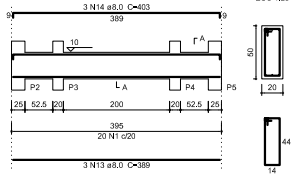
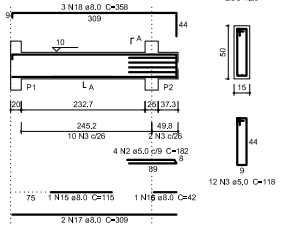
V101
ESC 1:50



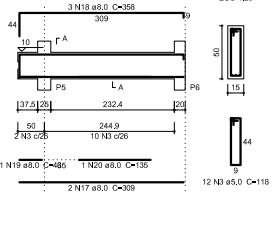
SEÇÃO A-A
ESC 1:25

V102
ESC 1:50



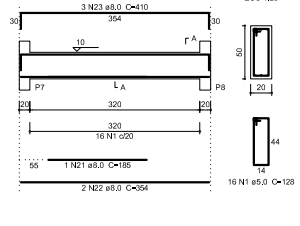
SEÇÃO A-A
ESC 1:25

V103
ESC 1:50



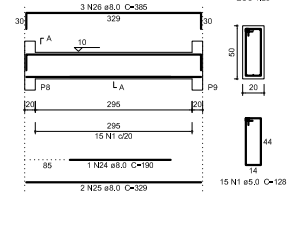
SEÇÃO A-A
ESC 1:25

V104
ESC 1:50



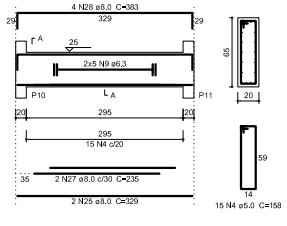
SEÇÃO A-A
ESC 1:25

V105
ESC 1:50



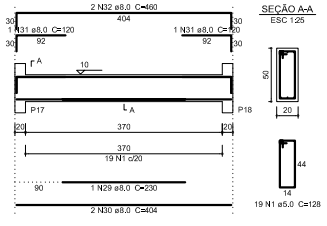
SEÇÃO A-A
ESC 1:25

V106
ESC 1:50



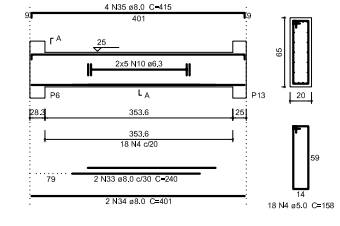
SEÇÃO A-A
ESC 1:25

V107
ESC 1:50



SEÇÃO A-A
ESC 1:25

V108
ESC 1:50



SEÇÃO A-A
ESC 1:25

Relação do aço

S2 14xS12 V101
V102 V103 V104
V105 V106 V107
V108 V109

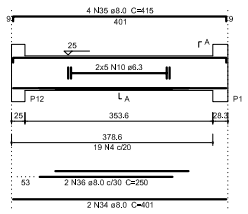
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	70	128	8960
	2	5,0	4	182	728
	3	5,0	24	118	2832
	4	5,0	52	158	8216
	5	5,0	34	88	2992
	6	5,0	26	68	1768
	7	5,0	236	108	25704
	8	5,0	476	29	13804
CA50	9	6,3	10	CORR	3290
	10	6,3	20	CORR	8020
	11	6,3	182	94	17108
	12	6,3	98	114	11172
	13	8,0	3	389	1167
	14	8,0	3	403	1209
	15	8,0	1	115	115
	16	8,0	1	42	42
	17	8,0	4	309	1236
	18	8,0	6	358	2148
	19	8,0	1	43	43
	20	8,0	1	135	135
	21	8,0	1	185	185
	22	8,0	2	354	708
	23	8,0	3	410	1230
	24	8,0	1	190	190
	25	8,0	4	329	1316
	26	8,0	3	385	1155
	27	8,0	2	235	470
	28	8,0	4	383	1532
	29	8,0	2	230	230
	30	8,0	2	404	808
	31	8,0	2	120	240
	32	8,0	2	460	920
	33	8,0	2	240	480
	34	8,0	4	401	1604
	35	8,0	8	415	3320
	36	8,0	2	250	500
	37	8,0	124	VAR	VAR
	38	10,0	8	VAR	VAR

Resumo do aço

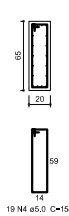
AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6,3	395,9	96,9
	8,0	455,4	179,7
	10,0	16,5	10,2
CA60	5,0	655,1	100,2
PESO TOTAL			
CA50	286,7		
CA60	100,2		

Vol. de concreto total (C-25) = 7,81 m³
Área de forma total = 86,17 m²

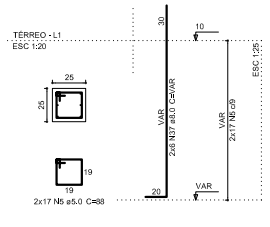
V109
ESC 1:50



SEÇÃO A-A
ESC 1:25



P2=P5



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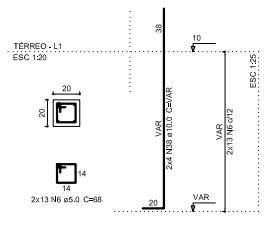
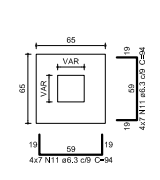
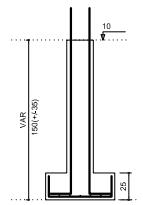


S2=S3=S4=S5

PLANTA
ESC 1:25

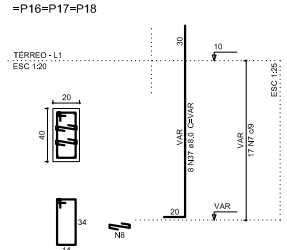


CORTE
ESC 1:25



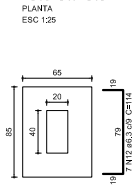
Solo compactado sobre a sapata
peso específico > 1600,00 kgf/m³

P1=P6=P7=P8=P9=P10=P11=P12=P13=P14=P15 =P16=P17=P18

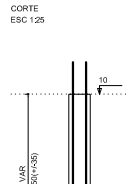


S1=S6=S7=S8=S9=S10=S11=S12=S13=S14=S15 =S16=S17=S18

PLANTA
ESC 1:25

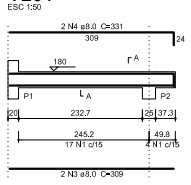


CORTE
ESC 1:25

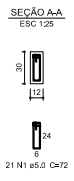


Solo compactado sobre a sapata
peso específico > 1600,00 kgf/m³

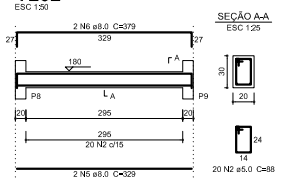
V201
ESC 1:50



SEÇÃO A-A
ESC 1:25



V202
ESC 1:50



SEÇÃO A-A
ESC 1:25

Relação do aço

14xP1 2xP2 2xP3
V201 V202

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	21	72	1512
	2	5,0	20	88	1760
CA50	3	8,0	2	309	618
	4	8,0	2	331	662
	5	8,0	2	329	658
	6	8,0	2	379	758

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8,0	26,29	10,78
CA60	5,0	32,72	5,14
PESO TOTAL			
CA50	10,78		
CA60	5,14		

Vol. de concreto total (C-25) = 0,28 m³
Área de forma total = 4,30 m²

OBSERVAÇÕES

RESISTÊNCIA CARACTERÍSTICA DO CONCRETO: fck = 30 MPa
RESISTÊNCIA CARACTERÍSTICA DO AÇO: CA-60 = 500 MPa
CA-50 = 600 MPa
COBRIMENTO DAS ARMADURAS:
LAJES (P.50) = 2,5 cm
VIGAS = 3,0 cm
PILARES (EM CONTATO COM O SOLO / SEM CONTATO COM O SOLO) = 3,0/4,5 cm
MATERIAL DO PESO DA QUADRA NÃO CONSIDERADO NO RESUMO DE MATERIAIS

NOTAS

COTAS EM METROS. AS COTAS PREVALECEM SOBRE O DESENHO.
PAREDES NÃO COTADAS MEDEM 15cm. CONFERIR MEDIDAS NO LOCAL.
QUALQUER DÚVIDA OU ALTERAÇÃO CONSULTAR PREVIAMENTE O SETOR DE PROJETOS NA SECRETARIA DE OBRAS.

REV	POR	DATA	DESCRIÇÃO

REVISÕES

PREFEITURA MUNICIPAL DE ARACRUZ
MARCELO SOUZA COELHO
PREFEITO

SECRETÁRIA MUNICIPAL DE OBRA
JOÃO CLEBER BIANCHI
SECRETÁRIO

PROJETO ESTRUTURAL

ESCALA: INDICADA
DATA: MAIO/2015
DESENHO: MARLOS
CONTEÚDO: EST.-ESC04
PRANCHA: 02/03

OBRA: CONSTRUÇÃO DE ESCOLA - ESPAÇO EDUCATIVO URBANO 2
ENDEREÇO: ALDEIA PAU BRASIL - ARACRUZ ES
AUTOR DO PROJETO: MARLOS FERREIRA REIS - CREA RJ 181529/D
RESPONSÁVEL TÉCNICO:
COORDENAÇÃO:
ASSUNTO: ARMAÇÃO 01

DAN Engenharia
AV. CONHECIMENTO, NÚMERO 3º ANDAR, SALA 04, BAIRRO DA SERRA, CEP 29.164-018, SERRA - ES
TEL. (27) 3328-3333
FAX (27) 3328-3333
E-MAIL: dan@danengenharia.com.br

DE ACORDO COM A LEGISLAÇÃO VIGENTE, CABE AO AUTOR DO PROJETO QUALQUER ALTERAÇÃO. BEM COMO OS DIREITOS AUTORAIS SOBRE O MESMO.