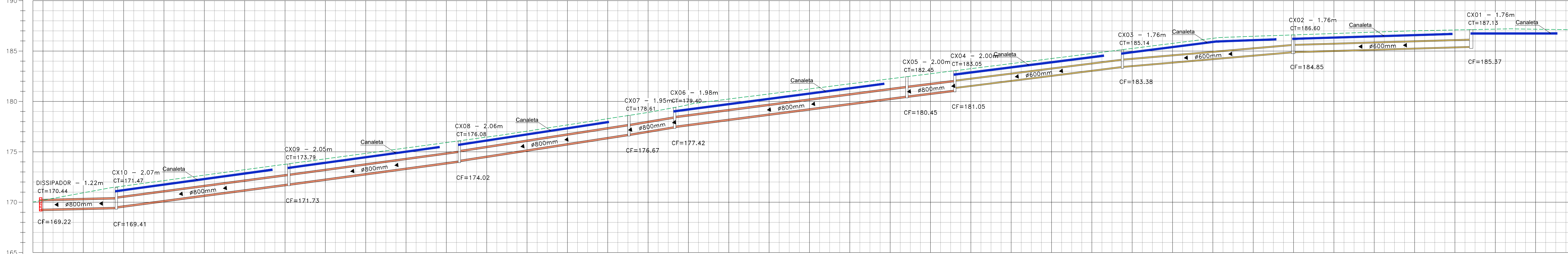


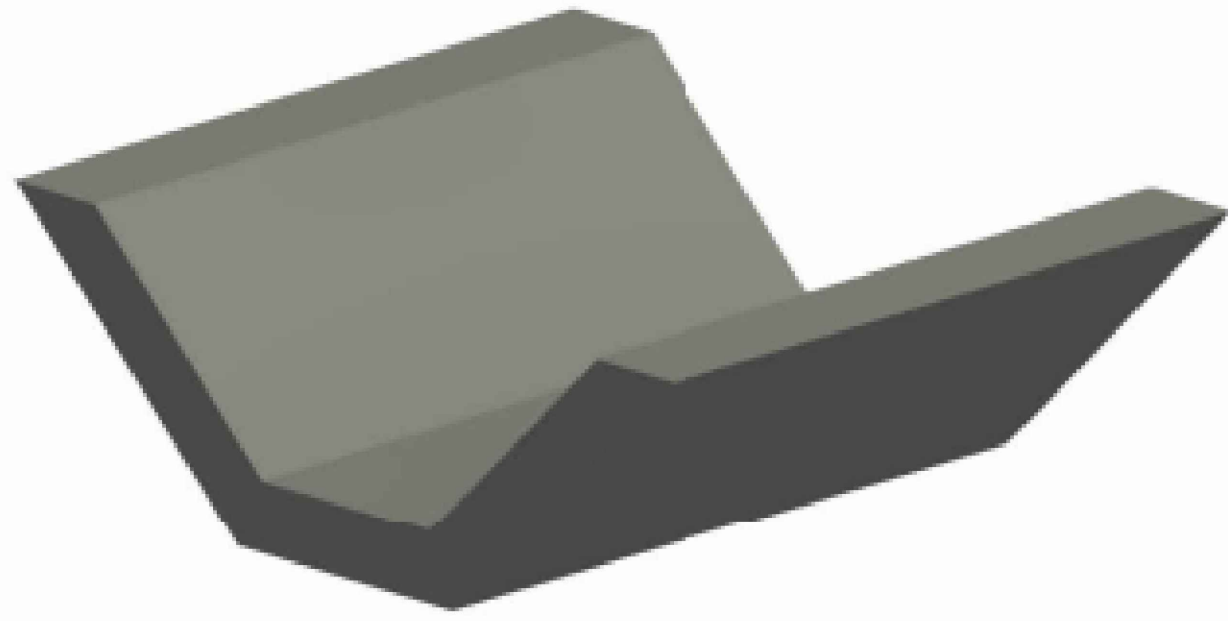
PERFIL LONGITUDINAL MARGEM ESQUERDA  
ESC. V.: 1:150  
ESC. H.: 1:750



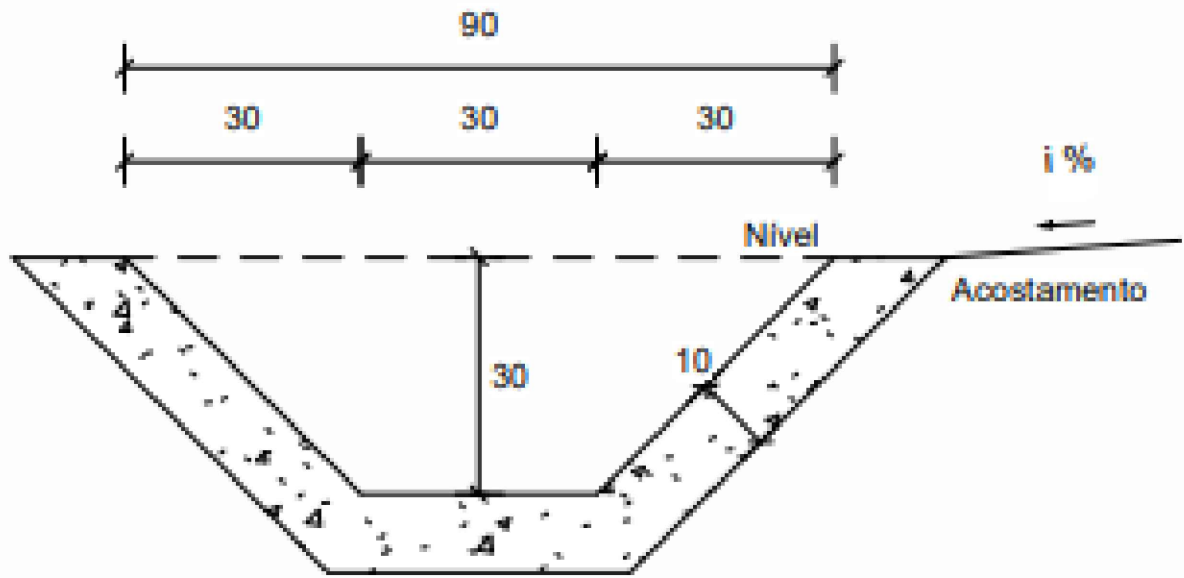
ESTACAS / COTA PROJETO	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 169.270	170.442 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SZC 90-30



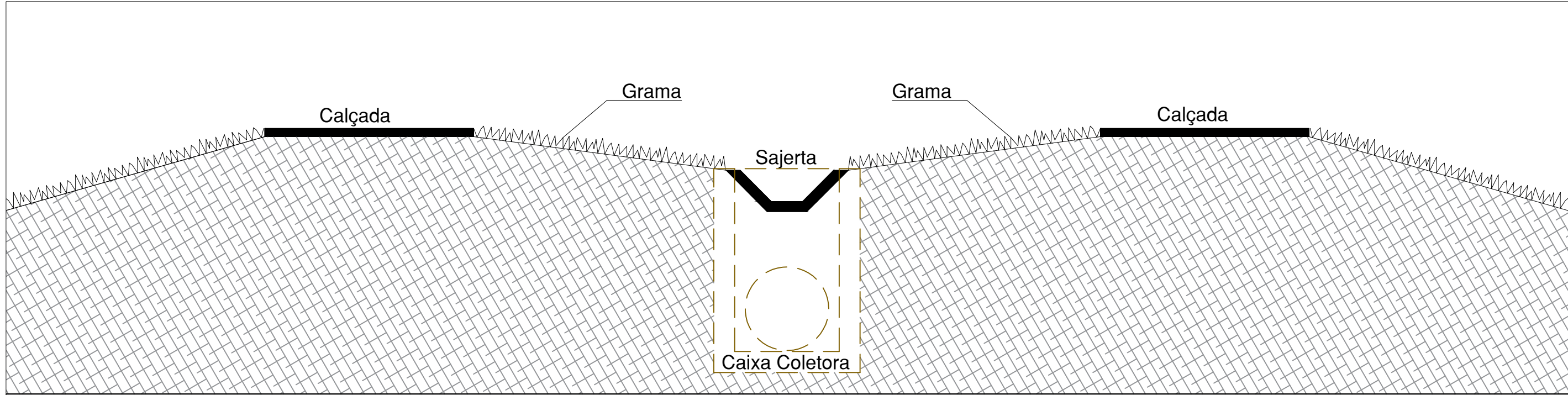
Perspectiva



Seção transversal  
Escala 1:20

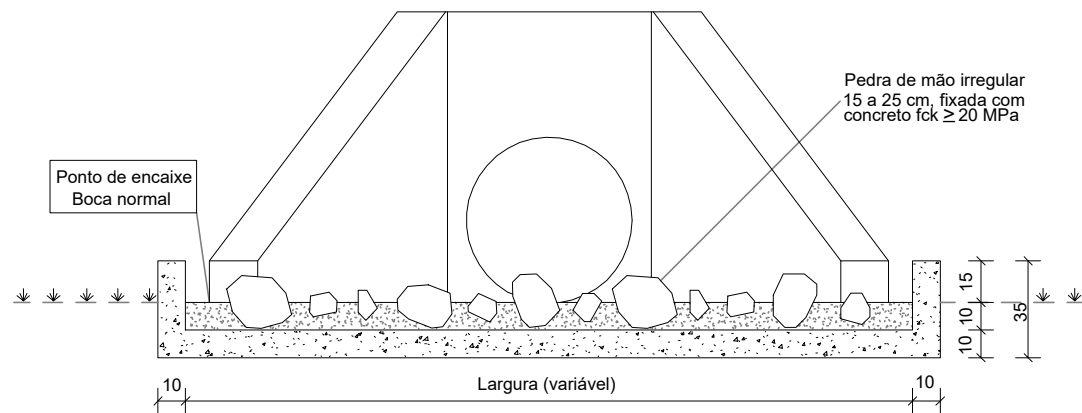
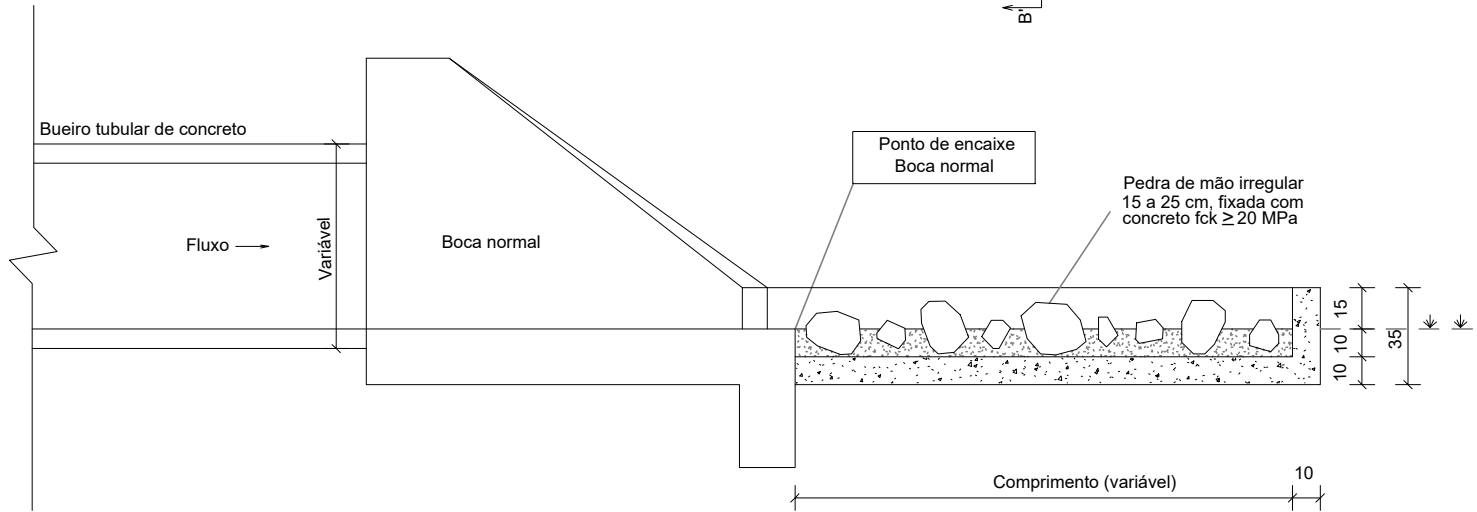
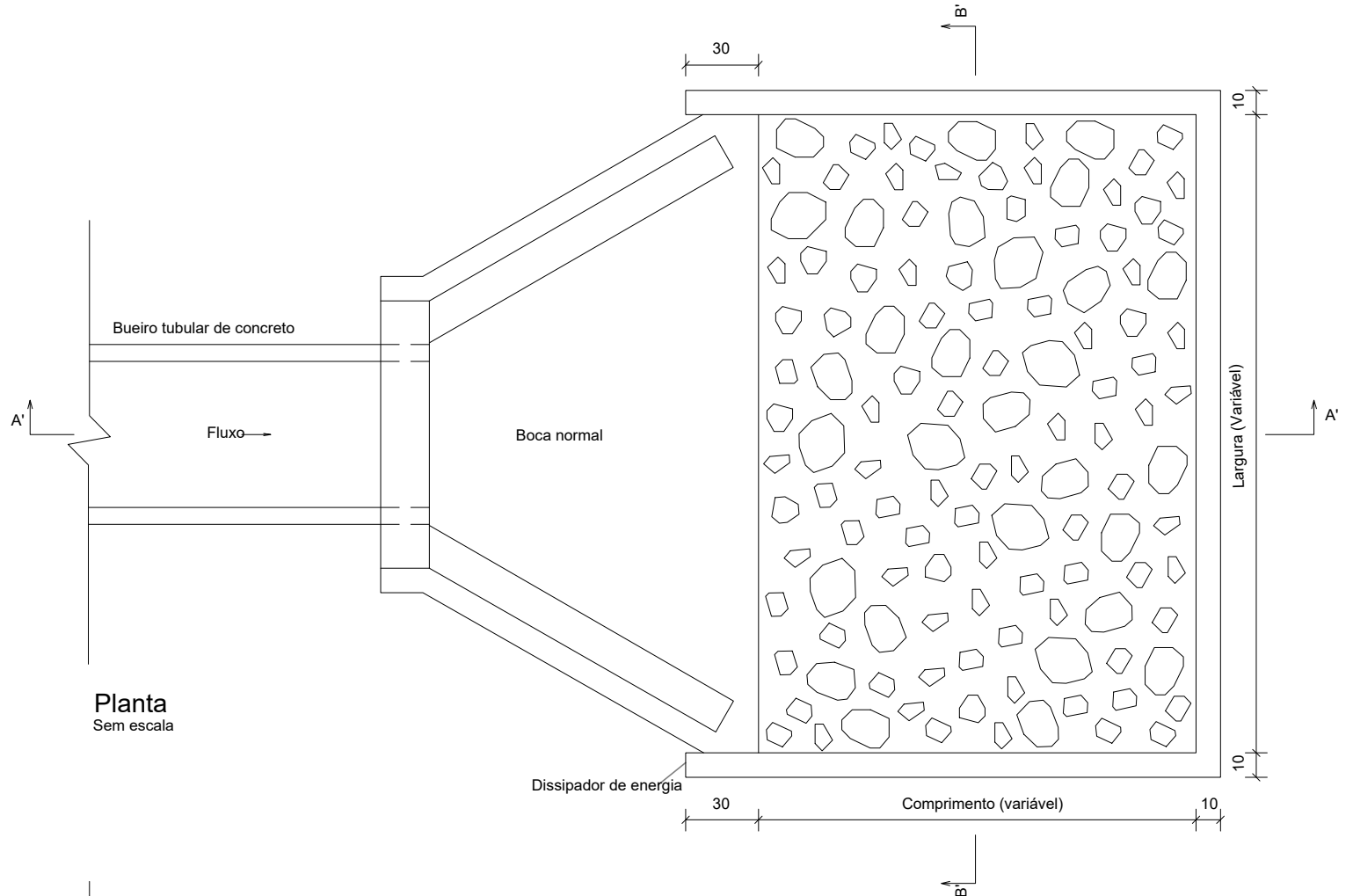
Consumos médios <sup>3</sup>		Método executivo <sup>4</sup>	
		Convencional	Extrusão
Escavação	m³/m	0,3131	0,3131
Apiloamento	m²/m	1,5142	1,5142
Concreto fck ≥ 20 MPa	m³/m	0,1331	0,1331
Guia de madeira	m/m	0,7571	-
Argamassa de cimento e areia <sup>6</sup>	m³/m	0,0001	-

DRENAGEM  
SARJETA TRAPEZOIDAL  
SEM ESCALA



DRENAGEM  
SEÇÃO TRANSVERSAL  
ESCALA: 1/40

DISSIPADORES DE ENERGIA ADAPTÁVEIS AOS BUEIROS TUBULARES DE CONCRETO - DEB



Consumo médio³									
Dispositivo	Adaptável em	Comprimento (cm)	Largura (cm)	Escavação (m³/un)	Apiloamento (m²/un)	Fôrma (m²/un)	Pedra de mão (m³/un)	Dispositivo	
								Fixação das pedras de mão	Laje e paredes
DEB 180-263	BSTC 60	180	263	1,0874	5,4370	4,3680	0,3748	0,2794	0,7195
DEB 240-316	BSTC 80	240	316	1,6925	8,4623	5,4066	0,4491	0,4491	1,0652
DEB 300-366	BSTC 100	300	366	2,4071	12,0353	6,4278	0,6489	0,6489	1,4651
DEB 360-414	BSTC 120	360	414	3,2235	16,1176	7,4327	0,8784	0,8784	1,9152
DEB 450-551	BSTC 150	450	551	5,2652	26,3260	9,3360	1,4559	1,4559	3,0153
DEB 300-511	BSTC 100	300	511	3,3061	16,5303	7,2978	0,9027	0,9027	1,9509
DEB 360-584	BSTC 120	360	584	4,4788	22,3939	8,4517	1,2359	1,2359	2,5853
DEB 450-746	BSTC 150	450	746	7,0592	35,2960	10,5060	1,9726	1,9726	3,9611
DEB 300-666	BSTC 100	300	666	4,2671	21,3553	8,2278	1,1737	1,1737	2,4701
DEB 360-754	BSTC 120	360	754	5,7395	28,6976	9,4717	1,5946	1,5946	3,2582
DEB 450-956	BSTC 150	450	956	8,9912	44,9560	11,7660	2,5252	2,5252	4,9796

- Notas:
- 1 - Dimensões em centímetros (cm)
  - 2 - Os dissipadores de energia devem atender aos requisitos da norma DNIT 022-ES.
  - 3 - Os consumos médios indicados correspondem aos quantitativos efetivos segundo a geometria do dispositivo, considerando a boca normal;
  - 4 - A velocidade máxima admissível a montante do dissipador de energia é de 4,5 m/s para a capacidade de vazão dos bueiros funcionando como canal e orifício até 1,2 D. Para capacidade de vazão e velocidade superiores, utilizar o dispositivo em blocos de concreto;
  - 5 - Concreto fck ≥ 20 MPa, para fixação das pedras de mão, espessura 10 cm;
  - 6 - No ponto de encaixe entre a saída dos bueiros e o dissipador de energia é necessária a execução de bocas normais;
  - 7 - A área do dissipador de energia deve ser preenchida com 60% de pedras de mão.



SERVIÇOS, PROJETOS E ASSESSORIA LTDA.  
Fone: (65) 3642-4045 Av. Histonador Rubens de mendonça, 1856 - Edifício Cuiabá  
Office Tower, Sl. 506 CEP: 78050-000 - Cuiabá - MT

PREFEITURA MUNICIPAL  
APROVAÇÃO

LUIS FELIPE CARVALHO B. LIMA  
ENGENHEIRO CIVIL  
CREA-MT 121.523-083-6

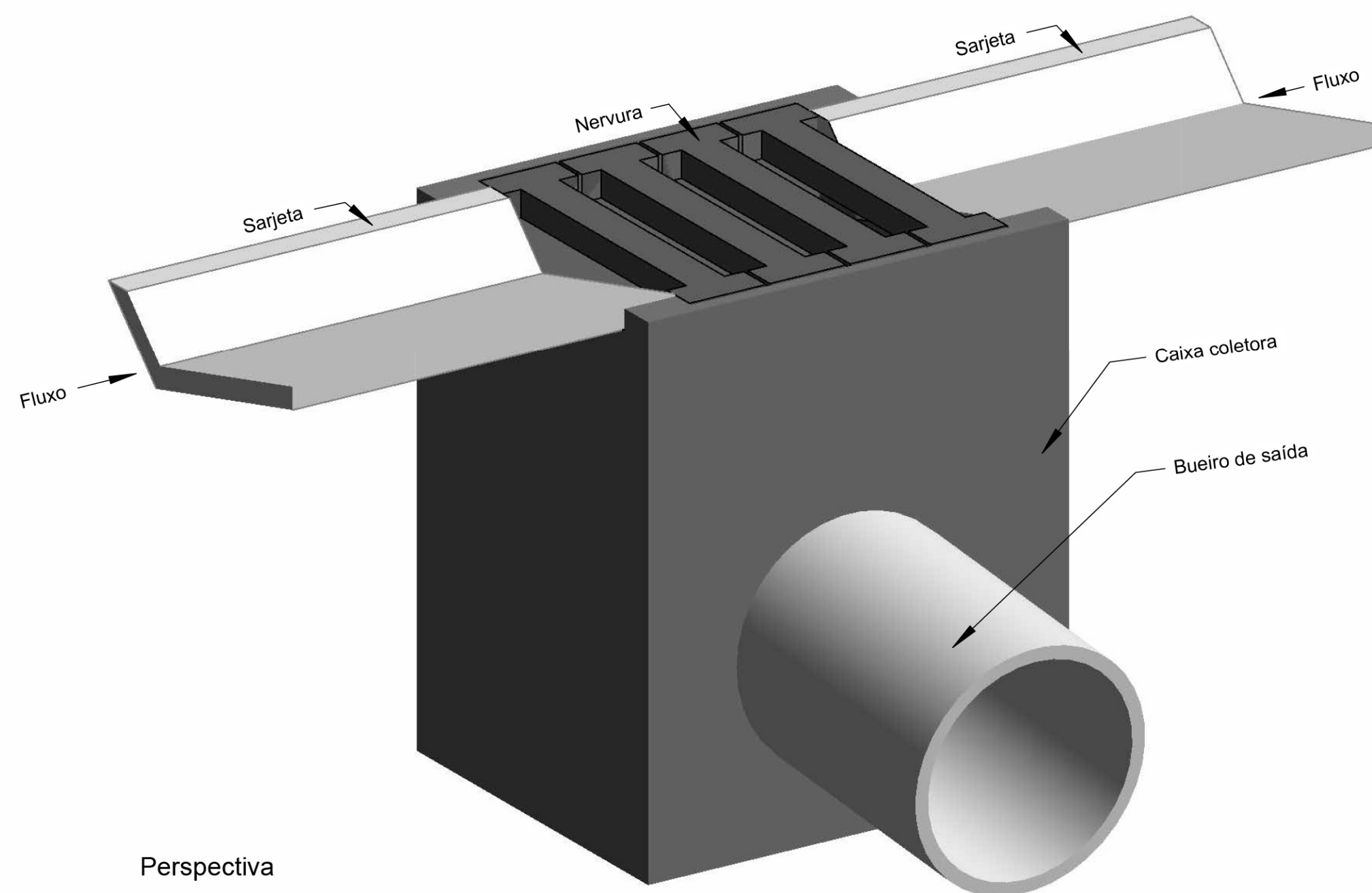
OBRA CONSTRUÇÃO DA PISTA DE CAMINHADA E ACADEMIA AO AR LIVRE

PROPRIETÁRIO:	PREFEITURA MUNICIPAL DE LAMBARI D'OESTE	ESCALA:	INDICADA	FOLHA N.º:
LOCAL:	AV. BOA VISTA - LAMBARI D'OESTE	ÁREA PAVIMENTAÇÃO:		02 / 03
ASSUNTO:	DRENAGEM	DETALHE SARJETA DETALHE DISSIPADOR SEÇÃO TRANSVERSAL	DATA:	MAIO / 2025

0 1 2 3 4 5  
cm

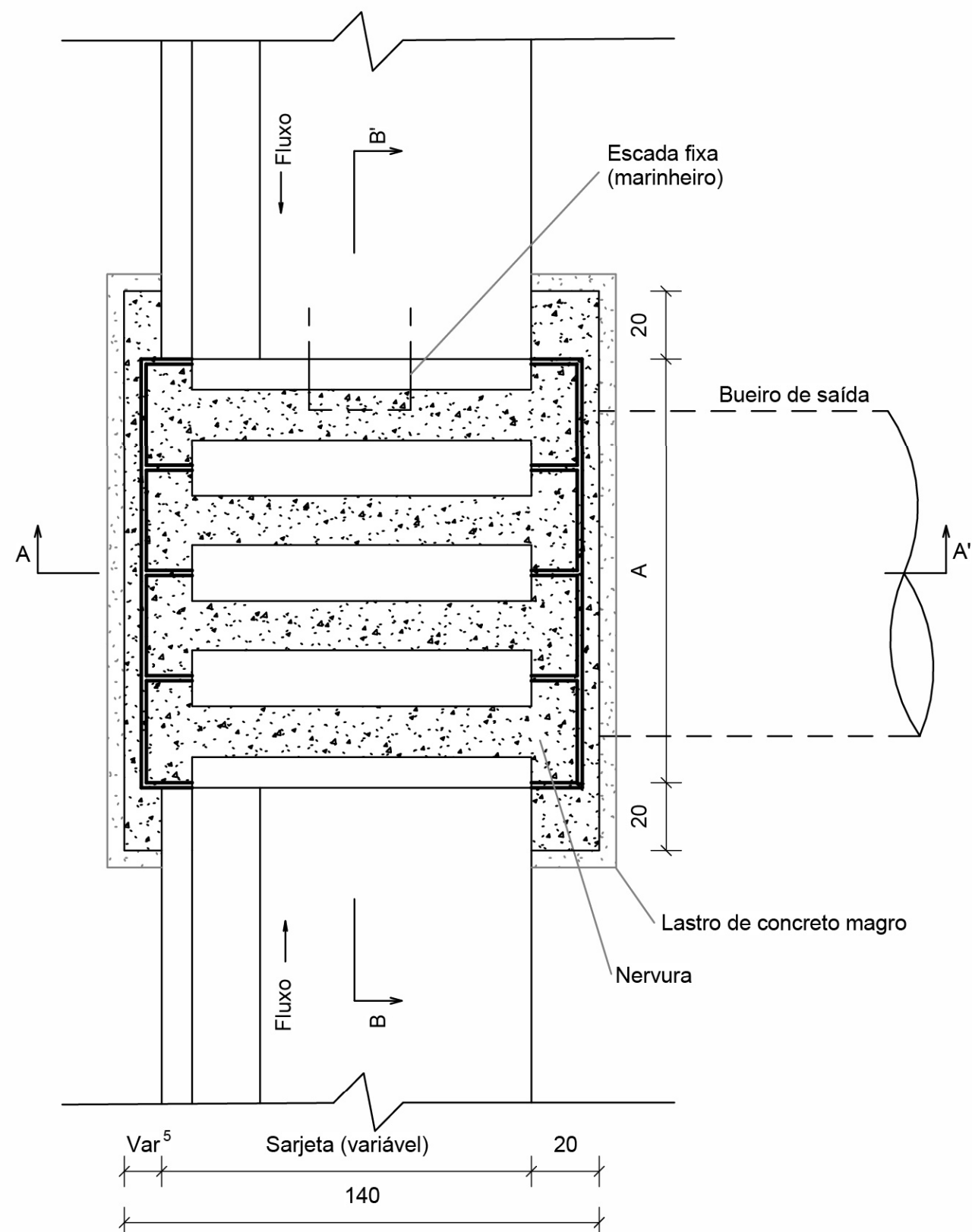


CAIXAS COLETORAS DE SARJETA COM GRELHA DE CONCRETO - CCS

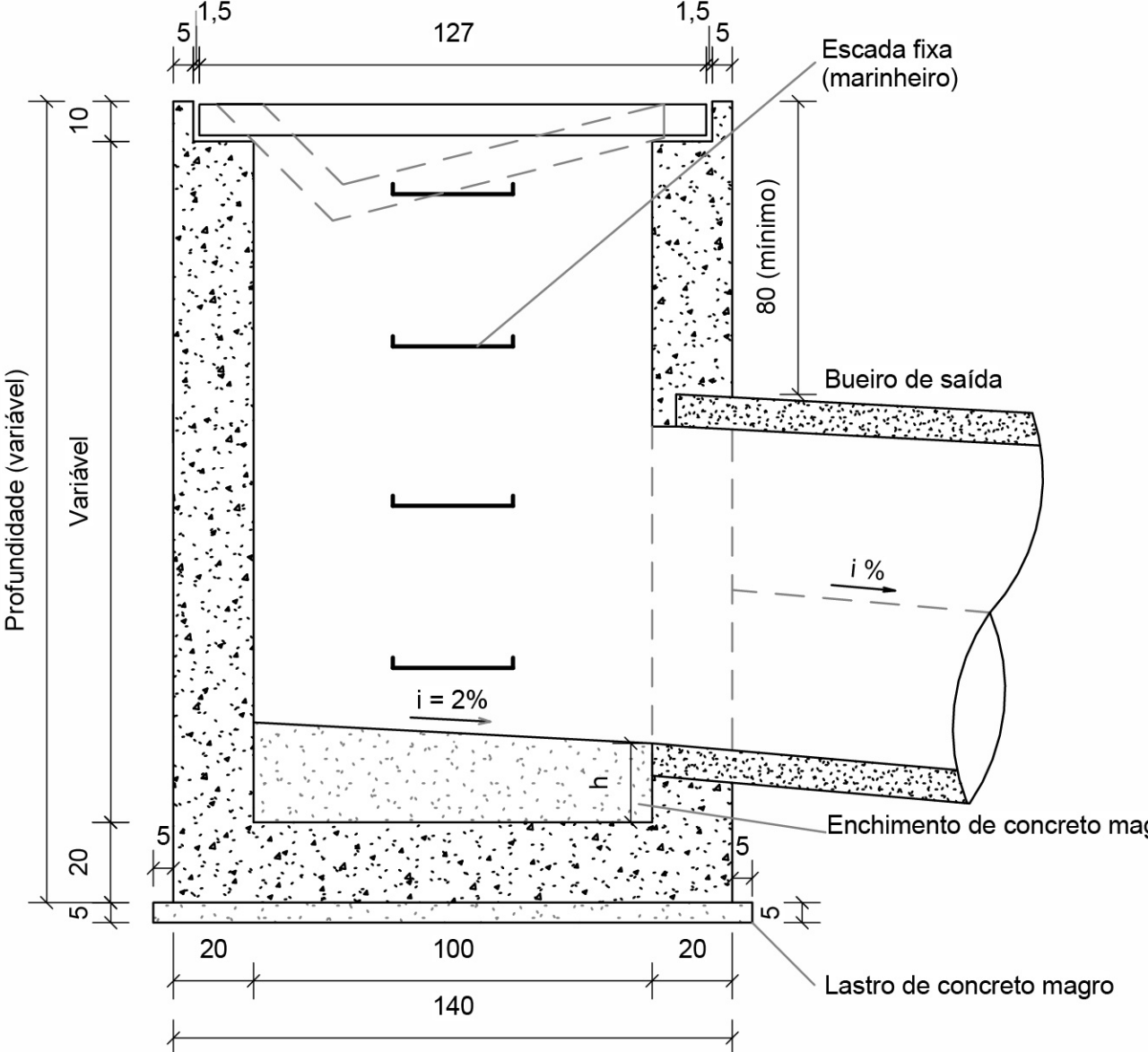


Perspectiva

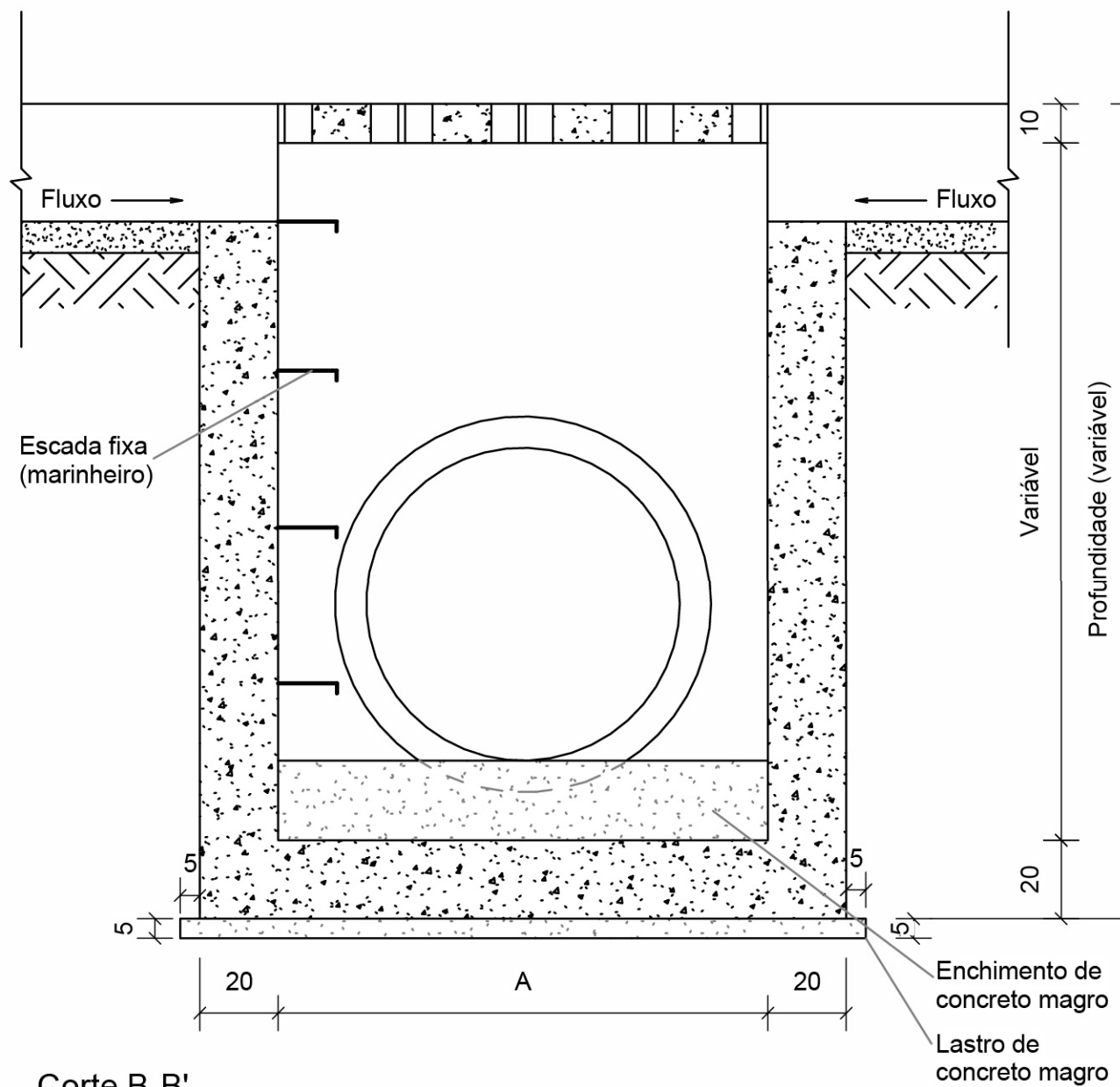
Consumos médios da caixa coletora³									
Dispositivo	Profundidade (cm)	A (cm)	Diâmetro do bueiro de saída (cm)	h (cm)	Escavação (m³/und)	Concreto magro (m³/und)	Fôrma (m²/und)	Aço CA-50 (kg/und)	Concreto fck ≥ 20 MPa (m³/und)
CCS 200-60 A	200	125	60	10	14,8200	0,2688	19,9304	112,1610	2,2760
CCS 200-80 A		125	80	10	14,8200	0,2688	19,7984	112,1610	2,2320
CCS 250-60 A		125	60	20	18,5250	0,3938	25,2304	137,2294	2,8060
CCS 250-80 A	250	125	80		18,5250	0,3938	25,0984	137,2294	2,7620
CCS 250-100 A		125	100		18,5250	0,3938	24,9288	137,2294	2,7054
CCS 250-120 A		160	120		20,8000	0,4935	28,0814	154,6048	3,0458
CCS 300-60 A	300	125	60	20	22,2300	0,3938	30,5304	162,2978	3,3360
CCS 300-80 A		125	80		22,2300	0,3938	30,3984	162,2978	3,2920
CCS 300-100 A		125	100		22,2300	0,3938	30,2288	162,2978	3,2354
CCS 300-120 A		160	120		24,9600	0,4935	34,0814	182,5544	3,6458
CCS 350-60 A	350	125	60	20	25,9350	0,3938	35,8304	183,4266	3,8660
CCS 350-80 A		125	80		25,9350	0,3938	35,6984	183,4266	3,8220
CCS 350-100 A		125	100		25,9350	0,3938	35,5288	183,4266	3,7654
CCS 350-120 A		160	120		29,1200	0,4935	40,0814	206,2116	4,2458
CCS 400-60 A	400	125	60	20	29,6400	0,3938	41,1304	208,4950	4,3960
CCS 400-80 A		125	80		29,6400	0,3938	40,9984	208,4950	4,3520
CCS 400-100 A		125	100		29,6400	0,3938	40,8288	208,4950	4,2954
CCS 400-120 A		160	120		33,2800	0,4935	46,0814	234,1612	4,8458



Planta Sem escala

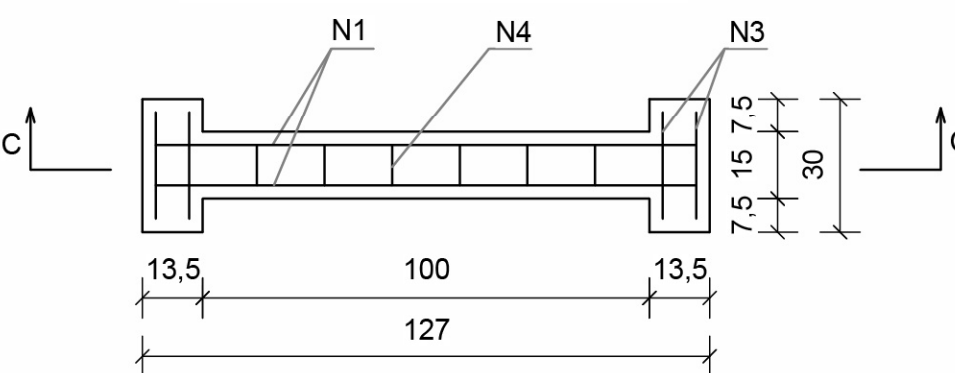


Corte A-A' Sem escala

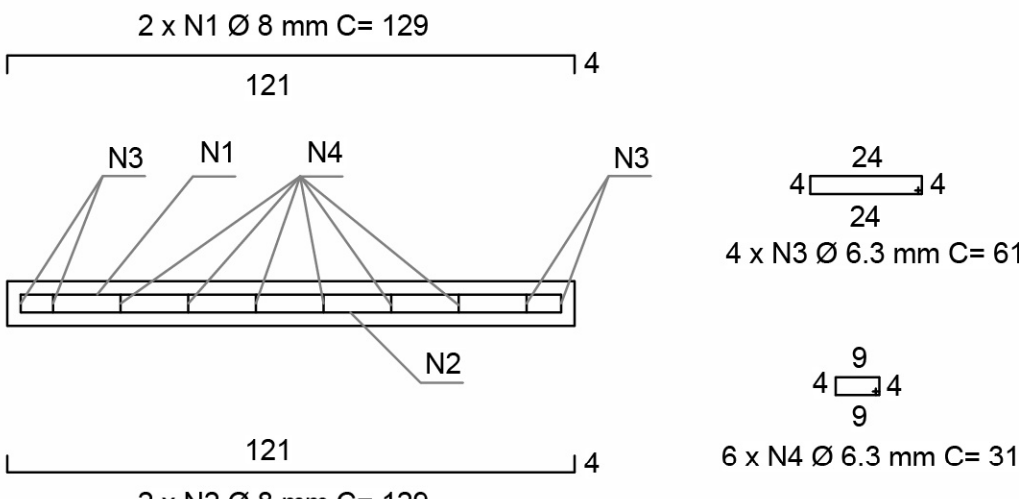


Corte B-B' Sem escala

Armaduras da nervura



Planta Sem escala



Corte C-C' Sem escala

Consumos médios da grelha (A = 125 cm)³		
Fôrma	m²/und	2,3000
Aço CA-50	kg/und	12,3668
Concreto fck ≥ 25 MPa	m³/und	0,0924

Consumos médios da grelha (A = 160 cm)³		
Fôrma	m²/und	2,8750
Aço CA-50	kg/und	15,4585
Concreto fck ≥ 25 MPa	m³/und	0,1155



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PREFEITURA MUNICIPAL  
APPROVAÇÃO

LUIS FELIPE CARVALHO B. LIMA  
ENGENHEIRO CIVIL  
CREA-MT 121.523-083-6

OBRA CONSTRUÇÃO DA PISTA DE CAMINHADA E ACADEMIA AO AR LIVRE

PROPRIETÁRIO:	PREFEITURA MUNICIPAL DE LAMBARÍ DOESTE	ESCALA:	INDICADA	FOLHA N.º:
LOCAL:	AV. BOA VISTA - LAMBARÍ DOESTE	ÁREA:	PAVIMENTAÇÃO	03 / 03
ASSUNTO:	DRENAGEM	DETALHE:	CAIXA COLETORA	
DATA:	MAIO / 2025			

0 1 2 3 4 5  
cm