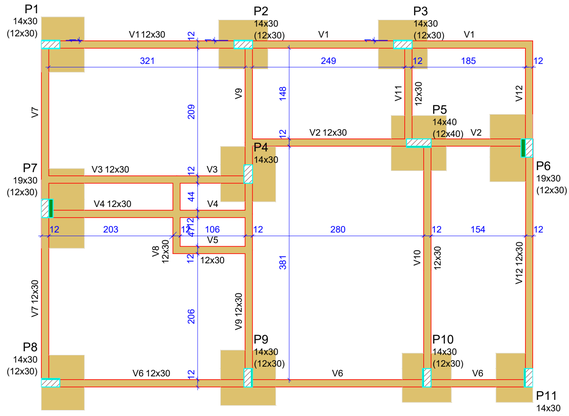
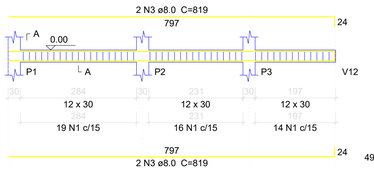


Forma viga baldrame (Nível 0.00)

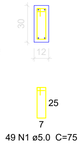
escala 1:50

V1 (12 x 30)

ESC 1:75

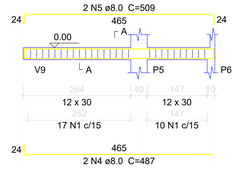


SEÇÃO A-A
ESC 1:25

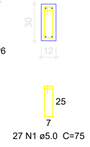


V2 (12 x 30)

ESC 1:75

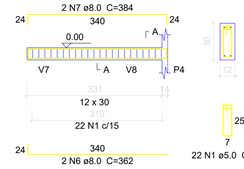


SEÇÃO A-A
ESC 1:25



V3=V4 (12 x 30)

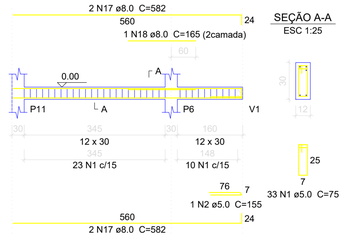
ESC 1:75



SEÇÃO A-A
ESC 1:25

V12 (12 x 30)

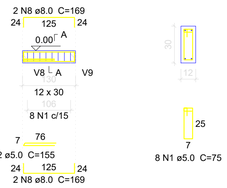
ESC 1:75



SEÇÃO A-A
ESC 1:25

V5 (12 x 30)

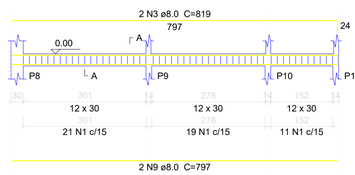
ESC 1:75



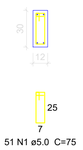
SEÇÃO A-A
ESC 1:25

V6 (12 x 30)

ESC 1:75

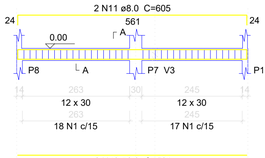


SEÇÃO A-A
ESC 1:25

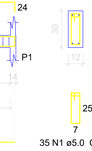


V7=V9 (12 x 30)

ESC 1:75

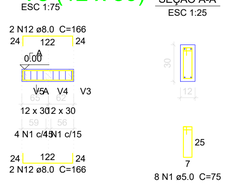


SEÇÃO A-A
ESC 1:25



V8 (12 x 30)

ESC 1:75



SEÇÃO A-A
ESC 1:25

Relação do aço

V1	V2	2xV3
V5	V6	2xV7
V8	V10	V11
V12		

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	326	75	24450
	2	5.0	3	155	465
CA50	3	8.0	6	819	4914
	4	8.0	2	487	974
	5	8.0	2	509	1018
	6	8.0	4	362	1448
	7	8.0	4	384	1536
	8	8.0	4	169	676
	9	8.0	2	797	1594
	10	8.0	4	561	2244
	11	8.0	4	605	2420
	12	8.0	4	166	664
	13	8.0	2	400	800
	14	8.0	2	422	844
	15	8.0	2	192	384
	16	8.0	2	214	428
	17	8.0	4	582	2328
	18	8.0	1	165	165

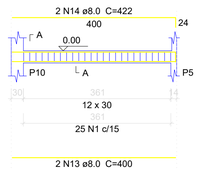
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)	PESO + 10 % (kg)
CA50	8.0	224.4	21	97.4
CA60	5.0	249.2	23	42.2
PESO TOTAL (kg)				
CA50	97.4			
CA60	42.2			

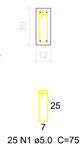
Volume de concreto (C-25) = 1.71 m³
Área de forma = 34.19 m²

V10 (12 x 30)

ESC 1:75

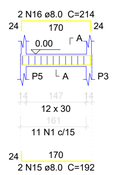


SEÇÃO A-A
ESC 1:25

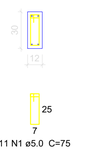


V11 (12 x 30)

ESC 1:75

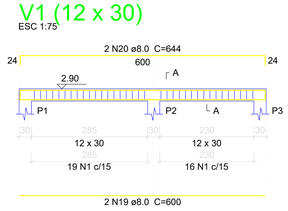


SEÇÃO A-A
ESC 1:25

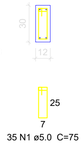


V1 (12 x 30)

ESC 1:75

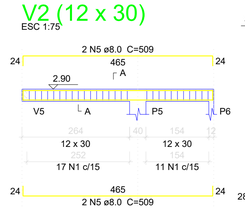


SEÇÃO A-A
ESC 1:25

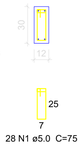


V2 (12 x 30)

ESC 1:75

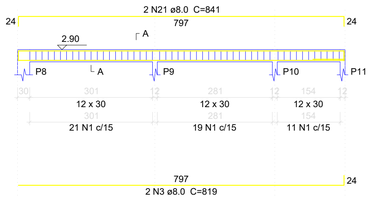


SEÇÃO A-A
ESC 1:25

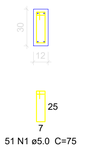


V3 (12 x 30)

ESC 1:75

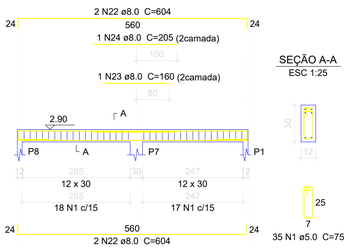


SEÇÃO A-A
ESC 1:25



V4 (12 x 30)

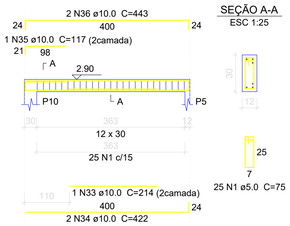
ESC 1:75



SEÇÃO A-A
ESC 1:25

V6 (12 x 30)

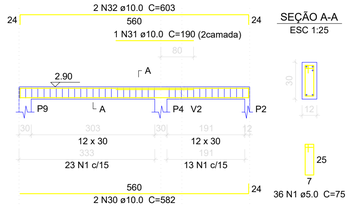
ESC 1:75



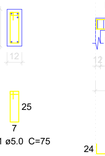
SEÇÃO A-A
ESC 1:25

V5 (12 x 30)

ESC 1:75

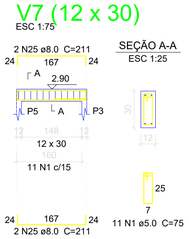


SEÇÃO A-A
ESC 1:25



V7 (12 x 30)

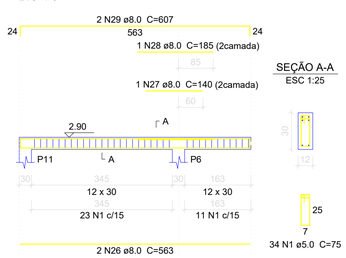
ESC 1:75



SEÇÃO A-A
ESC 1:25

V8 (12 x 30)

ESC 1:75



SEÇÃO A-A
ESC 1:25

Relação do aço

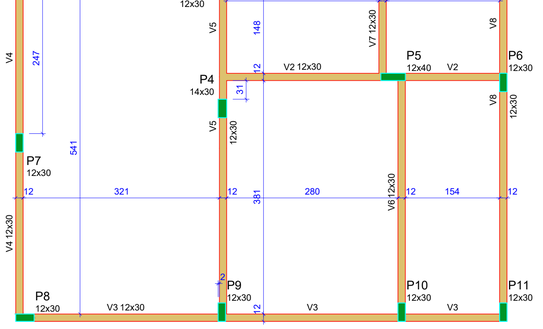
V1	V2	V3
V4	V5	V6
V7	V8	

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	255	75	19125
CA50	19	8.0	2	600	1200
	20	8.0	2	644	1288
	5	8.0	4	509	2036
	3	8.0	2	819	1638
	21	8.0	2	841	1682
	22	8.0	4	604	2416
	23	8.0	1	160	160
	24	8.0	1	205	205
	25	8.0	4	211	844
	26	8.0	2	563	1126
	27	8.0	1	140	140
	28	8.0	1	185	185
	29	8.0	2	607	1214
	30	10.0	2	582	1164
	31	10.0	1	190	190
	32	10.0	2	603	1206
	33	10.0	1	214	214
	34	10.0	2	422	844
	35	10.0	1	117	117
	36	10.0	2	443	886

Resumo do aço

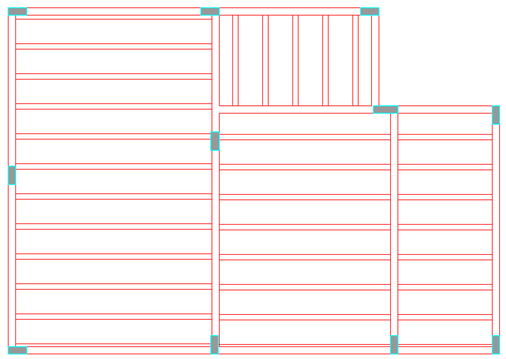
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)	PESO + 10 % (kg)
CA50	8.0	141.4	13	61.3
	10.0	46.3	5	31.3
CA60	5.0	191.3	18	32.4
PESO TOTAL (kg)				
CA50	92.7			
CA60	32.4			

Volume de concreto (C-25) = 1.33 m³
Área de forma = 19.58 m²



Forma viga cobertura

escala 1:50



Planta Sentido de vigotas pré-moldadas

escala 1:50

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:

Legenda dos pilares
Pilar que passa
Pilar com mudança de seção

Projeto:	Casas Prefeitura Abaeté
Folha:	02/02
Objeto:	PROJETO ESTRUTURAL
Endereço:	Abaeté/MG
Data:	10/04/2023

Descrição: Detalhamento das vigas.

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