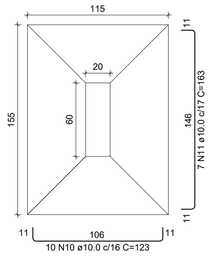
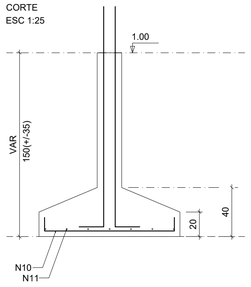
S1

PLANTA
ESC 1:25

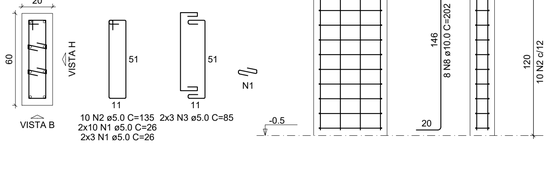


CORTE
ESC 1:25



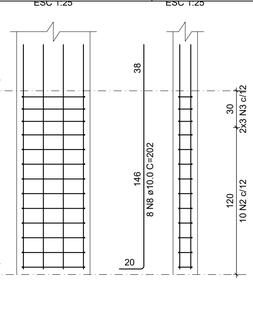
RAMPA ACESSO - L1

SEÇÃO
ESC 1:20



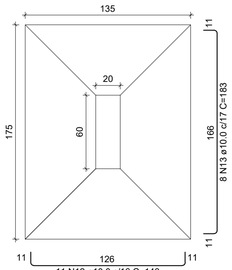
VISTA H
ESC 1:25

VISTA B
ESC 1:25

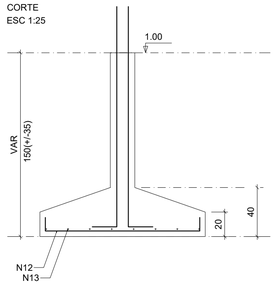


S2=S8

PLANTA
ESC 1:25



CORTE
ESC 1:25

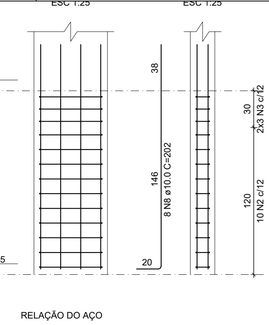


RAMPA ACESSO - L1

SEÇÃO
ESC 1:20

VISTA H
ESC 1:25

VISTA B
ESC 1:25



RELAÇÃO DO AÇO

P1	2xP2	P3
4xP4	P9	P10
P11	2xP13	S1
2xS2	5xS3	S9
S10	S11	2xS13

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	299	26	7774
	2	5.0	100	135	13500
	3	5.0	60	85	5100
	4	5.0	10	115	1150
	5	5.0	6	75	450
	6	5.0	20	95	1900
	7	5.0	12	65	780
CA50	8	10.0	98	202	19796
	9	10.0	8	75	600
	10	10.0	10	123	1230
	11	10.0	7	163	1141
	12	10.0	28	143	4004
	13	10.0	16	183	2928
	14	10.0	60	153	9180
	15	10.0	45	193	8685
	16	10.0	7	98	686
	17	10.0	6	133	798
	18	10.0	8	103	824
	19	10.0	8	103	824
	20	10.0	6	133	798
	21	10.0	12	93	1116
	22	10.0	12	108	1296

RESUMO DO AÇO

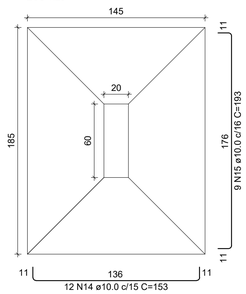
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	539.1	365.6
CA60	5.0	306.5	52

PESO TOTAL (kg)	
CA50	365.6
CA60	52

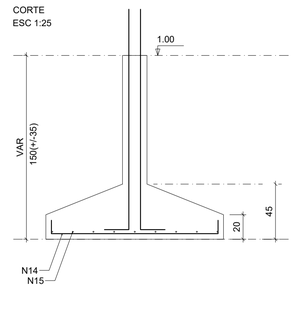
Volume de concreto (C-25) = 8.84 m³
Área de forma = 36.25 m²

S3=S4=S5=S6=S7

PLANTA
ESC 1:25



CORTE
ESC 1:25

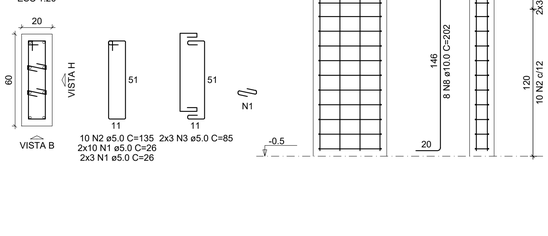


Solo com capacidade de suporte > 150.00 kN/m²
Solo compactado sobre a sapata
peso específico > 16.00 kN/m³

P3

RAMPA ACESSO - L1

SEÇÃO
ESC 1:20



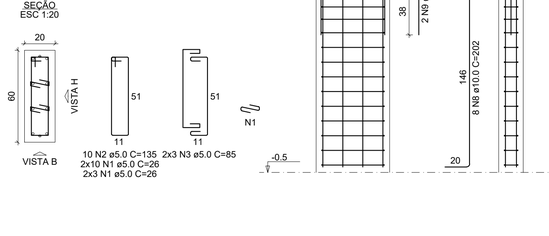
VISTA H
ESC 1:25

VISTA B
ESC 1:25

P4=P5=P6=P7

RAMPA ACESSO - L1

SEÇÃO
ESC 1:20



VISTA H
ESC 1:25

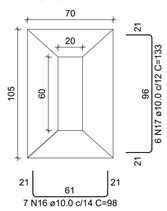
VISTA B
ESC 1:25

Solo com capacidade de suporte > 150.00 kN/m²
Solo compactado sobre a sapata
peso específico > 16.00 kN/m³

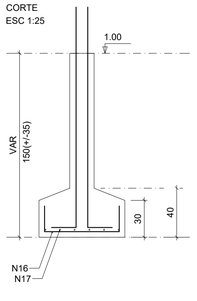
P9

S9

PLANTA
ESC 1:25

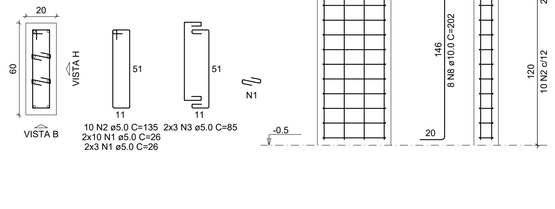


CORTE
ESC 1:25



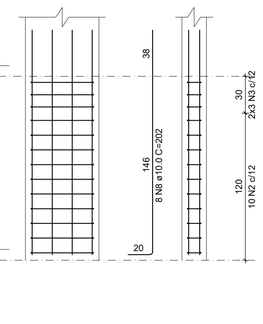
RAMPA ACESSO - L1

SEÇÃO
ESC 1:20



VISTA H
ESC 1:25

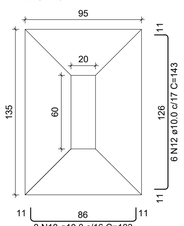
VISTA B
ESC 1:25



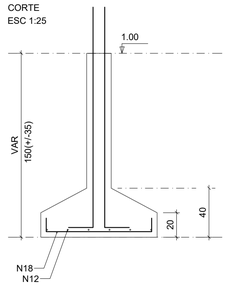
P10

S10

PLANTA
ESC 1:25

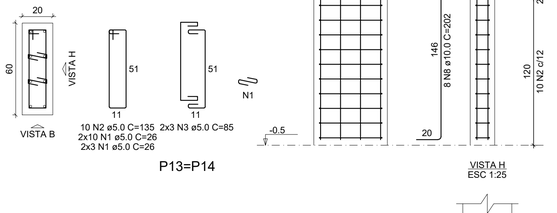


CORTE
ESC 1:25



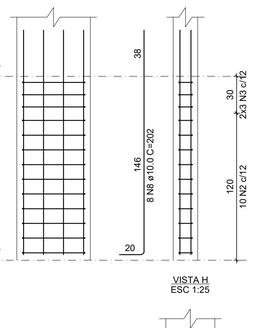
RAMPA ACESSO - L1

SEÇÃO
ESC 1:20



VISTA H
ESC 1:25

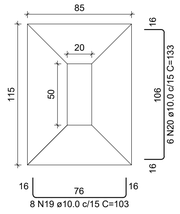
VISTA B
ESC 1:25



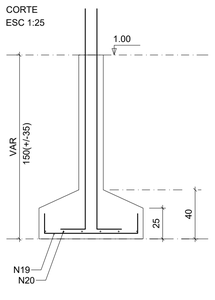
P11

S11

PLANTA
ESC 1:25

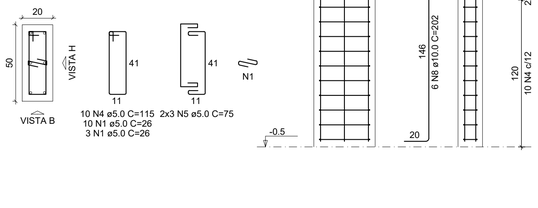


CORTE
ESC 1:25



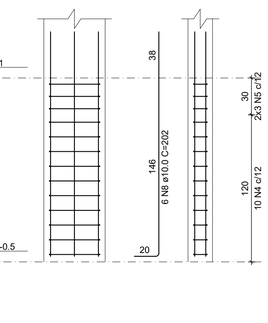
RAMPA ACESSO - L1

SEÇÃO
ESC 1:20



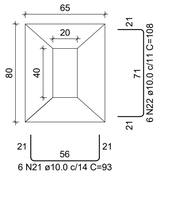
VISTA H
ESC 1:25

VISTA B
ESC 1:25

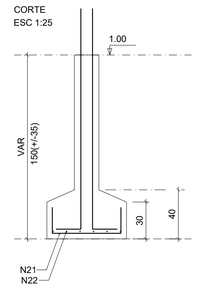


S13=S14

PLANTA
ESC 1:25



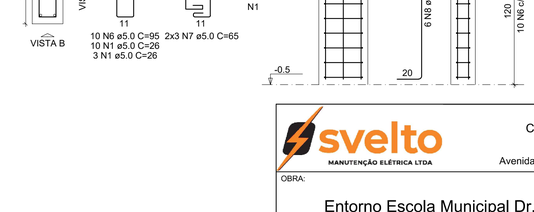
CORTE
ESC 1:25



P13=P14

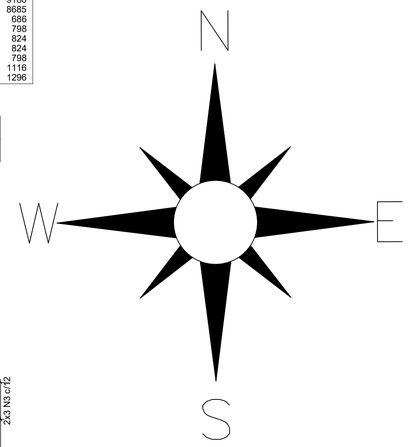
RAMPA ACESSO - L1

SEÇÃO
ESC 1:20



VISTA H
ESC 1:25

VISTA B
ESC 1:25



svelto MANUTENÇÃO ELÉTRICA LTDA	SVELTO MANUTENÇÃO ELETRICA LTDA CNPJ: 59.332.500/0001-73 IE:3040004699 TELEFONE: 54 999537716 Avenida João Stella, nº 289, Centro, Protásio Alves - RS
OBRA: Entorno Escola Municipal Dr. Manoel Vieira da Fonseca - Andre da Rocha - RS	RESPONSÁVEL TÉCNICO: CHARLES FURLAN: 02519271051 Assinado digitalmente por CHARLES FURLAN: 02519271051 ON: C=BR, O=ICP-Brasil, OU=Certificado Digital PF A1, OU=Presencial, OU=35252010000380, OU=AC Syngular01 Multipla, CN=CHARLES FURLAN: 02519271051 Dados: 2026.03.20 10:03:30 -03'00' Foxit PDF Reader Versão: 11.0.1 Eng. Civil Charles Furlan CREA/RS: 248121
DESCRIÇÃO DA PRANCHA: SAPATAS - RAMPA	CONTRATANTE: Municipio de Protásio Alves CNPJ/CPF: 91.566.885/0001-46
DATA: 03/2026 ESCALA: INDICADA	
PRANCHA: 05/06 REVISÃO: 00/00	TIPO DE PROJETO: ESTRUTURAL