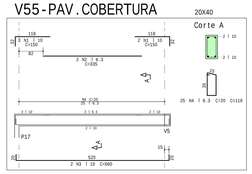
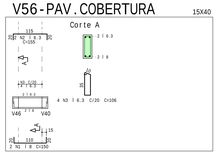
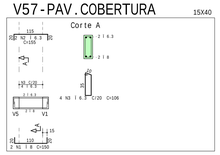
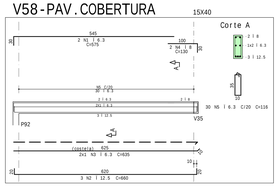
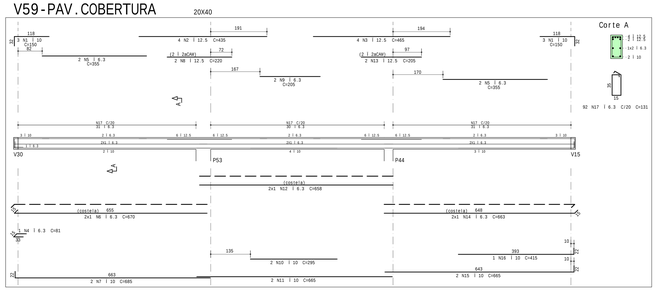
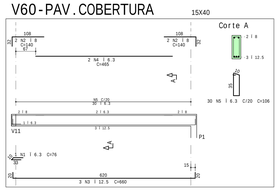


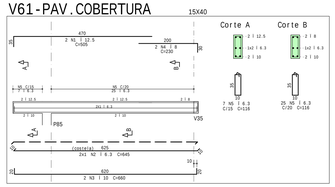


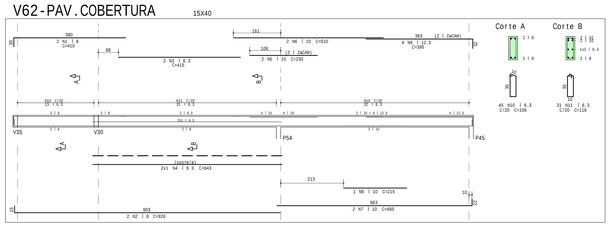


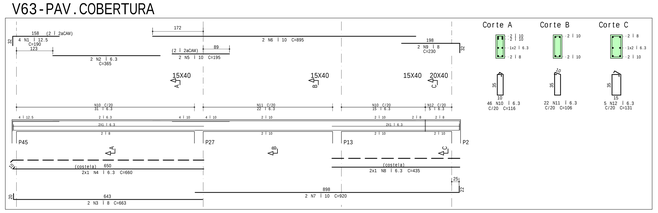


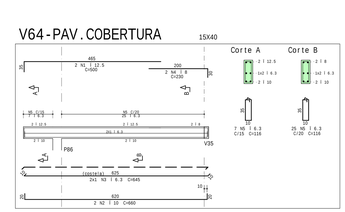


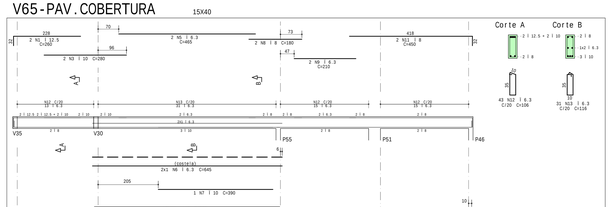


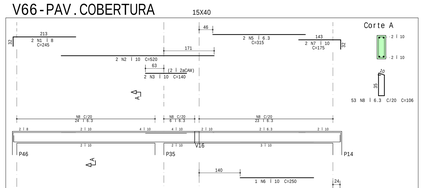


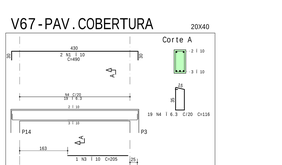


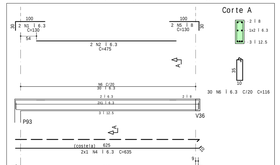


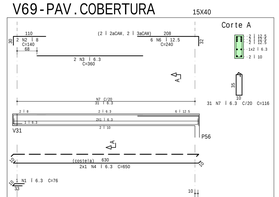


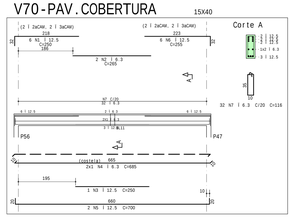


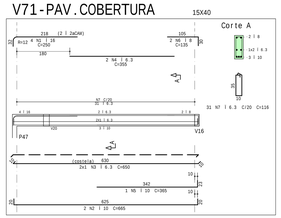


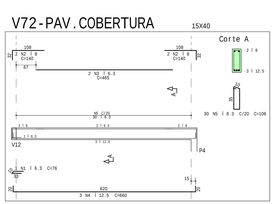


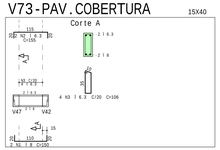


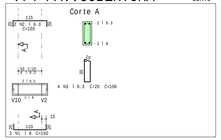


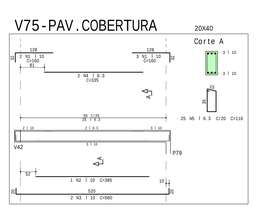


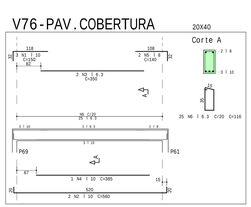












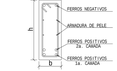
A40	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
		mm		cm	cm
V55-PAV.COBERTURA					
	50A	6.3	2	335	670
	50A	6.3	2	560	1120
	50A	6.3	25	116	2900
V56-PAV.COBERTURA					
	50A	6.3	2	150	300
	50A	6.3	2	155	310
	50A	6.3	4	106	424
V57-PAV.COBERTURA					
	50A	6.3	2	150	300
	50A	6.3	2	155	310
	50A	6.3	4	106	424
V58-PAV.COBERTURA					
	50A	12.5	2	570	1140
	50A	6.3	2	660	1320
	50A	6.3	2	130	260
	50A	8	2	150	300
	50A	6.3	30	116	3480
V59-PAV.COBERTURA					
	50A	10	6	150	900
	50A	12.5	4	435	1740
	50A	12.5	4	465	1860
	50A	8	2	150	300
	50A	6.3	2	355	710
	50A	6.3	2	670	1340
	50A	6.3	2	685	1370
	50A	12.5	2	220	440
	50A	6.3	2	205	410
	50A	6.3	2	683	1366
	50A	6.3	2	685	1370
	50A	10	1	415	415
	50A	6.3	92	131	12052
V60-PAV.COBERTURA					
	50A	8	4	140	560
	50A	12.5	5	660	3300
	50A	6.3	2	465	930
	50A	8	30	106	3180
V61-PAV.COBERTURA					
	50A	12.5	2	505	1010
	50A	6.3	2	645	1290
	50A	10	2	660	1320
	50A	8	2	230	460
	50A	6.3	31	116	3596
V62-PAV.COBERTURA					
	50A	8	2	210	420
	50A	12.5	2	926	1852
	50A	6.3	2	415	830
	50A	6.3	2	643	1286
	50A	10	2	230	460
	50A	10	2	926	1852
	50A	10	2	685	1370
	50A	10	1	215	215
	50A	12.5	2	665	1330
	50A	6.3	45	106	4770
	50A	6.3	31	116	3596
V63-PAV.COBERTURA					
	50A	12.5	4	130	780
	50A	8	2	365	730
	50A	8	2	663	1326
	50A	6.3	2	680	1320
	50A	10	2	895	1790
	50A	10	2	895	1790
	50A	10	2	920	1840
	50A	6.3	2	435	870
	50A	8	2	920	1840
	50A	6.3	46	116	5336
	50A	6.3	22	106	2332
	50A	6.3	5	131	655
V64-PAV.COBERTURA					
	50A	8	2	660	1320
	50A	10	2	645	1290
	50A	8	2	230	460
	50A	6.3	57	116	3712
V65-PAV.COBERTURA					
	50A	12.5	2	360	720
	50A	10	2	355	710
	50A	8	2	630	1260
	50A	6.3	2	465	930
	50A	6.3	2	645	1290
	50A	10	2	665	1330
	50A	8	2	360	720
	50A	6.3	2	210	420
	50A	6.3	2	665	1330
	50A	6.3	43	116	4558
	50A	6.3	31	116	3596
V66-PAV.COBERTURA					
	50A	8	2	245	490
	50A	12.5	2	520	1040
	50A	8	2	140	280
	50A	10	2	1155	2310
	50A	6.3	2	150	300
	50A	10	1	150	150
	50A	10	2	175	350
	50A	6.3	53	106	5618
V67-PAV.COBERTURA					
	50A	10	2	690	1380
	50A	10	2	485	930
	50A	8	2	255	510
	50A	6.3	19	116	2204
V68-PAV.COBERTURA					
	50A	6.3	2	130	260
	50A	8.3	2	475	950
	50A	6.3	2	415	830
	50A	6.3	2	635	1270
	50A	8	2	130	260
	50A	6.3	30	116	3480
V69-PAV.COBERTURA					
	50A	6.3	1	76	76
	50A	8.3	2	140	280
	50A	6.3	2	360	720
	50A	6.3	2	665	1330
	50A	10	2	665	1330
	50A	12.5	6	240	1440
	50A	6.3	31	116	3596
V70-PAV.COBERTURA					
	50A	12.5	6	360	1800
	50A	12.5	2	265	530
	50A	12.5	1	250	250
	50A	12.5	2	360	720
	50A	12.5	6	265	1590
	50A	6.3	56	116	3712
V71-PAV.COBERTURA					
	50A	16	4	350	1400
	50A	8.3	2	665	1330
	50A	6.3	2	650	1300
	50A	6.3	2	665	1330
	50A	8	2	385	770
	50A	6.3	31	116	3596
V72-PAV.COBERTURA					
	50A	6.3	1	76	76
	50A	8	4	140	560
	50A	6.3	2	465	930
	50A	8	2	385	770
	50A	6.3	30	106	3180
V73-PAV.COBERTURA					
	50A	8	2	150	300
	50A	8.3	2	155	310
	50A	6.3	4	106	424
V74-PAV.COBERTURA					
	50A	8	2	150	300
	50A	8.3	2	155	310
	50A	6.3	4	106	424
V75-PAV.COBERTURA					
	50A	8	2	150	300
	50A	10	5	385	1925
	50A	12.5	2	560	1120
	50A	6.3	2	335	670
	50A	6.3	25	116	2900
V76-PAV.COBERTURA					
	50A	10	3	150	450
	50A	12.5	2	560	1120
	50A	6.3	2	380	760
	50A	8	2	150	300
	50A	8	2	140	280
	50A	6.3	25	116	2900

RESUMO DE A40			
A40	BIT	COMPR	PESO
	mm	m	kgf
50A	6.3	1197	283
50A	8	128	50
50A	10	334	206
50A	12.5	334	515
50A	16	14	35
Peso Total	50A =		791 kgf

LEGENDA

CONVENIO ARMADURA PARA LAJES:

CONVENIO ARMADURA PARA VIGAS:



h--> espessura da laje
c--> cobrimento das armaduras

b--> largura da viga
h--> altura da viga

DETALHE TELA ENTRANDO NA VIGA:

DETALHE TELA ENTRANDO NO PILAR:

DOBRAMENTO DAS BARRAS

SEM ESCALA

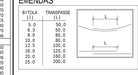
DIAMETROS DE DOBRAMENTOS

	D=4d	D=6d
< 20	8d	-
> 20	8d	-

Fios	5.0	6.3	8.0	10.0	12.5	16.0	20.0	25.0
Dcins	3.0	4.0	4.0	5.0	7.0	8.0	16.0	20.0

EMENDAS

BITOLA (t)	TRASPASSE (L)
5.0	50.0
6.3	50.0
8.0	80.0
10.0	100.0
12.5	160.0
16.0	320.0
20.0	160.0
25.0	200.0



SIGLAS:

C.F = CENTRO DE GRAVIDADE
C.A = CENTRO DE ASSENTAMENTO DA FUNDAÇÃO
C.P = CONTRA - FLECHA

SIGLA DOS ELEMENTOS ESTRUTURAIS:

PILARES	BALDRAME	VIGAS	VIGA/VIGA DE EQUILIBRIO
ESTACA	SAPATA	VIGA/VIGA DE TRAVAMENTO	
ESTACA	SUBSAPATA	VIGA/VIGA DE EQUILIBRIO	
BLOCO	TIRANTE	VIGA DE TRAVAMENTO	

LEGENDA DE PILARES:

= PROGRESSIVE = NORTE = RUMO = NASCE

NOTAS :

1- Cotas e Dimensoes em cm.

2-Concreto Estrutural - Fck = 30MPa

Concreto Armado : Cimento Portland CP III

Concreto Protendido : Cimento Portland CP III

Módulo de Elasticidade : Eci = 252Mpa

Relação água/aglomerante em massa <=0.60

3-Aço

CA-50 - Fyk = 500 MPa
CA-60 - Fyk = 600 MPa

4-Concreto de regularização-m.Fck = 15MPa

Módulo de Elasticidade : Eci = 152Mpa

Espessura : 5.0cm

5-As cotas prevalecem sobre o desenho

6-Classe de Agressividade Ambiental= II

7-Fator do Terreno:S1=1.00

8-Categoria de Rugosidade:S2=II

9-Classe da Edificação:S3=C

10-Fator Estatístico:S3 = 1.00

11-Velocidade Básica do Vento:V=30m/s

12-Coeficiente das Armaduras para sustentatividade:CAA II :

Lajes:2.5cm Pilares:2.5cm Vigas:2.5cm

12.1-Coeficiente das Armaduras para sustentatividade:CAA I:

Lajes:2.5cm Pilares:2.5cm

Vigas:2.5cm Sapatas:4cm

PROJETOS DE REFERêNCIA :

PROJETO ARQUITETÔNICO: PLANTAS BAIXAS,CORTES E FACHADAS

REVISIO

DATA	REVISAO No.	DESCRIÇAO
11/06/2025	00	EMISSIO INICIAL
17/07/2025	01	DIMENSIES DE PILARES E SAPATAS ATUALIZADOS

ART N°0820250124641

PROJETO ESTRUTURAL

PROPRIETÁRIO:
MUNICIPIO DE VILA PAVO - CNPJ 36.350.346/0001-67

AUTOR DO PROJETO:
CARLOS RAPHAEL MONTEIRO Assinado de forma digital por CARLOS RAPHAEL MONTEIRO DE LEMOS:04665479780
Dados: 2025.07.18 09:32:30 -03'00'
CARLOS RAPHAEL MONTEIRO DE LEMOS - CREA 123457/D - ES

ML
ENGENHARIA & PROJETOS

INFORMAÇíES DA OBRA

ENDEREÇO DA OBRA	R. BERNARDO DURIES DE OLIVEIRA, VILA PAVO-ES
RESPONSÁVEL TÉCNICO: FELIPE ML	DATA: 07/2025 — ESCALA: 1:50
NOME ARQUIVO CAD: xxx-xx-xxx-xxx.dwg ou xxx-xx.dwt	NOME PRANCHA: 17/17
NOME PROJETO: ESTILO45-REG.	

RUA CODORNO, NONA ANDAR 01, CEP: 29.134-660, UNIVERSAL, VILA/ES TEL: +55(27)2142-9422

DESENHO PRODUZIDO POR LICENÇA DE USO EDUCACIONAL, PROIBIDA A COMERCIALIZAÇÃO