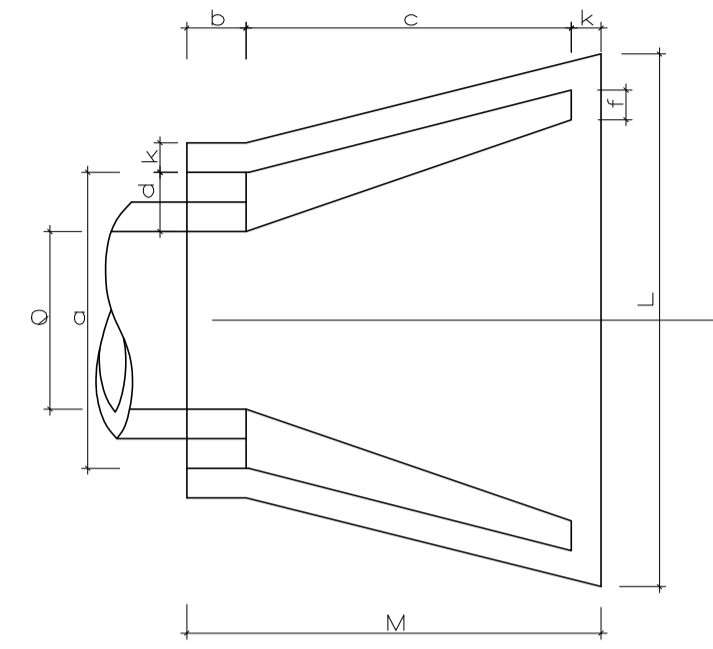
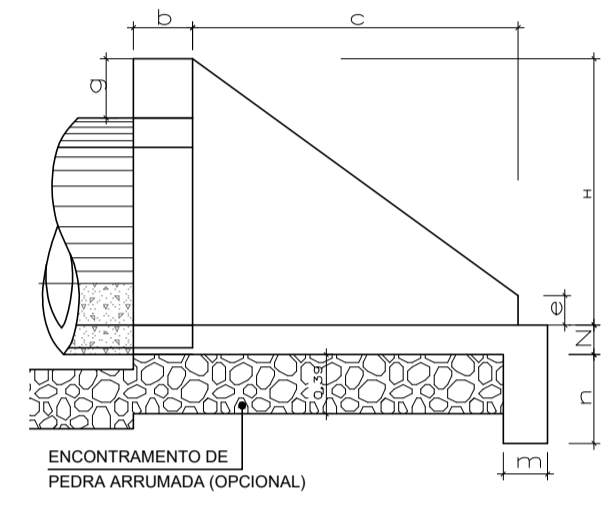


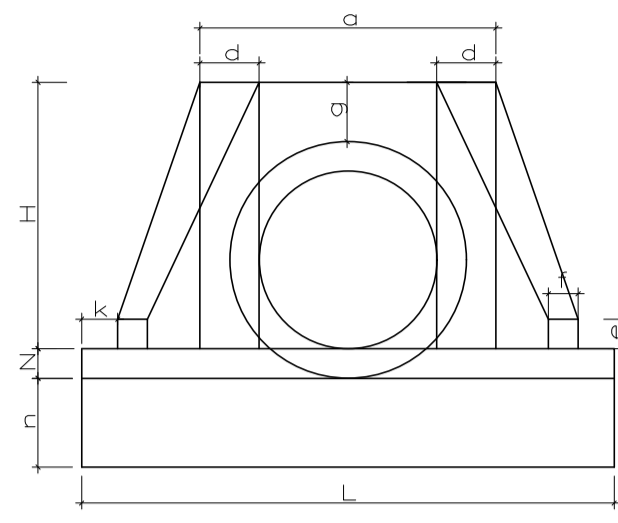
SAÍDA DE BUEIRO



PLANTA



VISTA LATERAL

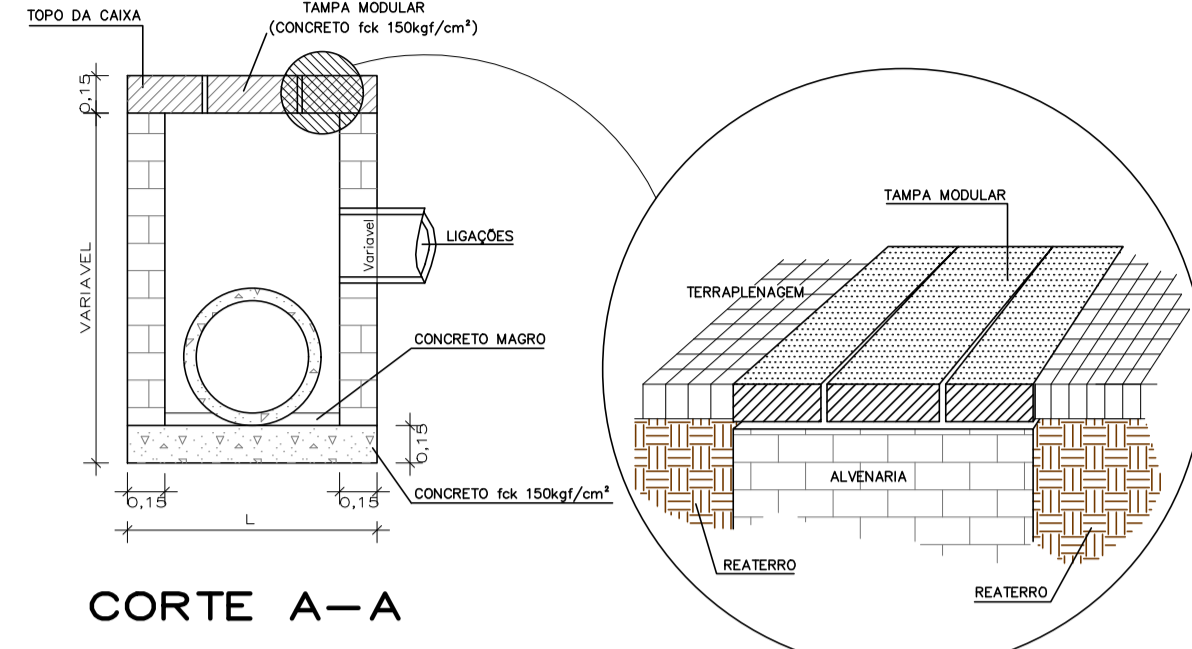


VISTA FRONTAL

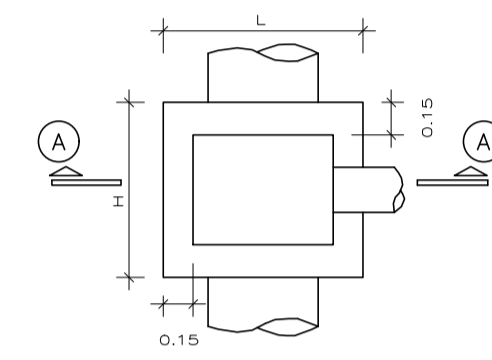
TIPO	TABELA													CONSUMO DE MATERIAL			
	a	b	c	d	e	f	g	k	m	n	H	L	M	N	VOLUME CONCRETO (m³)	FORMA (m²)	ENROC PEDRA ARRUMADA
BST 1/0,40	0,80	0,20	0,90	0,20	0,10	0,10	0,10	0,10	0,10	0,10	0,80	1,40	1,20	0,10	0,492	3,75	0,297
BST 1/0,60	1,00	0,20	1,10	0,20	0,15	0,10	0,10	0,10	0,30	0,88	1,60	1,40	0,10	0,559	4,27	0,338	
BST 1/0,80	1,20	0,20	1,40	0,20	0,15	0,10	0,10	0,10	0,30	1,10	1,70	1,70	0,10	0,813	4,88	0,440	
BST 1/1,00	1,40	0,20	1,71	0,20	0,20	0,15	0,20	0,10	0,15	0,30	1,32	2,20	0,10	1,225	6,96	0,696	
BST 1/1,20	1,60	0,20	1,87	0,20	0,25	0,15	0,20	0,10	0,15	0,30	1,63	2,46	0,10	1,393	9,52	0,836	
BST 1/1,50	2,10	0,20	2,30	0,30	0,30	0,20	0,20	0,10	0,15	0,30	1,85	3,00	0,10	2,580	14,32	1,325	

OBS: 1 - O CONSUMO DE MATERIAIS SE REFERE A UMA BOCA
2 - UTILIZAR CONCRETO Ck - 150kg/m³

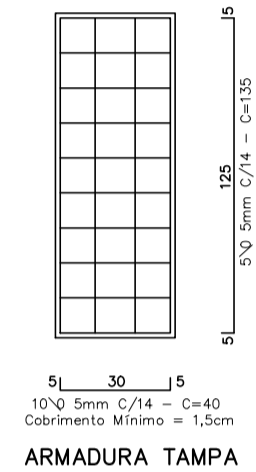
CAIXA DE LIGAÇÃO



CORTE A-A



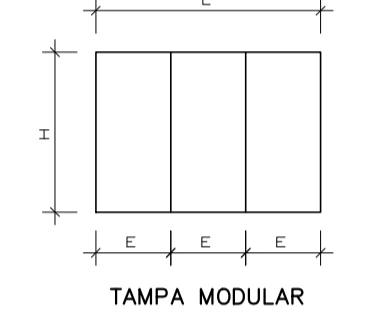
PLANTA



ARMADURA TAMPA

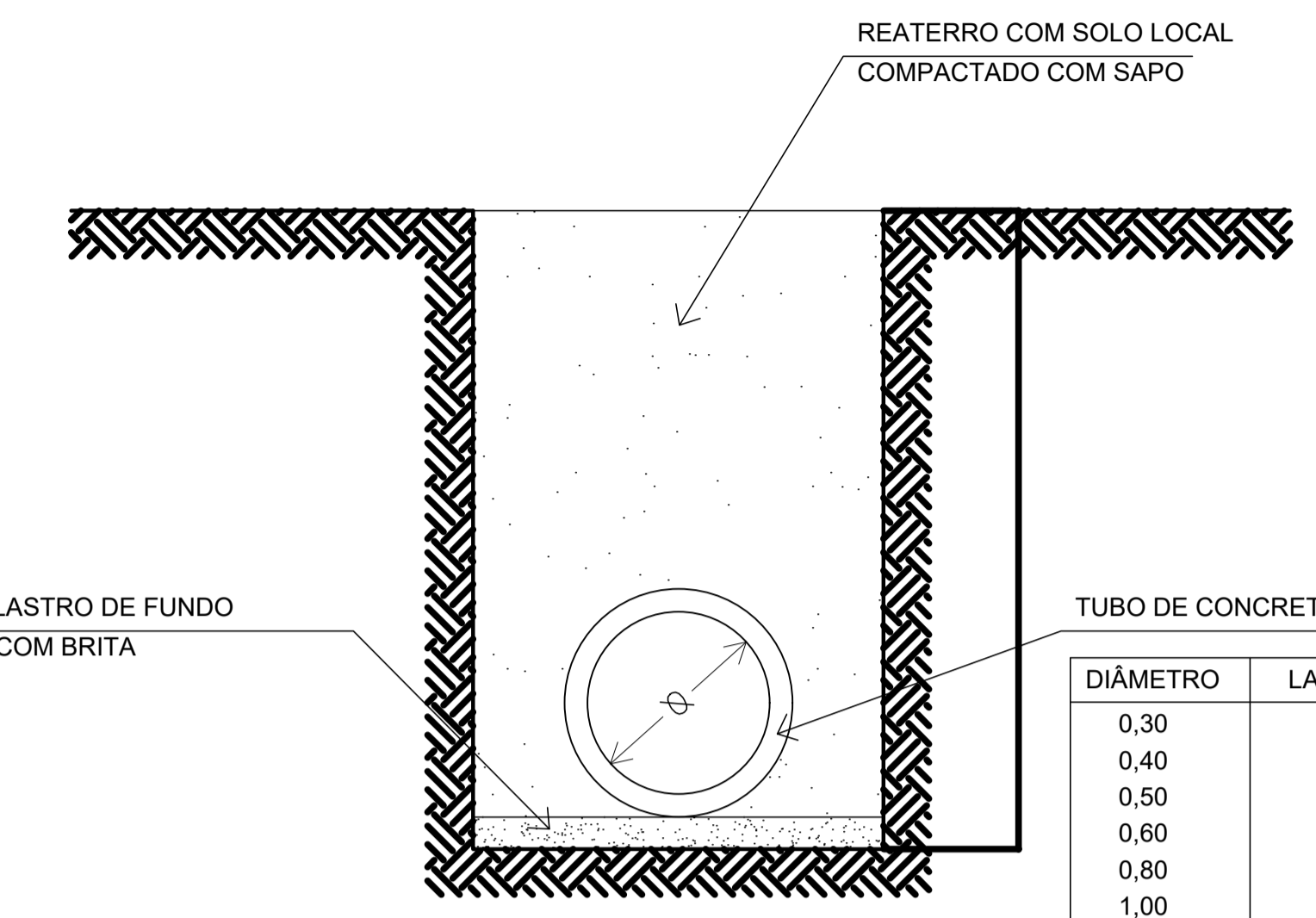
TUBO	H	L	E
Ø 0,40	1,30	0,70	0,35
Ø 0,60	1,30	1,05	0,35
Ø 0,80	1,30	1,40	0,35

TABELA



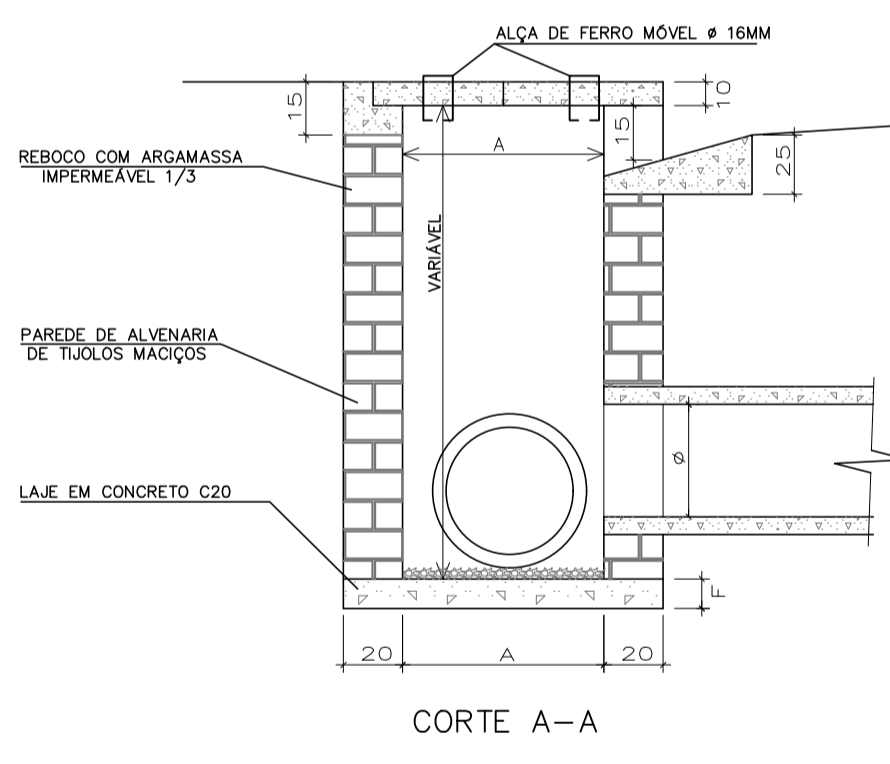
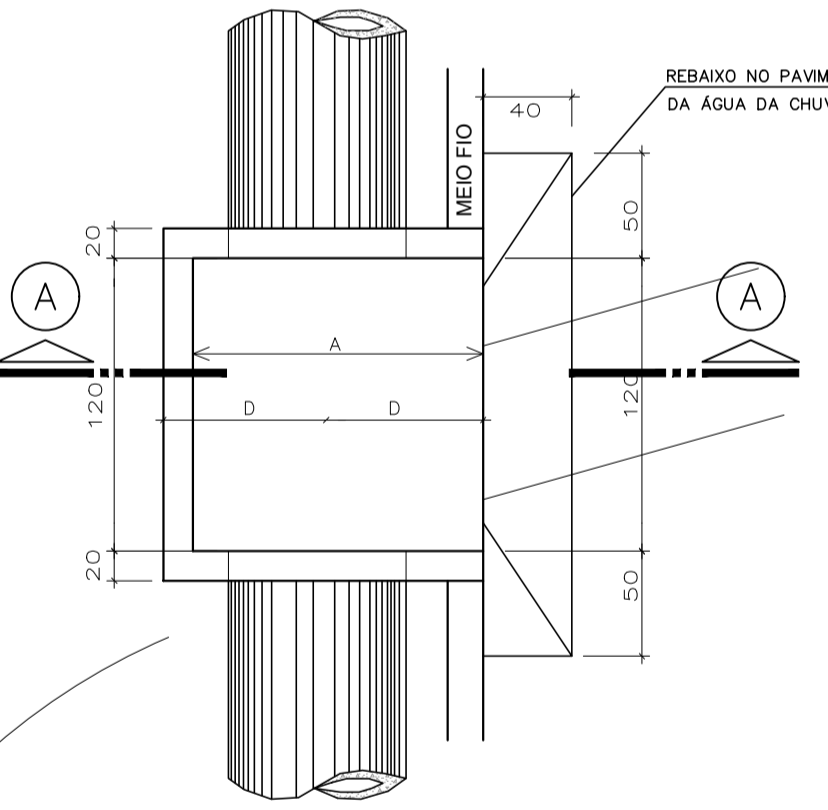
TAMPA MODULAR

ASSENTAMENTO DE TUBO



DIÂMETRO	LARGURA DA VALA
0,30	0,80
0,40	0,90
0,50	1,00
0,60	1,10
0,80	1,30
1,00	1,50
1,20	1,70

CAIXA COLETORES SIMPLES



CORTE A-A

NOME	COTAS	PROFUNDIDADE (m)
CS-EST. 1840,99	CT+ 119,88 CF= 117,55	119,08
CS-EST. 1840,59	CT+ 118,88 CF= 117,08	118,68
CS-EST. 1800,12	CT+ 118,37 CF= 116,04	118,37
CS-EST. 1800,02	CT+ 118,33 CF= 116,38	118,33
CS-EST. 1759,85	CT+ 116,94 CF= 114,83	116,49
CS-EST. 1759,98	CT+ 116,93 CF= 114,93	116,40
CL-EST. 1713,33	CT+ 115,83 CF= 113,83	115,36
CS-EST. 1694,41	CT+ 115,15 CF= 112,96	114,72
CS-EST. 1694,40	CT+ 115,04 CF= 113,04	115,04
CS-EST. 1621,20	CT+ 113,26 CF= 111,85	112,39
CS-EST. 1619,86	CT+ 113,23 CF= 111,43	112,22
CS-EST. 1580,16	CT+ 112,31 CF= 110,93	111,85
CS-EST. 1579,63	CT+ 112,30 CF= 110,50	111,65
BOCA TIPO A-1 - EST. 1698,10	CT+ 111,87 CF= 777	115,06
CS-EST. 1548,81	CT+ 111,58 CF= 110,16	111,48
CS-EST. 1543,48	CT+ 111,52 CF= 109,87	111,28
CS-EST. 1380,04	CT+ 111,35 CF= 109,86	111,32
CS-EST. 1359,80	CT+ 111,32 CF= 110,07	111,32
CS-EST. 1320,81	CT+ 111,08 CF= 109,69	110,87
CS-EST. 1320,00	CT+ 111,09 CF= 109,59	110,86

NOME	COTAS	PROFUNDIDADE (m)
CS-EST. 1418,24	CT+ 111,03 CF= 106,94	110,41
CS-EST. 1501,55	CT+ 110,82 CF= 106,42	110,61
CS-EST. 1505,18	CT+ 110,80 CF= 109,20	110,58
CS-EST. 1417,46	CT+ 110,77 CF= 109,17	110,42
CL-EST. 1406,02	CT+ 110,38 CF= 108,65	110,13
CS-EST. 1279,28	CT+ 110,38 CF= 109,34	110,73
CS-EST. 1279,72	CT+ 110,38 CF= 108,96	110,74
CS-EST. 1405,16	CT+ 110,35 CF= 107,71	110,23
CS-EST. 1448,36	CT+ 110,31 CF= 108,39	110,23
CS-EST. 1236,47	CT+ 108,76 CF= 107,08	108,65
CS-EST. 1238,95	CT+ 108,73 CF= 107,08	108,62
CL-EST. 775,26	CT+ 107,76 CF= 106,23	107,93
CS-EST. 793,18	CT+ 107,76 CF= 106,36	107,76
CS-EST. 792,38	CT+ 107,76 CF= 106,36	107,76
CS-EST. 759,41	CT+ 107,47 CF= 105,94	107,84
CS-EST. 757,97	CT+ 107,45 CF= 105,97	107,81
CS-EST. 1196,12	CT+ 107,27 CF= 105,87	107,04
CS-EST. 1196,20	CT+ 107,24 CF= 105,87	107,01
CS-EST. 1158,19	CT+ 107,02 CF= 105,31	106,84
CS-EST. 1158,38	CT+ 107,00 CF= 105,40	106,40

NOME	COTAS	PROFUNDIDADE (m)
BOCA TIPO A-1 - EST. 1148,95	CT+ 106,14 CF= 777	777
CS-EST. 711,34	CT+ 105,99 CF= 105,79	105,77
CS-EST. 711,21	CT+ 105,99 CF= 105,49	105,77
CS-EST. 683,99	CT+ 105,66 CF= 104,06	105,28
CS-EST. 681,57	CT+ 105,65 CF= 103,95	105,28
CS-EST. 686,42	CT+ 103,55 CF= 102,15	102,39
CS-EST. 696,54	CT+ 103,33 CF= 101,53	102,00
CS-EST. 628,50	CT+ 102,34 CF= 101,94	101,37
CS-EST. 929,87	CT+ 103,33 CF= 100,33	101,36
CS-EST. 994,63	CT+ 101,91 CF= 100,77	101,91
CS-EST. 991,33	CT+ 101,81 CF= 99,91	101,83
CS-EST. 959,85	CT+ 101,81 CF= 100,01	101,46
CS-EST. 958,91	CT+ 101,81 CF= 99,91	101,46
BOCA TIPO A-1 - EST. 657,19	CT+ 101,74 CF= 777	777
CS-EST. 455,57	CT+ 98,52 CF= 98,32	98,21
CS-EST. 454,99	CT+ 98,90 CF= 97,33	98,21
CS-EST. 419,78	CT+ 98,02 CF= 96,86	97,96
CS-EST. 419,86	CT+ 98,01 CF= 96,85	98,12
CS-EST. 125,55	CT+ 97,82 CF= 96,43	97,83
EST. 8,00	CT+ 97,82 CF= 96,01	97,52

NOME	COTAS	PROFUNDIDADE (m)
CS-EST. 125,30	CT+ 97,80 CF= 96,20	97,87
CS-EST. 7,57	CT+ 97,80 CF= 96,05	97,56
CS-EST. 379,88	CT+ 96,72 CF= 95,15	96,42
CS-EST. 379,92	CT+ 96,71 CF= 95,15	96,28
CS-EST. 79,89	CT+ 96,68 CF= 95,08	95,82
CS-EST. 79,91	CT+ 96,67 CF= 95,17	96,27
CS-EST. 41,99	CT+ 96,53 CF= 94,73	95,95
CS-EST. 44,10	CT+ 96,52 CF= 94,22	95,95
CS-EST. 341,37	CT+ 96,20 CF= 94,22	95,32
CS-EST. 338,98	CT+ 96,16 CF= 94,29	95,47
CS-EST. 299,50	CT+ 95,75 CF= 94,05	95,57
CS-EST. 299,80	CT+ 95,73 CF= 94,03	95,59
CS-EST. 259,38	CT+ 95,29 CF= 93,89	94,61
CS-EST. 200,21	CT+ 95,27 CF= 93,87	94,63
CS-EST. 228,67	CT+ 95,06 CF= 93,06	94,70
CS-EST. 230,02	CT+ 95,04 CF= 93,64	94,68
BOCA TIPO A-1 - EST. 123,94	CT+ 93,63	93,63
BOCA TIPO A-1 - EST. 228,98	CT+ 92,26	92,26
BOCA TIPO A-1 - EST. 42,36	CT+ 91,49	91,49
BOCA TIPO A-1 - EST. 125,15	CT+ 0,58	0,58

TUBO	DN (mm)	COMPRIMENTO (m)	DECLIVIDADE (%)
BSTC DN 0,40M CONCRETO - EST. 8,00	0,40	33,438	3,97%
BSTC DN 0,40M CONCRETO - EST. 41,99	0,40	10,161	0,50%
BSTC DN 0,40M CONCRETO - EST. 125,30	0,40	45,414	1,91%
BSTC DN 0,40M CONCRETO - EST. 79,91	0,40	37,925	1,98%
BSTC DN 0,40M CONCRETO - EST. 7,57	0,40	6,201	0,73%
BSTC DN 0,40M CONCRETO - EST. 44,10	0,40	6,933	7,02%
BSTC DN 0,40M CONCRETO - EST. 79,89	0,40	5,990	0,50%
BSTC DN 0,40M CONCRETO - EST. 454,99	0,40	35,509	1,31%
BSTC DN 0,40M CONCRETO - EST. 419,86	0,40	39,757	3,40%
BSTC DN 0,40M CONCRETO - EST. 379,88	0,40	40,284	2,49%
BSTC DN 0,40M CONCRETO - EST. 338,98	0,40	37,448	0,50%
BSTC DN 0,40M CONCRETO - EST. 299,80	0,40	40,622	0,50%
BSTC DN 0,40M CONCRETO - EST. 260,21	0,40	31,436	0,50%
BSTC DN 0,40M CONCRETO - EST. 228,67	0,40	11,072	0,50%
BSTC DN 0,40M CONCRETO - EST. 200,21	0,40	9,915	0,50%
BSTC DN 0,40M CONCRETO - EST. 239,38	0,40	6,873	0,50%
BSTC DN 0,40M CONCRETO - EST. 299,50	0,40	6,732	0,50%
BSTC DN 0,40M CONCRETO - EST. 379,92	0,40	6,177	0,50%
BSTC DN 0,40M CONCRETO - EST. 419,78	0,40	6,081	0,50%
BSTC DN 0,40M CONCRETO - EST. 792,38	0,40	15,906	0,50%

TUBO	DN (mm)	COMPRIMENTO (m)	DECLIVIDADE (%)
BSTC DN 0,40M CONCRETO - EST. 775,26	0,40	16,352	1,67%
BSTC DN 0,40M CONCRETO - EST. 757,97	0,40	46,757	2,78%
BSTC DN 0,40M CONCRETO - EST. 711,21	0,40	50,265	0,53%
BSTC DN 0,40M CONCRETO - EST. 711,34	0,40	6,379	0,50%
BSTC DN 0,40M CONCRETO - EST. 759,41	0,40	7,050	6,00%
BSTC DN 0,40M CONCRETO - EST. 793,18	0,40	6,292	7,77%
BSTC DN 0,40M CONCRETO - EST. 896,54	0,40	5,919	0,50%
BSTC DN 0,40M CONCRETO - EST. 896,54	0,40	32,719	2,10%
BSTC DN 0,40M CONCRETO - EST. 929,87	0,40	32,200	0,93%
BSTC DN 0,40M CONCRETO - EST. 929,87	0,40	31,900	0,61%
BSTC DN 0,40M CONCRETO - EST. 991,33	0,40	16,280	0,69%
BSTC DN 0,40M CONCRETO - EST. 996,42	0,40	6,091	0,50%
BSTC DN 0,40M CONCRETO - EST. 928,50	0,40	7,461	0,50%
BSTC DN 0,40M CONCRETO - EST. 958,91	0,40	7,080	0,50%
BSTC DN 0,40M CONCRETO - EST. 994,63	0,40	6,209	0,50%
BSTC DN 0,40M CONCRETO - EST. 1380,04	0,40	39,015	0,91%
BSTC DN 0,40M CONCRETO - EST. 1320,00	0,40	36,627	1,50%
BSTC DN 0,40M CONCRETO - EST. 1279,72	0,40	40,566	3,96%
BSTC DN 0,40M CONCRETO - EST. 1239,47	0,40	40,559	4,46%
BSTC DN 0,40M CONCRETO - EST. 1199,12	0,40	41,230	0,50%

TUBO	DN (mm)	COMPRIMENTO (m)	DECLIVIDADE (%)
BSTC DN 0,40M CONCRETO - EST. 1158,38	0,40	16,242	0,50%
BSTC DN 0,40M CONCRETO - EST. 1158,19	0,40	5,994	3,05%
BSTC DN 0,40M CONCRETO - EST. 1198,20	0,40	6,808	6,35%
BSTC DN 0,40M CONCRETO - EST. 1238,95	0,40	6,421	7,92%
BSTC DN 0,40M CONCRETO - EST. 1279,28	0,40	6,222	2,04%
BSTC DN 0,40M CONCRETO - EST. 1303,81	0,40	6,412	4,76%
BSTC DN 0,40M CONCRETO - EST. 1399,80	0,40	6,080	3,37%
BSTC DN 0,60M CONCRETO - EST. 1840,09	0,60	40,964	3,94%
BSTC DN 0,60M CONCRETO - EST. 1800,02	0,60	40,862	3,37%
BSTC DN 0,60M CONCRETO - EST. 1759,98	0,60	45,900	3,12%
BSTC DN 0,60M CONCRETO - EST. 1713,33	0,60	17,827	3,77%
BSTC DN 0,60M CONCRETO - EST. 1619,86	0,60	40,493	1,62%
BSTC DN 0,60M CONCRETO - EST. 1579,85	0,60	36,148	2,99%
BSTC DN 0,60M CONCRETO - EST. 1500,18	0,60	34,619	1,45%
BSTC DN 0,60M CONCRETO - EST. 1840,59	0,60	6,092	6,50%
BSTC DN 0,60M CONCRETO - EST. 1599,80	0,60	6,062	7,50%
BSTC DN 0,60M CONCRETO - EST. 1759,85			