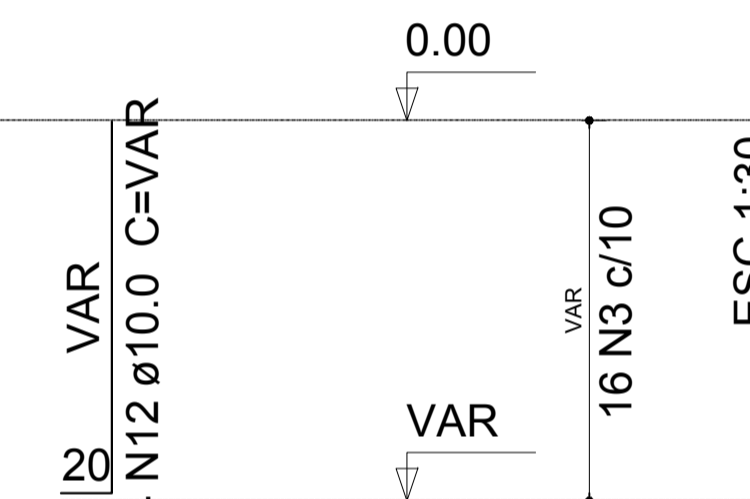


P11=P15=P17=P24=P26

TÉRREO - L1
ESC 1:25

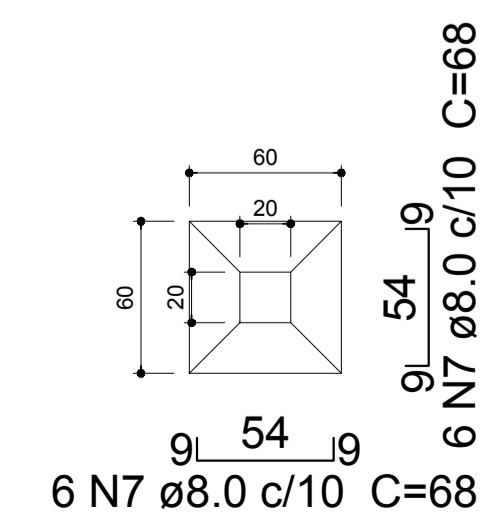


16 N3 ø5.0 C=68



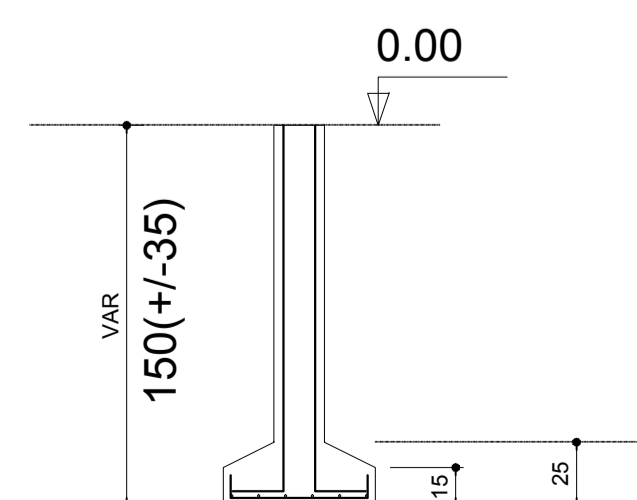
S11=S15=S17=S24=S26

PLANTA
ESC 1:30



6 N7 ø8.0 c/10 C=68

CORTE
ESC 1:30



PREFEITURA MUNICIPAL DE PARANAGUÁ
ADMINISTRAÇÃO DR. EDISON DE OLIVEIRA KERSTEN
SECRETARIA MUNICIPAL DE OBRAS PÚBLICAS

TÍTULO PROJETO DE ESTRUTURA DE CONCRETO ARMADO

OBRA REFORMA E AMPLIAÇÃO CMEI - ZULEIDE PINTO ROSA

CONTEÚDO - FUNDAÇÃO -

PROPRIETÁRIO PREFEITURA MUNICIPAL DE PARANAGUÁ
C.N.P.J. 20.017.458/0001-15

AUTOR DO PROJETO DEBORA TEMPORÃO DE AGUIAR RAMOS
CREA: PR-25647/D

DATA Julho/2016

ESCALA indicada

DESENHO Debora

ÁREA AMPL. 163.95m²

ÁREA TOTAL 399.63m²

PRANCHA 03/15