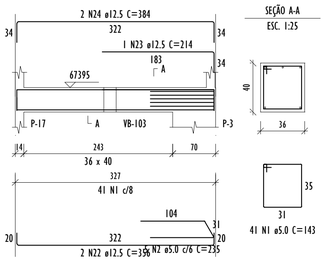
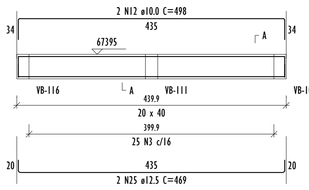
PROJETO ESTRUTURAL - UBS VALADARES

VB-129 (36 x 40)
ESC. 1:50

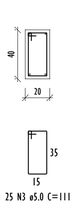


SEÇÃO A-A
ESC. 1:25

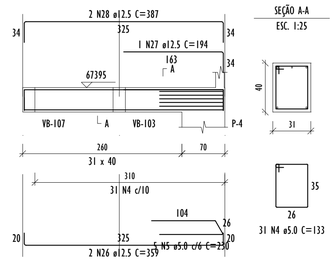
VB-130 (20 x 40)
ESC. 1:50



SEÇÃO A-A
ESC. 1:25

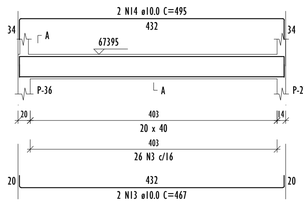


VB-131 (31 x 40)
ESC. 1:50

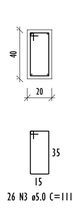


SEÇÃO A-A
ESC. 1:25

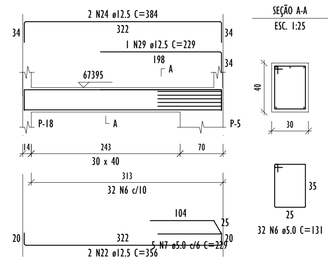
VB-132 (20 x 40)
ESC. 1:50



SEÇÃO A-A
ESC. 1:25

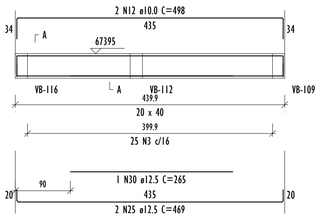


VB-133 (30 x 40)
ESC. 1:50

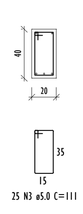


SEÇÃO A-A
ESC. 1:25

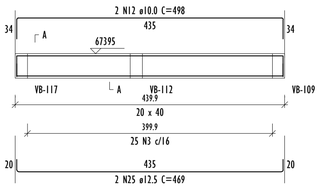
VB-134 (20 x 40)
ESC. 1:50



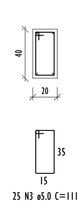
SEÇÃO A-A
ESC. 1:25



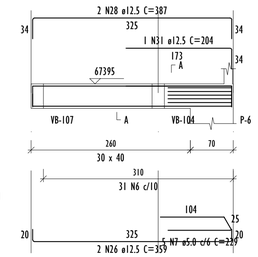
VB-135 (20 x 40)
ESC. 1:50



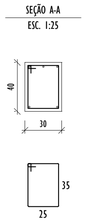
SEÇÃO A-A
ESC. 1:25



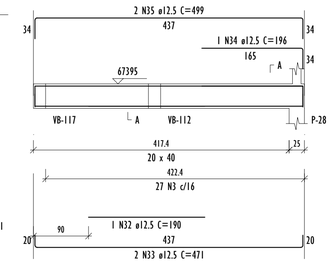
VB-136 (30 x 40)
ESC. 1:50



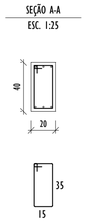
SEÇÃO A-A
ESC. 1:25



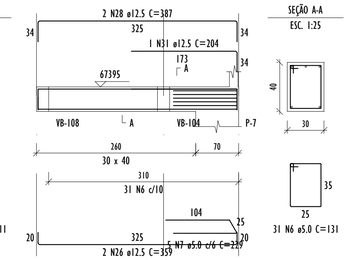
VB-137 (20 x 40)
ESC. 1:50



SEÇÃO A-A
ESC. 1:25

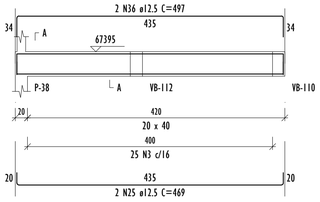


VB-138 (30 x 40)
ESC. 1:50

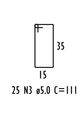


SEÇÃO A-A
ESC. 1:25

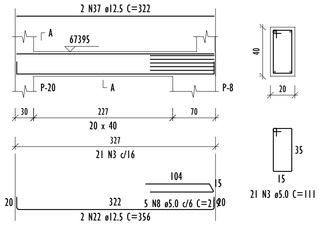
VB-139 (20 x 40)
ESC. 1:50



SEÇÃO A-A
ESC. 1:25

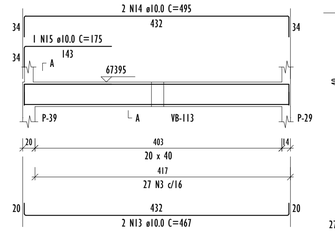


VB-140 (20 x 40)
ESC. 1:50

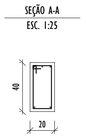


SEÇÃO A-A
ESC. 1:25

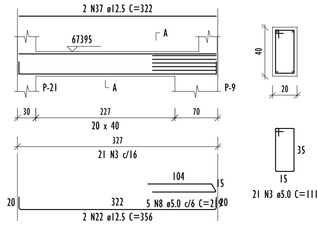
VB-141 (20 x 40)
ESC. 1:50



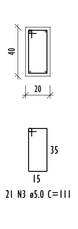
SEÇÃO A-A
ESC. 1:25



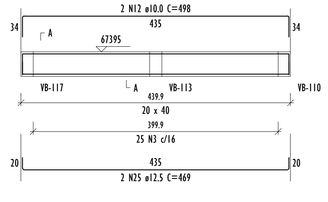
VB-142 (20 x 40)
ESC. 1:50



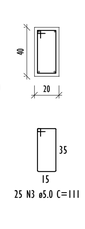
SEÇÃO A-A
ESC. 1:25



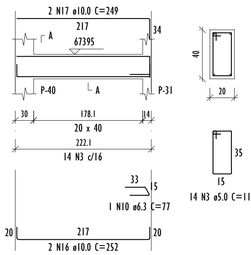
VB-143 (20 x 40)
ESC. 1:50



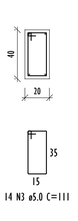
SEÇÃO A-A
ESC. 1:25



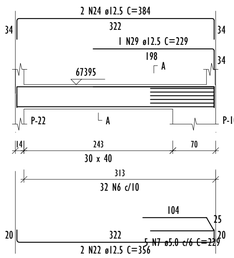
VB-144 (20 x 40)
ESC. 1:50



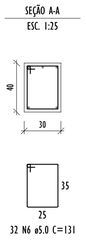
SEÇÃO A-A
ESC. 1:25



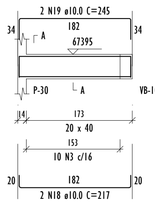
VB-145 (30 x 40)
ESC. 1:50



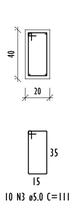
SEÇÃO A-A
ESC. 1:25



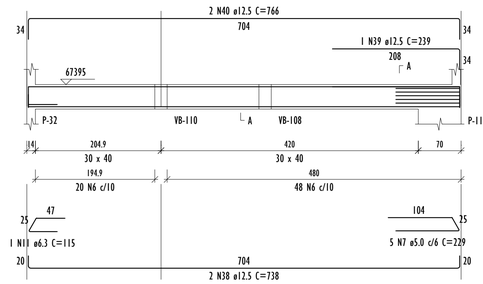
VB-146 (20 x 40)
ESC. 1:50



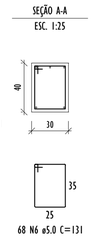
SEÇÃO A-A
ESC. 1:25



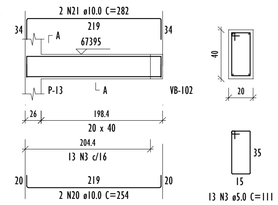
VB-147 (30 x 40)
ESC. 1:50



SEÇÃO A-A
ESC. 1:25

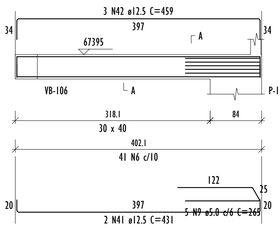


VB-148 (20 x 40)
ESC. 1:50

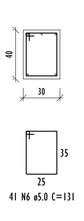


SEÇÃO A-A
ESC. 1:25

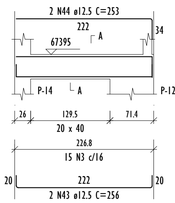
VB-149 (30 x 40)
ESC. 1:50



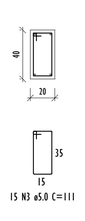
SEÇÃO A-A
ESC. 1:25



VB-150 (20 x 40)
ESC. 1:50



SEÇÃO A-A
ESC. 1:25



DETALHAMENTO DE VIGAS (NÍVEL 673.95)
ESCALA INDICADA

RELAÇÃO DO AÇO

VB-129	VB-130	VB-131
VB-132	VB-133	VB-134
VB-135	VB-136	VB-137
VB-138	VB-139	VB-140
VB-141	VB-142	VB-143
VB-144	VB-145	VB-146
VB-147	VB-148	VB-149
VB-150		

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	41	143	5863
	2	5.0	5	235	1175
	3	5.0	299	111	33189
	4	5.0	31	133	4123
	5	5.0	5	230	1150
	6	5.0	235	131	30785
	7	5.0	25	229	5725
	8	5.0	10	219	2190
	9	5.0	5	265	1325
CA50	10	6.3	1	77	77
	11	6.3	1	115	115
	12	10.0	8	498	3984
	13	10.0	4	467	1868
	14	10.0	4	495	1980
	15	10.0	1	175	175
	16	10.0	2	252	504
	17	10.0	2	249	498
	18	10.0	2	217	434
	19	10.0	2	245	490
	20	10.0	2	254	508
	21	10.0	2	282	564
	22	12.5	10	356	3560
	23	12.5	1	214	214
	24	12.5	6	384	2304
	25	12.5	10	469	4690
	26	12.5	6	359	2154
	27	12.5	1	194	194
	28	12.5	6	387	2322
	29	12.5	2	229	458
	30	12.5	1	265	265
	31	12.5	2	204	408
	32	12.5	1	190	190
	33	12.5	2	471	942
	34	12.5	1	196	196
	35	12.5	2	499	998
	36	12.5	2	497	994
	37	12.5	4	322	1288
	38	12.5	2	738	1476
	39	12.5	1	239	239
	40	12.5	2	766	1532
	41	12.5	2	431	862
	42	12.5	3	459	1377
	43	12.5	2	256	512
	44	12.5	2	253	506

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 0% (Barras)	PESO + 0% (kg)
CA50	6.3	1.9	1	0.5
	10.0	110	10	67.8
	12.5	276.8	24	266.7
CA60	5.0	855.3	72	131.8

PESO TOTAL (kg)	
CA50	335
CA60	131.8

Volume de concreto (C-30) = 6.58 m³
Área de forma = 71.36 m²

NOTAS GERAIS:

1. MEDIDAS EM CENTÍMETROS (cm).
2. TODAS AS MEDIDAS DEVERÃO SER VERIFICADAS NO LOCAL ANTES DO INÍCIO DA EXECUÇÃO.
3. A FUNDAÇÃO FOI DETERMINADA ATRAVÉS DO RELATÓRIO DE SONDAGEM NÚMERO 009/2026 REALIZADO PELA EMPRESA PÓRTICO ENGENHARIA & CONSULTORIA EM FEVEREIRO DE 2026;
4. CONCRETO:
   - · Fck = 30 MPa;
   - · Eci = 31 GPa;
   - · FATOR A/C = 0.55;
5. AÇOS:
   - · CA-50(Ecs=210000 MPa E Fyk=500MPa);
   - · CA-60(Ecs=210000 MPa E Fyk=600MPa);
6. CLASSE DE AGRESSIVIDADE AMBIENTAL II;
7. COBRIMENTO DAS ARMADURAS:
   - · ESTACAS = 5.0 cm; BLOCOS = 5.0 cm; VIGAS = 2.5 cm; PILARES = 2.5 cm; LAJES = 2.0 cm;
8. IMPERMEABILIZAR AS ESTRUTURAS EM CONTATO COM O SOLO;
9. DEVERÁ SER EXECUTADA ALVENARIA DE EMBASAMENTO EM BLOCOS DE CONCRETO, COM ALTURA DE 40 CM, SOB AS PAREDES DA EDIFICAÇÃO. A EXECUÇÃO DEVERÁ GARANTIR O ADEQUADO APOIO DAS ALVENARIAS SUPERIORES, OBSERVANDO O ALINHAMENTO E NIVELAMENTO DOS ELEMENTOS CONSTRUTIVOS;
10. O TEMPO DE ESCORAMENTO DAS ESTRUTURAS DE CONCRETO DEVE SER NO MÍNIMO DE 28 DIAS. OS DISPOSITIVOS UTILIZADOS DEVEM FACILITAR A REMOÇÃO DAS FÔRMAS DE MANEIRA A NÃO SUBMETER A ESTRUTURA À IMPACTOS, SOBRECARGAS E OUTROS DANOS. NENHUMA CARGA DEVE SER IMPOSTA E NENHUM ESCORAMENTO DEVE SER REMOVIDO ANTES DO TEMPO MÍNIMO DE 28 DIAS;
11. OS NÍVEIS LANÇADOS NO PROJETO ESTRUTURAL FORAM DETERMINADOS A PARTIR DOS NÍVEIS PRESENTES NO PROJETO ARQUITETÔNICO.

REV.	DESCRIÇÃO	DATA	EXEC.	VERIF.	APROV.
01	REVISÃO DE PROJETO	06/2026	RF	LS	SL
00	EMISSÃO INICIAL	05/2026	RF	LS	SL

CONTRATADA: viavoz projetos

RT: Sinval Ladeira
REG. CREA: 28.498/D
ASS:

CONTRATANTE: PREFEITURA MUNICIPAL DE JUIZ DE FORA

ENDEREÇO: JUIZ DE FORA/MG

PROGRAMA: UBS VALADARES

TÍTULO E CONTEÚDO:
PROJETO EXECUTIVO ESTRUTURAL
DETALHAMENTO DE VIGAS NÍVEL 673,95 - PARTE 03/03

DATA: MAIO/2026
ESCALA: INDICADA
FOLHA: 17/23
ARQUIVO: ESTC-PE-JF691-VLDR-052026-R01