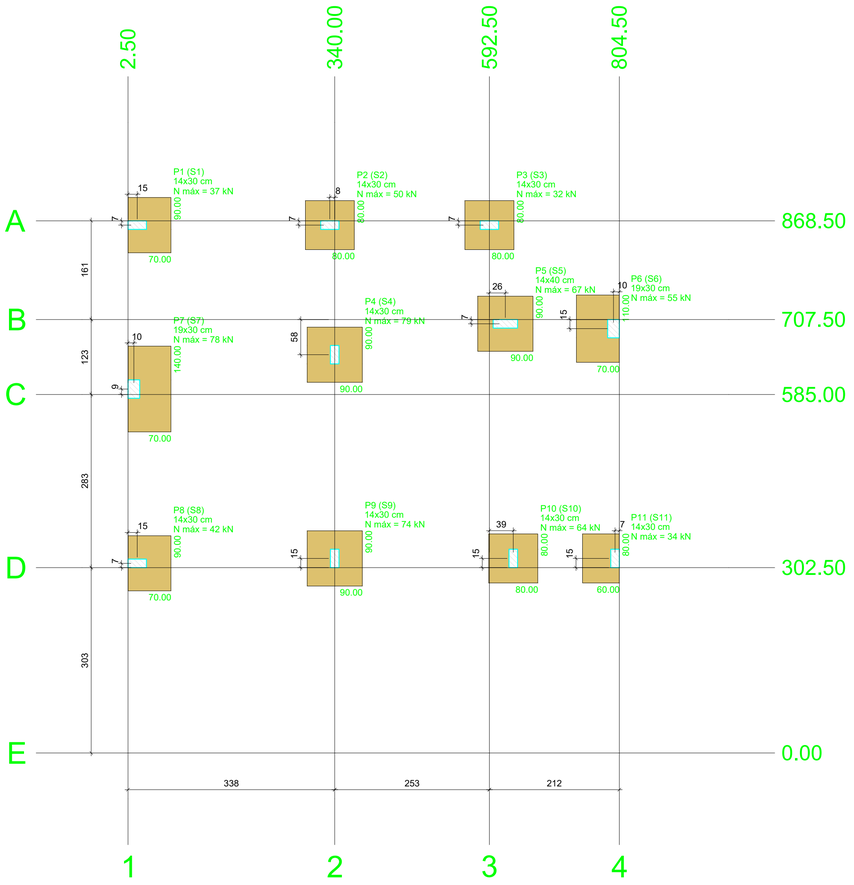
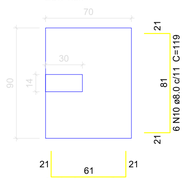


Planta de locação

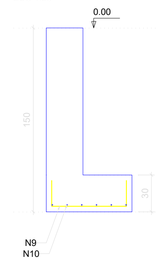
escala 1:50

S1=S8

PLANTA
ESC 1:25



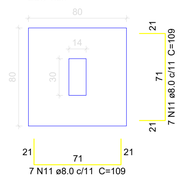
CORTE
ESC 1:25



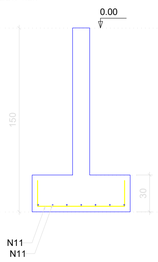
Solo com capacidade de suporte > 180.00 kN/m²
Solo compactado sobre a sapata
peso específico > 16.00 kN/m³

S2=S3=S10

PLANTA
ESC 1:25



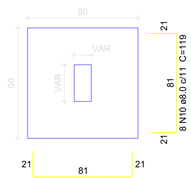
CORTE
ESC 1:25



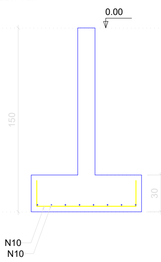
Solo com capacidade de suporte > 180.00 kN/m²
Solo compactado sobre a sapata
peso específico > 16.00 kN/m³

S4=S5=S9

PLANTA
ESC 1:25



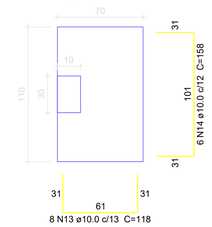
CORTE
ESC 1:25



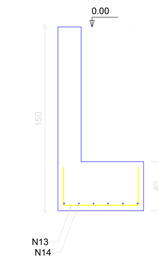
Solo com capacidade de suporte > 180.00 kN/m²
Solo compactado sobre a sapata
peso específico > 16.00 kN/m³

S6

PLANTA
ESC 1:25



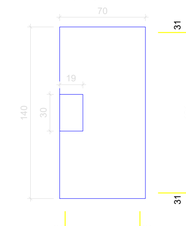
CORTE
ESC 1:25



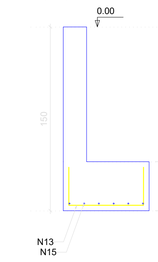
Solo com capacidade de suporte > 180.00 kN/m²
Solo compactado sobre a sapata
peso específico > 16.00 kN/m³

S7

PLANTA
ESC 1:25



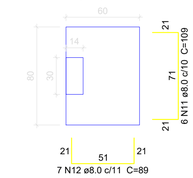
CORTE
ESC 1:25



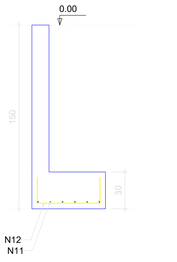
Solo com capacidade de suporte > 180.00 kN/m²
Solo compactado sobre a sapata
peso específico > 16.00 kN/m³

S11

PLANTA
ESC 1:25



CORTE
ESC 1:25



Relação do aço

2xS1 3xS4 S6
S7 3xS10 S11

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA50	9	8.0	16	99	1584
	10	8.0	60	119	7140
	11	8.0	48	109	5232
	12	8.0	7	89	623
	13	10.0	19	118	2242
	14	10.0	6	158	948
	15	10.0	6	188	1128

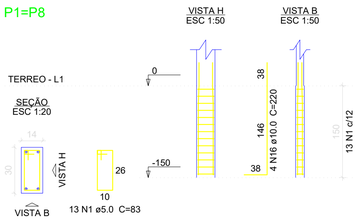
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)	PESO + 10 % (kg)
CA50	8.0	145.8	14	63.3
	10.0	43.2	4	29.3
PESO TOTAL (kg)				
CA50	92.6			

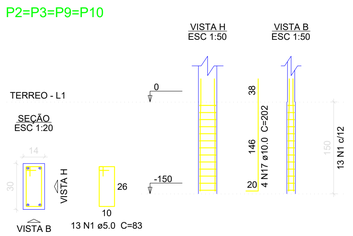
Volume de concreto (30 MPa) = 2.53 m³
Área de forma = 12 m²

ARRANQUE DOS PILARES

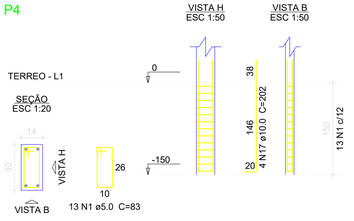
P1=P8



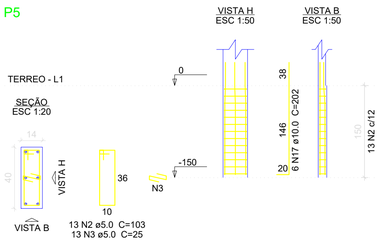
P2=P3=P9=P10



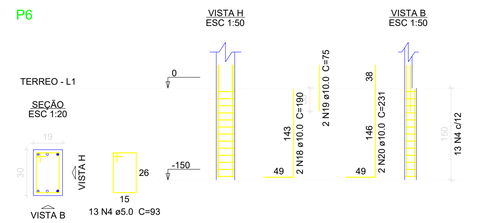
P4



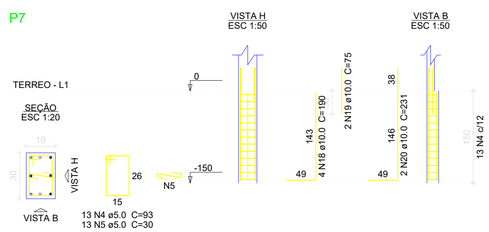
P5



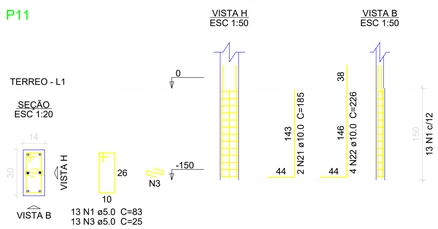
P6



P7



P11



Relação do aço

Terreo: 2xP1 4xP2
P4 P5
P6 P7
P11
laje: 9xP1 P4
P5

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	129	83	10707
	2	5.0	13	103	1339
	3	5.0	26	25	650
	4	5.0	26	93	2418
	5	5.0	13	30	390
	6	5.0	225	79	17775
	7	5.0	25	99	2475
	8	5.0	25	23	575
CA50	16	10.0	8	220	1760
	17	10.0	26	202	5252
	18	10.0	6	190	1140
	19	10.0	4	75	300
	20	10.0	4	231	924
	21	10.0	2	185	370
	22	10.0	4	226	904
	23	10.0	46	288	13248

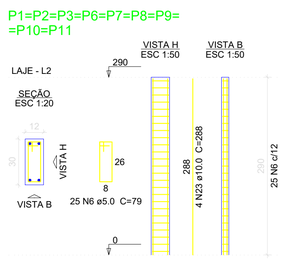
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)	PESO + 10 % (kg)
CA50	10.0	239	22	162.1
CA60	5.0	363.3	34	61.6
PESO TOTAL (kg)				
CA50	162.1			
CA60	61.6			

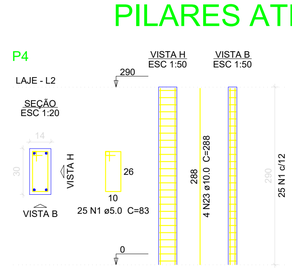
Volume de concreto (C-25) = 1.8 m³
Área de forma = 39.39 m²

PILARES ATÉ A LAJE

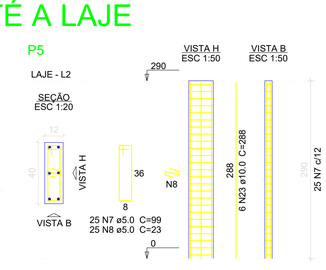
P1=P2=P3=P6=P7=P8=P9= =P10=P11



P4



P5



NOTAS:

1 - ALVENARIA DE TIJOLO CERÂMICO DE 14X19X39

2 - CONSUMO MÍNIMO DE CIMENTO 300kg/m3

3 - FATOR ÁGUA/CIMENTO MÁXIMA: 0,60

4 - TODOS AS PEÇAS (FUNDAÇÃO, PILAR, VIGAS E LAJES) DEVERÃO TER CURA ÚMIDA POR PELO MENOS 7 DIAS

5 - ESCORAMENTOS DAS LAJES E VIGAS SÓ PODEM SER RETIRADOS APÓS 28 DIAS

6 - DESFORMAS: PILARES E FACES LATERIAIS DE VIGAS: 3 DIAS; FACES INFERIORES DE VIGAS: 21 DIAS

7 - AS JUNTAS DE CONCRETAGEM DEVERÃO SER LIMPAS COM JATOS DE ÁGUA ANTES DO INÍCIO DA PRÓXIMA C CONCRETAGEM

CONCRETO		
SAPATAS	VIGAS/LAJES VIGAS BALDRAME	PILARES
30 MPa	25 MPa	25 MPa

TABELA DE COBRIMENTOS (CONTROLE RIGOROSO)					
ELEMENTO	FUNDAÇÕES	VIGAS BALDRAMES	VIGAS	PILARES	LAJES MACIÇAS
COBRIMENTO	4,5 cm	3,0 cm	2,0 cm	2,0 cm	2,0 cm

LEGENDAS:

Projeto: Casas Prefeitura Abaeté
Folha: 01/02

Objeto: PROJETO ESTRUTURAL
Endereço: Abaeté/MG
Data: 10/04/2023

Descrição: PLANTA DE LOCAÇÃO, SAPATAS E PILARES

Área: 45,99 m²

Contratante
Prefeitura Municipal de Abaeté
18.296.632/0001-00

OTIMIZA
AUDITORIA E GESTÃO EM ENERGIA

Resp. Téc:
ENG. HENRIQUE VITAL DO CARMO FREITAS
ENG° CIVIL- CREA MG 188562