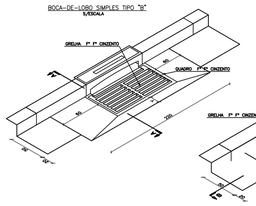
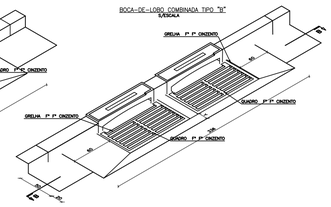
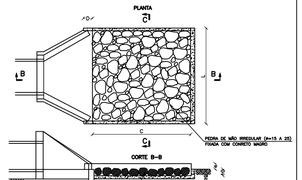
BOCA-DE-LOBO SIMPLES TIPO "S"
S/ESCALA



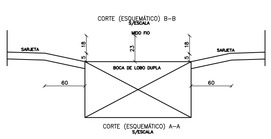
BOCA-DE-LOBO COMBINADA TIPO "S"
S/ESCALA

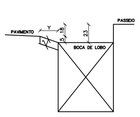


DISSIPADORES DE ENERGIA (i)
APLICÁVEIS A SAÍDAS DE BUEIROS TUBULARES E DESCIDAS D'ÁGUA DE ATERROS — DEB
S/ESCALA



CORTE (ESQUEMÁTICO) B–B
S/ESCALA



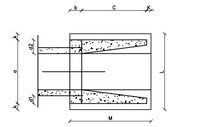


CORTE (ESQUEMÁTICO) A–A
S/ESCALA

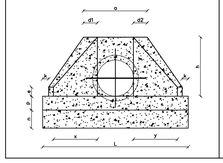
DIMENSÕES — DISSIPADOR (cm)					
TIPO	ADAPTÁVEL EM	C	L	d	e
DEB 01	SARD1/02/03	200	70	10	15
DEB 02	SARD1/02	200	74	10	15
DEB 03	BTC #60 – SARD2/04	240	242	30	15
DEB 04	BTC #60 – SARD2/06	320	263	30	15
DEB 05	BTC #60 – SARD2/08	400	345	30	15
DEB 06	BTC #100 – SARD2/08	400	397	30	15
DEB 07	BTC #100 – DND1/12	480	508	30	15
DEB 08	BTC #100 – DND1/14	400	508	30	15
DEB 09	BTC #100 – DND1/16	480	607	30	15
DEB 10	BTC #100 – DND1/18	560	700	30	15
DEB 11	BTC #120	400	434	30	15
DEB 12	BTC #120	480	723	30	15
DEB 13	BTC #150	600	918	30	15

BUEIRO SIMPLES TUBULAR DE CONCRETO — BOCAS NORMAIS E ESCONSAS

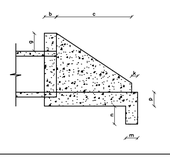
PLANTA NORMAL



VISTA FRONTAL



VISTA LATERAL



DIMENSÕES E CONSUMOS MÉDIOS PARA UMA UNIDADE

BUEIRO SIMPLES TUBULAR (D = 40)

TIPO	d	a	b	c	d1	d2	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	M	FORMA (m²)	CONC. (m³)
0	30	104	20	135	23	33	10	10	30	98	144	133	15	144	20	30	133	23	20	72	72	242	165	7.40	1.153
15	30	131	20	135	28	33	10	10	30	98	177	157	15	144	20	30	134	23	20	133	72	297	165	7.62	1.219
30	25	161	20	135	35	38	10	10	30	98	214	184	15	105	20	30	135	23	20	179	0	283	165	8.71	1.370
45	20	193	20	135	47	38	10	10	30	98	256	210	15	105	23	30	135	23	20	243	43	333	165	10.68	1.722

BUEIRO SIMPLES TUBULAR (D = 60)

TIPO	d	a	b	c	d1	d2	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	M	FORMA (m²)	CONC. (m³)
0	30	104	20	135	23	33	10	10	30	98	144	133	15	144	20	30	133	23	20	72	72	242	165	7.40	1.153
15	30	131	20	135	28	33	10	10	30	98	177	157	15	144	20	30	134	23	20	133	72	297	165	7.62	1.219
30	25	161	20	135	35	38	10	10	30	98	214	184	15	105	20	30	135	23	20	179	0	283	165	8.71	1.370
45	20	193	20	135	47	38	10	10	30	98	256	210	15	105	23	30	135	23	20	243	43	333	165	10.68	1.722

BUEIRO SIMPLES TUBULAR (D = 80)

TIPO	d	a	b	c	d1	d2	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	M	FORMA (m²)	CONC. (m³)
0	30	143	25	145	28	38	20	15	30	107	193	178	15	167	20	30	153	30	20	84	84	295	165	10.57	2.140
15	30	184	25	145	35	38	20	15	30	107	255	220	15	165	25	30	154	30	20	149	39	312	165	11.73	2.362
30	25	227	25	145	45	43	20	15	30	107	303	254	15	165	25	30	155	30	20	207	0	307	165	12.93	2.532
45	20	274	25	145	58	43	20	15	30	120	343	288	15	170	25	30	157	30	20	271	58	426	165	15.97	3.168

BUEIRO SIMPLES TUBULAR (D = 100)

TIPO	d	a	b	c	d1	d2	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	M	FORMA (m²)	CONC. (m³)
0	30	183	30	185	35	43	25	20	30	142	243	174	15	177	30	40	175	37	30	95	95	345	265	16.88	3.587
15	30	231	30	185	42	51	25	20	30	142	303	233	15	177	30	40	183	37	30	160	44	368	265	18.41	3.757
30	25	283	30	185	52	56	25	20	30	142	368	288	15	183	30	40	185	37	30	238	0	405	265	19.78	4.265
45	20	340	30	185	71	52	25	20	30	142	390	324	15	171	30	40	179	37	30	304	44	498	265	23.30	5.263

BUEIRO SIMPLES TUBULAR (D = 120)

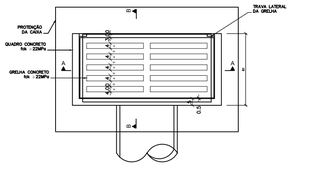
TIPO	d	a	b	c	d1	d2	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	M	FORMA (m²)	CONC. (m³)
0	30	224	40	185	45	56	30	25	35	163	298	198	15	208	40	45	188	43	35	104	104	391	265	20.65	5.166
15	30	283	40	185	52	56	30	25	35	163	368	233	15	188	40	45	177	43	35	184	48	412	265	21.43	5.412
30	25	343	40	185	61	63	30	25	35	163	414	284	15	185	40	45	183	43	35	267	0	455	265	24.00	6.058
45	20	404	40	185	83	63	30	25	35	163	455	331	15	198	40	45	196	43	35	366	48	562	265	29.34	8.243

BUEIRO SIMPLES TUBULAR (D = 150)

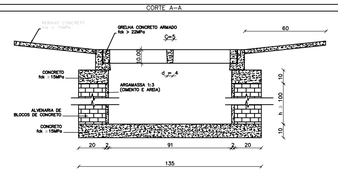
TIPO	d	a	b	c	d1	d2	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	M	FORMA (m²)	CONC. (m³)
0	30	343	50	360	45	66	35	30	50	194	500	277	15	303	45	45	277	52	40	150	150	520	325	32.54	10.610
15	30	403	50	360	47	61	35	30	50	194	548	328	15	293	45	45	258	52	40	263	75	555	325	34.15	11.431
30	25	464	50	360	78	58	35	30	50	194	603	396	15	268	45	45	260	52	40	377	0	612	325	37.95	12.668
45	20	525	50	360	95	71	35	30	50	194	615	439	15	245	45	45	245	52	40	505	75	752	325	46.95	15.353

DRENAGEM PLUVIAL URBANA — BOCAS-DE-LOBO SIMPLES COM GRELHAS DE CONCRETO

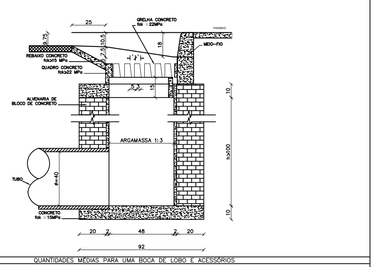
PLANTA



CORTE A–A



CORTE B–B

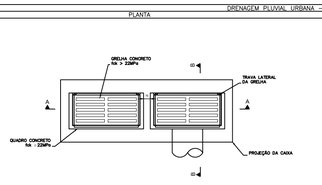


QUANTIDADES MÉDIAS PARA UMA BOCA DE LOBO E ACESSÓRIOS

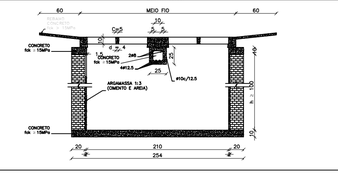
CÓDIGO	h	ALVENARIA DE TIJOLO (m²)	ARGAMASSA 1:3 (m²)	FORMAS (m²)	AÇO (kg)	CONCRETO fck=15MPa (m³)	CONCRETO fck=22MPa (m³)
BLSG01	100	3.61	0.58	3.10	4.10	0.250	0.060
BLSG02	150	5.66	0.91	3.10	4.10	0.250	0.060
BLSG03	200	7.55	0.12	3.10	4.10	0.250	0.060
BLSG04	250	9.42	0.15	3.10	4.10	0.250	0.060

DRENAGEM PLUVIAL URBANA — BOCAS-DE-LOBO DUPLAS COM GRELHAS DE CONCRETO

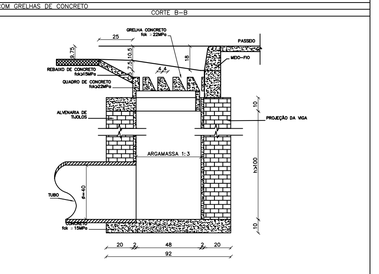
PLANTA



CORTE A–A

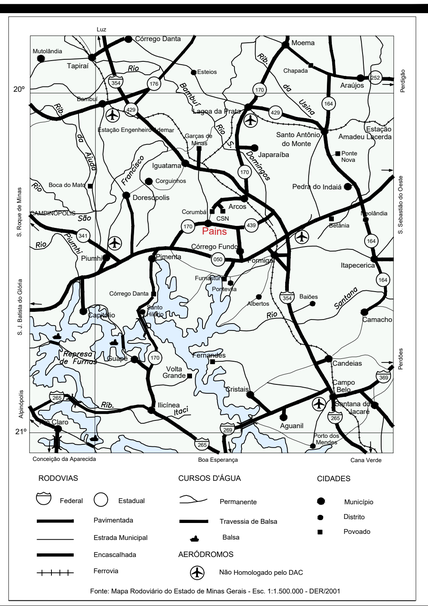


CORTE B–B



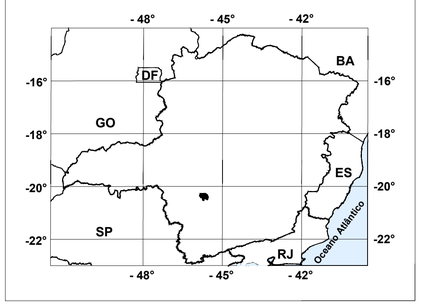
QUANTIDADES MÉDIAS PARA UMA BOCA DE LOBO E ACESSÓRIOS

CÓDIGO	h	ALVENARIA DE TIJOLO (m²)	ARGAMASSA 1:3 (m²)	FORMAS (m²)	AÇO (kg)	CONCRETO fck=15MPa (m³)	CONCRETO fck=22MPa (m³)
BLDG01	100	6.27	0.11	6.60	15.1	0.460	0.110
BLDG02	150	9.43	0.16	6.60	15.1	0.460	0.110
BLDG03	200	12.49	0.22	6.60	15.1	0.460	0.110
BLDG04	250	15.55	0.27	6.60	15.1	0.460	0.110



Fonte: Mapa Rodoviário do Estado de Minas Gerais - Esc. 1:1.500.000 - DER/2001

LOCALIZAÇÃO DO MUNICÍPIO NO ESTADO DE MINAS GERAIS



RELAÇÃO DE RUAS	
BAIRRO VÁRZEA	
NOME DA RUA	
AVENIDA GONÇALVES DE MELO	137,35m
RUA MARINHO CAETANO LEAL	9,0m
COMPRIMENTO TOTAL:	146,35M

OBS: INFORMAÇÃO DAS COORDENADAS GEOGRÁFICAS
COORDENADAS UTM SAD 69
LATITUDE 20°22'37.89"S LONGITUDE: 45°39'46.44"O
ART. nº MG

APROVAÇÃO PREFEITURA

CROQUI DE LOCALIZAÇÃO / SITUAÇÃO

VISTO PREFEITO

MARCO AURÉLIO GOMES RABELO - PREFEITO MUNICIPAL

PREFEITURA MUNICIPAL DE PAINS

BAIRRO VÁRZEA - PAINS/MG

ESCALA: INDICADA

R.T.

CHRISTIAN CARLOS DA SILVA TEIXEIRA- CREA MG 253.248

PRANCHA 02/02

FORMATO A1

DATA: JANEIRO/2023

DESENHO: CHRISTIAN TEIXEIRA