PREFEITURA MUNICIPAL DE DOUTOR PEDRINHO - SC

Sistema de Coleta e Tratamento de Esgotos Sanitários

PLANILHA MEMORIAL DE CÁLCULO - REDE COLETORA DE ESGOTOS SANITÁRIOS **EE-SB01**

Acessório Montante	Acessório Jusante	Trecho Número	Extensão	ontribuiçã do Trecho	Vazão Montante	Vazão Jusante	Vazão de Cálculo	Diâmetro	Declividade	Cota Ter. Montante	Cota Ter. Jusante	Cota Colet Montante	Cota Colet Jusante	Prof.Colet. Montante	Prof.Colet. Jusante	cess.Jusa rofundidad	cess.Jusan. Cota	H/D	ÂNGULO TETA	RAIO HIDR.	LAM	VELC	TENS TRAT.	VCRT
			(m)	(l/s)	(l/s)	(l/s)	(l/s)	(mm)	(m/m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)				(y/d)	(m/s)	(Pa)	(m/s)
Rua																								
26	27	1	60,00	0,0480	0,000	0,048	1,500	150	0,01377	522,665	522,039	521,665	520,839	1,000	1,200	1,200	520,839	0,200	106,260	0,018	0,200	0,622	2,490	2,526
27	28	1	80,00	0,0640	0,048	0,112	1,500	150	0,01408	522,039	520,913	520,839	519,713	1,200	1,200	1,200	519,713	0,200	106,260	0,018	0,200	0,629	2,546	2,526
28	29	1	60,00	0,0480	0,112	0,160	1,500	150	0,00450	520,913	520,700	519,713	519,443	1,200	1,257	1,257	519,443	0,260	122,629	0,023	0,260	0,414	1,023	2,833
29	30	1	60,00	0,0480	0,160	0,208	1,500	150	0,00450	520,700	520,991	519,443	519,173	1,257	1,818	1,818	519,173	0,260	122,629	0,023	0,260	0,414	1,023	2,833
30	31	1	60,00	0,0480	0,208	0,256	1,500	150	0,00450	520,991	521,931	519,173	518,903	1,818	3,028	3,028	518,903	0,260	122,629	0,023	0,260	0,414	1,023	2,833
31	32	1	60,00	0,0480	0,256	0,304	1,500	150	0,00450	521,931	523,006	518,903	518,633	3,028	4,373	4,373	518,633	0,260	122,629	0,023	0,260	0,414	1,023	2,833
32	25	1	60,00	0,0480	0,304	0,352	1,500	150	0,00667	523,006	519,433	518,633	518,233	4,373	1,200	1,200	518,233	0,240	117,335	0,021	0,240	0,482	1,416	2,737
25	24	1	55,60	0,0445	0,352	0,396	1,500	150	0,02437	519,433	518,078	518,233	516,878	1,200	1,200	1,200	516,878	0,180	100,416	0,016	0,180	0,777	4,010	2,409
Rua																								
1	2	1	90,00	0,0720	0,000	0,072	1,500	150	0,00450	529,601	531,022	528,401	527,996	1,200	3,026	3,026	527,996	0,260	122,629	0,023	0,260	0,414	1,023	2,833
2	3	1	90,00	0,0720	0,072	0,144	1,500	150	0,00450	531,022	529,633	527,996	527,591	3,026	2,042	2,042	527,591	0,260	122,629	0,023	0,260	0,414	1,023	2,833
3	4	1	90,00	0,0720	0,144	0,216	1,500	150	0,00450	529,633	528,526	527,591	527,186	2,042	1,340	1,340	527,186	0,260	122,629	0,023	0,260	0,414	1,023	2,833
4	5	1	90,00	0,0720	0,216	0,288	1,500	150	0,01352	528,526	527,169	527,186	525,969	1,340	1,200	1,200	525,969	0,200	106,260	0,018	0,200	0,616	2,446	2,526
5	6	1	90,00	0,0720	0,288	0,360	1,500	150	0,01268	527,169	526,028	525,969	524,828	1,200	1,200	1,200	524,828	0,200	106,260	0,018	0,200	0,597	2,293	2,526
6	9	1	100,00	0,0800	0,360	0,440	1,500	150	0,02406	526,028	523,622	524,828	522,422	1,200	1,200	1,200	522,422	0,180	100,416	0,016	0,180	0,772	3,959	2,409
Rua																								
7	8	1	80,00	0,0640	0,000	0,064	1,500	150	0,00450	524,953	526,584	523,953	523,593	1,000	2,991	2,991	523,593	0,260	122,629	0,023	0,260	0,414	1,023	2,833
8	9	1	64,00	0,0512	0,064	0,115	1,500	150	0,01830	526,584	523,622	523,593	522,422	2,991	1,200	1,200	522,422	0,190	103,368	0,017	0,190	0,695	3,161	2,469
Rua																								
11	12	1	35,00	0,0280	0,000	0,028	1,500	150	0,00634	521,668	521,646	520,668	520,446	1,000	1,200	1,200	520,446	0,240	117,335	0,021	0,240	0,470	1,347	2,737
Rua																								
10	12	1	100,00	0,0799	0,000	0,080	1,500	150	0,04599	526,045	521,646	525,045	520,446	1,000	1,200	1,200	520,446	0,150	91,146	0,014	0,150	0,955	6,407	2,217
Rua																								
16	17	1	70,00	0,0560	0,000	0,056	1,500	150	0,01660	520,157	518,995	518,957	517,795	1,200	1,200	1,200	517,795	0,190	103,368	0,017	0,190	0,662	2,868	2,469
17	18	1	100,00	0,0799	0,056	0,136	1,500	150	0,00684	518,995	518,311	517,795	517,111	1,200	1,200	1,200	517,111	0,240	117,335	0,021	0,240	0,488	1,452	2,737
18	19	1	99,99	0,0799	0,136	0,216	1,500	150	0,00450	518,311	518,377	517,111	516,661	1,200	1,716	1,716	516,661	0,260	122,629	0,023	0,260	0,414	1,024	2,833
Rua																								
9	14	1	92,00	0,0736	0,555	0,628	1,500	150	0,03939	523,622	519,998	522,422	518,798	1,200	1,200	1,200	518,798	0,160	94,313	0,015	0,160	0,920	5,823	2,284
14	15	1	92,00	0,0736	0,628	0,702	1,500	150	0,01678	519,998	518,454	518,798	517,254	1,200	1,200	1,200	517,254	0,190	103,368	0,017	0,190	0,666	2,899	2,469
Rua																								
12	13	1	76,00	0,0608	0,108	0,169	1,500	150	0,02647	521,646	519,634	520,446	518,434	1,200	1,200	1,200	518,434	0,170	97,400	0,016	0,170	0,782	4,136	2,348
13	15	1	83,00	0,0664	0,169	0,235	1,500	150	0,01422	519,634	518,454	518,434	517,254	1,200	1,200	1,200	517,254	0,200	106,260	0,018	0,200	0,632	2,572	2,526
Rua																								
15	19	1	99,00	0,0791	0,937	1,016	1,500	150	0,00451	518,454	518,377	517,254	516,808	1,200	1,569	1,569	516,808	0,260	122,629	0,023	0,260	0,414	1,025	2,833
Rua																								
19	20	1	45,00	0,0360	1,232	1,268	1,500	200	0,00349	518,377	519,418	516,661	516,504	1,716	2,914	2,914	516,504	0,190	103,368	0,023	0,190	0,368	0,804	2,851
20	21	1	45,00	0,0360	1,268	1,304	1,500	200	0,00351	519,418	519,708	516,504	516,346	2,914	3,362	n	516,346	0,190	103,368	0,023	0,190	0,369	0,809	2,851
21	22	1	60,00	0,0480	1,304	1,352	1,500	200	0,00350	519,708	518,232	516,346	516,136	3,362	2,096	2,096	516,136	0,190	103,368	0,023	0,190	0,368	0,806	2,851
22	23	1	50,00	0,0400	1,352	1,392	1,500	200	0,00350	518,232	517,852	516,136	515,961	2,096	1,891	1,891	515,961	0,190	103,368	0,023	0,190	0,368	0,806	2,851
23	24	1	80,00	0,0640	1,392	1,456	1,500	200	0,00350	517,852	518,078	515,961	515,681	1,891	2,397	2,397	515,681	0,190	103,368	0,023	0,190	0,368	0,806	2,851
Rua																								
24	33	1	10,46	0,0084	1,852	1,860	1,860	200	0,00354	518,078	518,078	515,681	515,644	2,397	2,434	2,434	515,644	0,210	109,099	0,025	0,210	0,393	0,891	2,981
--					Vazão Total =>	1,860																		

PREFEITURA MUNICIPAL DE DOUTOR PEDRINHO - SC

Sistema de Coleta e Tratamento de Esgotos Sanitários

PLANILHA MEMORIAL DE CÁLCULO - REDE COLETORA DE ESGOTOS SANITÁRIOS **EE-SB02**

Acessório Montante	Acessório Jusante	Trecho Número	Extensão	ontribuiçã do Trecho	Vazão Montante	Vazão Jusante	Vazão de Cálculo	Diâmetro	Declividade	Cota Ter. Montante	Cota Ter. Jusante	Cota Colet Montante	Cota Colet Jusante	Prof.Colet. Montante	Prof.Colet. Jusante	cess.Jusa rofundidad	cess.Jusan. Cota	H/D	ÂNGULO TETA	RAIO HIDR.	LAM	VELC	TENS TRAT.	VCRT
			(m)	(l/s)	(l/s)	(l/s)	(l/s)	(mm)	(m/m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)				(y/d)	(m/s)	(Pa)	(m/s)
Rua																								
59	60	1	65,00	0,0416	0,000	0,042	1,500	150	0,00450	519,626	520,554	518,426	518,134	1,200	2,421	2,421	518,134	0,260	122,629	0,023	0,260	0,414	1,023	2,833
60	61	1	25,00	0,0160	0,042	0,058	1,500	150	0,00450	520,554	520,978	518,134	518,021	2,421	2,957	2,957	518,021	0,260	122,629	0,023	0,260	0,414	1,023	2,833
61	62	1	65,00	0,0416	0,058	0,099	1,500	150	0,00450	520,978	521,215	518,021	517,729	2,957	3,487	3,487	517,729	0,260	122,629	0,023	0,260	0,414	1,023	2,833
62	63	1	60,00	0,0384	0,099	0,138	1,500	150	0,00614	521,215	518,560	517,729	517,360	3,487	1,200	1,200	517,360	0,240	117,335	0,021	0,240	0,462	1,304	2,737
63	64	1	55,00	0,0352	0,138	0,173	1,500	150	0,00891	518,560	517,920	517,360	516,870	1,200	1,050	1,050	516,870	0,220	111,888	0,020	0,220	0,529	1,753	2,635
Rua																								
52	53	1	40,01	0,0256	0,000	0,026	1,500	150	0,00450	519,546	519,628	518,346	518,166	1,200	1,462	1,462	518,166	0,260	122,629	0,023	0,260	0,414	1,024	2,833
53	54	1	69,96	0,0448	0,026	0,070	1,500	150	0,00450	519,628	520,554	518,166	517,851	1,462	2,703	2,703	517,851	0,260	122,629	0,023	0,260	0,414	1,023	2,833
54	55	1	35,00	0,0224	0,070	0,093	1,500	150	0,00450	520,554	521,985	517,851	517,694	2,703	4,291	4,291	517,694	0,260	122,629	0,023	0,260	0,414	1,023	2,833
55	56	1	80,00	0,0512	0,093	0,144	1,500	150	0,00450	521,985	519,962	517,694	517,334	4,291	2,628	2,628	517,334	0,260	122,629	0,023	0,260	0,414	1,023	2,833
56	58	1	85,00	0,0544	0,144	0,198	1,500	150	0,00546	519,962	517,920	517,334	516,870	2,628	1,050	1,050	516,870	0,250	120,000	0,022	0,250	0,446	1,200	2,786
Rua																								
42	43	1	60,00	0,0384	0,000	0,038	1,500	150	0,06703	564,756	560,734	563,556	559,534	1,200	1,200	1,200	559,534	0,140	87,891	0,013	0,140	1,105	8,761	2,147
43	44	1	70,00	0,0448	0,038	0,083	1,500	150	0,10431	560,734	553,432	559,534	552,232	1,200	1,200	1,200	552,232	0,120	81,072	0,011	0,120	1,252	11,806	1,998
44	45	1	70,00	0,0448	0,083	0,128	1,500	150	0,14387	553,432	543,361	552,232	542,161	1,200	1,200	1,200	542,161	0,120	81,072	0,011	0,120	1,471	16,283	1,998
45	46	1	100,00	0,0640	0,128	0,192	1,500	150	0,12210	543,361	531,151	542,161	529,951	1,200	1,200	1,200	529,951	0,120	81,072	0,011	0,120	1,355	13,819	1,998
46	47	1	50,00	0,0320	0,192	0,224	1,500	150	0,15078	531,151	523,612	529,951	522,412	1,200	1,200	1,200	522,412	0,110	77,479	0,010	0,110	1,426	15,722	1,918
47	48	1	80,00	0,0512	0,224	0,275	1,500	150	0,04015	523,612	520,400	522,412	519,200	1,200	1,200	1,200	519,200	0,160	94,313	0,015	0,160	0,928	5,935	2,284
48	49	1	54,98	0,0352	0,275	0,310	1,500	150	0,03239	520,400	518,619	519,200	517,419	1,200	1,200	1,200	517,419	0,160	94,313	0,015	0,160	0,834	4,788	2,284
49	51	1	32,02	0,0205	0,310	0,331	1,500	150	0,00449	518,619	518,411	517,419	517,275	1,200	1,136	1,136	517,275	0,260	122,629	0,023	0,260	0,414	1,022	2,833
Rua																								
50	51	1	69,98	0,0448	0,000	0,045	1,500	150	0,00450	518,619	518,411	517,419	517,104	1,200	1,307	1,307	517,104	0,260	122,629	0,023	0,260	0,414	1,023	2,833
Rua																								
34	35	1	79,87	0,0511	1,860	1,912	1,912	200	0,04275	522,517	519,102	521,317	517,902	1,200	1,200	1,200	517,902	0,120	81,072	0,015	0,120	0,971	6,452	2,307
35	36	1	100,00	0,0640	1,912	1,976	1,976	200	0,01295	519,102	517,807	517,902	516,607	1,200	1,200	1,200	516,607	0,160	94,313	0,020	0,160	0,639	2,552	2,637
36	37	1	70,00	0,0448	1,976	2,020	2,020	200	0,00411	517,807	518,119	516,607	516,319	1,200	1,800	1,800	516,319	0,210	109,099	0,025	0,210	0,424	1,036	2,981
37	38	1	43,00	0,0275	2,020	2,048	2,048	200	0,00407	518,119	518,619	516,319	516,144	1,800	2,475	2,475	516,144	0,220	111,888	0,026	0,220	0,433	1,068	3,043
38	39	1	20,00	0,0128	2,048	2,061	2,061	200	0,00440	518,619	518,586	516,144	516,056	2,475	2,530	2,530	516,056	0,210	109,099	0,025	0,210	0,438	1,108	2,981
39	40	1	80,00	0,0512	2,061	2,112	2,112	200	0,00413	518,586	518,186	516,056	515,726	2,530	2,460	2,460	515,726	0,220	111,888	0,026	0,220	0,436	1,082	3,043
40	41	1	85,00	0,0544	2,112	2,166	2,166	200	0,00406	518,186	518,211	515,726	515,381	2,460	2,830	2,830	515,381	0,220	111,888	0,026	0,220	0,433	1,065	3,043
41	64	1	83,50	0,0534	2,166	2,220	2,220	200	0,00408	518,211	517,920	515,381	515,040	2,830	2,880	2,880	515,040	0,220	111,888	0,026	0,220	0,434	1,072	3,043
Rua																								
51	57	1	100,00	0,0640	0,376	0,440	1,500	150	0,00450	518,411	518,226	517,104	516,654	1,307	1,572	1,572	516,654	0,260	122,629	0,023	0,260	0,414	1,023	2,833
57	58	1	96,49	0,0617	0,440	0,501	1,500	150	0,00450	518,226	517,920	516,654	516,220	1,572	1,700	1,700	516,220	0,260	122,629	0,023	0,260	0,414	1,023	2,833
Rua																								
58	64	1	10,38	0,0066	0,700	0,706	1,500	200	0,00471	517,920	517,920	516,220	516,171	1,700	1,749	1,749	516,171	0,180	100,416	0,022	0,180	0,414	1,033	2,782
Rua																								
64	65	1	65,52	0,0419	3,099	3,141	3,141	250	0,01909	517,920	515,739	515,040	513,789	2,880	1,950	1,950	513,789	0,140	87,891	0,022	0,140	0,829	4,159	2,772
--					Vazão Total =>	3,141																		

PREFEITURA MUNICIPAL DE DOUTOR PEDRINHO - SC

Sistema de Coleta e Tratamento de Esgotos Sanitários

PLANILHA MEMORIAL DE CÁLCULO - REDE COLETORA DE ESGOTOS SANITÁRIOS **EE-SB03**

Acessório Montante	Acessório Jusante	Trecho Número	Extensão	Contribuição do Trecho	Vazão Montante	Vazão Jusante	Vazão de Cálculo	Diâmetro	Declividade	Cota Ter. Montante	Cota Ter. Jusante	Cota Colet. Montante	Cota Colet. Jusante	Prof.Colet. Montante	Prof.Colet. Jusante	Acess.Jusan. Profundidade	Acess.Jusan. Cota	H/D	ÂNGULO TETA	RAIO HIDR.	LAM	VELC	TENS TRAT.	VCRT
			(m)	(l/s)	(l/s)	(l/s)	(l/s)	(mm)	(m/m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)				(y/d)	(m/s)	(Pa)	(m/s)
Rua																								
95	96	1	51,82	0,0562	0,000	0,056	1,500	150	0,00450	515,689	515,716	514,689	514,456	1,000	1,260	1,260	514,456	0,260	122,629	0,023	0,260	0,414	1,023	2,833
Rua																								
92	93	1	20,00	0,0217	0,000	0,022	1,500	150	0,01000	516,067	516,067	515,067	514,867	1,000	1,200	1,200	514,867	0,220	111,888	0,020	0,220	0,561	1,968	2,635
93	94	1	30,00	0,0325	0,022	0,054	1,500	150	0,00450	516,067	516,067	514,867	514,732	1,200	1,335	1,335	514,732	0,260	122,629	0,023	0,260	0,414	1,023	2,833
94	96	1	60,00	0,0651	0,054	0,119	1,500	150	0,00460	516,067	515,716	514,732	514,456	1,335	1,260	1,260	514,456	0,260	122,629	0,023	0,260	0,419	1,047	2,833
Rua																								
66	67	1	43,93	0,0476	0,000	0,048	1,500	150	0,00450	517,178	517,075	515,978	515,780	1,200	1,295	1,295	515,780	0,260	122,629	0,023	0,260	0,414	1,023	2,833
67	68	1	30,19	0,0327	0,048	0,080	1,500	150	0,00450	517,075	517,281	515,780	515,645	1,295	1,637	1,637	515,645	0,260	122,629	0,023	0,260	0,414	1,023	2,833
68	69	1	40,00	0,0434	0,080	0,124	1,500	150	0,00450	517,281	517,170	515,645	515,465	1,637	1,706	1,706	515,465	0,260	122,629	0,023	0,260	0,414	1,023	2,833
69	70	1	90,00	0,0976	0,124	0,221	1,500	150	0,00450	517,170	516,908	515,465	515,060	1,706	1,849	1,849	515,060	0,260	122,629	0,023	0,260	0,414	1,023	2,833
70	71	1	90,00	0,0976	0,221	0,319	1,500	150	0,00450	516,908	516,767	515,060	514,655	1,849	2,113	2,113	514,655	0,260	122,629	0,023	0,260	0,414	1,023	2,833
71	72	1	90,00	0,0976	0,319	0,417	1,500	150	0,00450	516,767	516,692	514,655	514,250	2,113	2,443	2,443	514,250	0,260	122,629	0,023	0,260	0,414	1,023	2,833
72	73	1	35,00	0,0380	0,417	0,455	1,500	150	0,00450	516,692	516,721	514,250	514,092	2,443	2,629	2,629	514,092	0,260	122,629	0,023	0,260	0,414	1,023	2,833
73	124	1	40,00	0,0434	0,455	0,498	1,500	150	0,00450	516,721	517,037	514,092	513,912	2,629	3,125	3,125	513,912	0,260	122,629	0,023	0,260	0,414	1,023	2,833
124	107	1	13,52	0,0147	0,498	0,513	1,500	150	0,00449	517,037	517,037	513,912	513,851	3,125	3,186	3,186	513,851	0,260	122,629	0,023	0,260	0,414	1,021	2,833
Rua																								
75	76	1	30,00	0,0325	0,000	0,033	1,500	150	0,00450	517,176	517,075	515,976	515,841	1,200	1,234	1,234	515,841	0,260	122,629	0,023	0,260	0,414	1,023	2,833
76	77	1	30,00	0,0325	0,033	0,065	1,500	150	0,00450	517,075	517,376	515,841	515,706	1,234	1,670	1,670	515,706	0,260	122,629	0,023	0,260	0,414	1,023	2,833
77	78	1	30,00	0,0325	0,065	0,098	1,500	150	0,00450	517,376	517,281	515,706	515,571	1,670	1,710	1,710	515,571	0,260	122,629	0,023	0,260	0,414	1,023	2,833
78	79	1	40,00	0,0434	0,098	0,141	1,500	150	0,00450	517,281	517,170	515,571	515,391	1,710	1,779	1,779	515,391	0,260	122,629	0,023	0,260	0,414	1,023	2,833
79	80	1	90,00	0,0976	0,141	0,239	1,500	150	0,00450	517,170	516,908	515,391	514,986	1,779	1,922	1,922	514,986	0,260	122,629	0,023	0,260	0,414	1,023	2,833
80	81	1	90,00	0,0976	0,239	0,336	1,500	150	0,00450	516,908	516,767	514,986	514,581	1,922	2,186	2,186	514,581	0,260	122,629	0,023	0,260	0,414	1,023	2,833
81	82	1	90,00	0,0976	0,336	0,434	1,500	150	0,00450	516,767	516,692	514,581	514,176	2,186	2,516	2,516	514,176	0,260	122,629	0,023	0,260	0,414	1,023	2,833
82	83	1	40,00	0,0434	0,434	0,477	1,500	150	0,00450	516,692	516,983	514,176	513,996	2,516	2,987	2,987	513,996	0,260	122,629	0,023	0,260	0,414	1,023	2,833
83	107	1	32,00	0,0347	0,477	0,512	1,500	150	0,00449	516,983	517,037	513,996	513,852	2,987	3,185	3,185	513,852	0,260	122,629	0,023	0,260	0,414	1,021	2,833
Rua																								
85	86	1	100,00	0,1084	0,000	0,108	1,500	150	0,02478	526,843	524,365	525,643	523,165	1,200	1,200	1,200	523,165	0,170	97,400	0,016	0,170	0,757	3,872	2,348
86	87	1	100,00	0,1084	0,108	0,217	1,500	150	0,07767	524,365	516,598	523,165	515,398	1,200	1,200	1,200	515,398	0,130	84,537	0,012	0,130	1,136	9,475	2,075
87	88	1	25,00	0,0271	0,217	0,244	1,500	150	0,02328	516,598	516,016	515,398	514,816	1,200	1,200	1,200	514,816	0,180	100,416	0,016	0,180	0,759	3,831	2,409
88	89	1	80,00	0,0868	0,244	0,331	1,500	200	0,00350	516,016	516,264	514,816	514,536	1,200	1,728	1,728	514,536	0,190	103,368	0,023	0,190	0,368	0,806	2,851
89	90	1	80,00	0,0868	0,331	0,418	1,500	200	0,00350	516,264	516,143	514,536	514,256	1,728	1,887	1,887	514,256	0,190	103,368	0,023	0,190	0,368	0,806	2,851
90	91	1	80,21	0,0870	0,418	0,504	1,500	200	0,00350	516,143	516,310	514,256	513,975	1,887	2,335	2,335	513,975	0,190	103,368	0,023	0,190	0,368	0,806	2,851
91	107	1	67,98	0,0737	0,504	0,578	1,500	200	0,00350	516,310	517,037	513,975	513,737	2,335	3,300	3,300	513,737	0,190	103,368	0,023	0,190	0,368	0,806	2,851
Rua																								
84	98	1	100,00	0,1084	0,000	0,108	1,500	150	0,00450	517,139	516,970	516,289	515,839	0,850	1,131	1,131	515,839	0,260	122,629	0,023	0,260	0,414	1,023	2,833
98	99	1	54,49	0,0591	0,108	0,168	1,500	150	0,00450	516,970	516,937	515,839	515,594	1,131	1,343	1,343	515,594	0,260	122,629	0,023	0,260	0,414	1,023	2,833
99	100	1	50,00	0,0542	0,168	0,222	1,500	150	0,00450	516,937	516,878	515,594	515,369	1,343	1,509	1,509	515,369	0,260	122,629	0,023	0,260	0,414	1,023	2,833
100	101	1	60,00	0,0651	0,222	0,287	1,500	150	0,00450	516,878	516,816	515,369	515,099	1,509	1,717	1,717	515,099	0,260	122,629	0,023	0,260	0,414	1,023	2,833
101	102	1	60,00	0,0651	0,287	0,352	1,500	150	0,00450	516,816	516,863	515,099	514,829	1,717	2,034	2,034	514,829	0,260	122,629	0,023	0,260	0,414	1,023	2,833
102	103	1	58,00	0,0629	0,352	0,415	1,500	150	0,00450	516,863	516,998	514,829	514,568	2,034	2,430	2,430	514,568	0,260	122,629	0,023	0,260	0,414	1,023	2,833
103	104	1	90,00	0,0976	0,415	0,512	1,500	150	0,00450	516,998	517,246	514,568	514,163	2,430	3,083	3,083	514,163	0,260	122,629	0,023	0,260	0,414	1,023	2,833
104	118	1	40,00	0,0434	0,512	0,556	1,500	150	0,00450	517,246	517,377	514,163	513,983	3,083	3,394	3,394	513,983	0,260	122,629	0,023	0,260	0,414	1,023	2,833
118	120	1	50,00	0,0542	0,556	0,610	1,500	150	0,00450	517,377	517,432	513,983	513,758	3,394	3,674	3,674	513,758	0,260	122,629	0,023	0,260	0,414	1,023	2,833
120	123	1	9,08	0,0099	0,610	0,620	1,500	150	0,00450	517,432	517,432	513,758	513,717	3,674	3,715	3,715	513,717	0,260	122,629	0,023	0,260	0,414	1,024	2,833
Rua																								
174	106	1	85,00	0,0922	0,000	0,092	1,500	150	0,00447	517,139	516,976	516,289	515,909	0,850	1,067	1,067	515,909	0,260	122,629	0,023	0,260	0,413	1,017	2,833

PREFEITURA MUNICIPAL DE DOUTOR PEDRINHO - SC

Sistema de Coleta e Tratamento de Esgotos Sanitários

PLANILHA MEMORIAL DE CÁLCULO - REDE COLETORA DE ESGOTOS SANITÁRIOS **EE-SB03**

Acessório Montante	Acessório Jusante	Trecho Número	Extensão	Contribuição do Trecho	Vazão Montante	Vazão Jusante	Vazão de Cálculo	Diâmetro	Declividade	Cota Ter. Montante	Cota Ter. Jusante	Cota Colet. Montante	Cota Colet. Jusante	Prof.Colet. Montante	Prof.Colet. Jusante	Acess.Jusan. Profundidade	Acess.Jusan. Cota	H/D	ÂNGULO TETA	RAIO HIDR.	LAM	VELC	TENS TRAT.	VCRT
			(m)	(l/s)	(l/s)	(l/s)	(l/s)	(mm)	(m/m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)				(y/d)	(m/s)	(Pa)	(m/s)
106	110	1	60,00	0,0651	0,092	0,157	1,500	150	0,00450	516,976	516,937	515,909	515,639	1,067	1,298	1,298	515,639	0,260	122,629	0,023	0,260	0,414	1,023	2,833
110	111	1	55,00	0,0596	0,157	0,217	1,500	150	0,00450	516,937	516,878	515,639	515,392	1,298	1,487	1,487	515,392	0,260	122,629	0,023	0,260	0,414	1,023	2,833
111	112	1	42,00	0,0455	0,217	0,262	1,500	150	0,00450	516,878	516,816	515,392	515,203	1,487	1,614	1,614	515,203	0,260	122,629	0,023	0,260	0,414	1,023	2,833
112	113	1	33,00	0,0358	0,262	0,298	1,500	150	0,00450	516,816	516,786	515,203	515,054	1,614	1,732	1,732	515,054	0,260	122,629	0,023	0,260	0,414	1,023	2,833
113	114	1	32,10	0,0348	0,298	0,333	1,500	150	0,00450	516,786	516,863	515,054	514,910	1,732	1,954	1,954	514,910	0,260	122,629	0,023	0,260	0,414	1,024	2,833
114	115	1	67,00	0,0727	0,333	0,406	1,500	150	0,00450	516,863	516,998	514,910	514,608	1,954	2,390	2,390	514,608	0,260	122,629	0,023	0,260	0,414	1,023	2,833
115	116	1	40,00	0,0434	0,406	0,449	1,500	150	0,00450	516,998	517,077	514,608	514,428	2,390	2,649	2,649	514,428	0,260	122,629	0,023	0,260	0,414	1,023	2,833
116	121	1	60,00	0,0651	0,449	0,514	1,500	150	0,00450	517,077	517,246	514,428	514,158	2,649	3,088	3,088	514,158	0,260	122,629	0,023	0,260	0,414	1,023	2,833
121	122	1	40,00	0,0434	0,514	0,558	1,500	150	0,00450	517,246	517,377	514,158	513,978	3,088	3,399	3,399	513,978	0,260	122,629	0,023	0,260	0,414	1,023	2,833
122	123	1	50,00	0,0542	0,558	0,612	1,500	150	0,00450	517,377	517,432	513,978	513,753	3,399	3,679	3,679	513,753	0,260	122,629	0,023	0,260	0,414	1,023	2,833
Rua																								
96	97	1	90,00	0,0976	0,175	0,273	1,500	200	0,00350	515,716	516,239	514,456	514,141	1,260	2,098	2,098	514,141	0,190	103,368	0,023	0,190	0,368	0,806	2,851
97	119	1	85,90	0,0932	0,273	0,366	1,500	200	0,00350	516,239	517,021	514,141	513,840	2,098	3,181	3,181	513,840	0,190	103,368	0,023	0,190	0,368	0,806	2,851
119	108	1	78,24	0,0848	0,366	0,451	1,500	200	0,00350	517,021	517,286	513,840	513,566	3,181	3,720	3,720	513,566	0,190	103,368	0,023	0,190	0,369	0,807	2,851
Rua Duque de Caxias																								
107	125	1	48,23	0,0523	1,603	1,655	1,655	200	0,00351	517,037	517,085	513,737	513,568	3,300	3,517	3,517	513,568	0,200	106,260	0,024	0,200	0,380	0,846	2,917
Rua																								
123	117	1	40,00	0,0434	1,232	1,275	1,500	200	0,00350	517,432	517,174	513,717	513,577	3,715	3,597	3,597	513,577	0,190	103,368	0,023	0,190	0,368	0,806	2,851
117	125	1	14,58	0,0158	1,275	1,291	1,500	200	0,00350	517,174	517,085	513,577	513,526	3,597	3,559	3,559	513,526	0,190	103,368	0,023	0,190	0,368	0,806	2,851
Rua Duque de Caxias																								
125	108	1	80,00	0,0868	2,946	3,033	3,033	250	0,00300	517,085	517,286	513,526	513,286	3,559	4,000	4,000	513,286	0,210	109,099	0,031	0,210	0,420	0,944	3,333
Rua																								
108	109	1	10,00	0,0108	3,484	3,494	3,494	250	0,00300	517,286	517,286	513,286	513,256	4,000	4,030	4,030	513,256	0,230	114,633	0,034	0,230	0,443	1,023	3,469
--					Vazão Total =>	3,494459																		

PREFEITURA MUNICIPAL DE DOUTOR PEDRINHO - SC

Sistema de Coleta e Tratamento de Esgotos Sanitários

PLANILHA MEMORIAL DE CÁLCULO - REDE COLETORA DE ESGOTOS SANITÁRIOS **EE-SB04**

Acessório Montante	Acessório Jusante	Trecho Número	Extensão	ontribuiçã do Trecho	Vazão Montante	Vazão Jusante	Vazão de Cálculo	Diâmetro	Declividade	Cota Ter. Montante	Cota Ter. Jusante	Cota Colet Montante	Cota Colet Jusante	Prof.Colet. Montante	Prof.Colet. Jusante	cess.Jusa rofundidad	cess.Jusan. Cota	H/D	ÂNGULO TETA	RAIO HIDR.	LAM	VELC	TENS TRAT.	VCRT
			(m)	(l/s)	(l/s)	(l/s)	(l/s)	(mm)	(m/m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)				(y/d)	(m/s)	(Pa)	(m/s)
134	144	1	60,00	0,0396	3,141	3,180	3,180	250	0,00385	516,450	516,268	515,250	515,019	1,200	1,249	1,249	515,019	0,200	106,260	0,030	0,200	0,462	1,161	3,261
Rua																								
126	127	1	20,00	0,0132	0,000	0,013	1,500	150	0,00450	517,271	517,271	516,421	516,331	0,850	0,940	0,940	516,331	0,260	122,629	0,023	0,260	0,414	1,023	2,833
127	128	1	20,00	0,0132	0,013	0,026	1,500	150	0,00450	517,271	517,500	516,331	516,241	0,940	1,259	1,259	516,241	0,260	122,629	0,023	0,260	0,414	1,023	2,833
128	129	1	25,00	0,0165	0,026	0,043	1,500	150	0,00450	517,500	517,425	516,241	516,129	1,259	1,297	1,297	516,129	0,260	122,629	0,023	0,260	0,414	1,023	2,833
129	130	1	45,00	0,0297	0,043	0,073	1,500	150	0,00450	517,425	517,356	516,129	515,926	1,297	1,430	1,430	515,926	0,260	122,629	0,023	0,260	0,414	1,023	2,833
130	131	1	50,00	0,0330	0,073	0,106	1,500	150	0,00450	517,356	517,275	515,926	515,701	1,430	1,574	1,574	515,701	0,260	122,629	0,023	0,260	0,414	1,023	2,833
131	132	1	60,00	0,0396	0,106	0,145	1,500	150	0,00450	517,275	517,258	515,701	515,431	1,574	1,827	1,827	515,431	0,260	122,629	0,023	0,260	0,414	1,023	2,833
132	133	1	90,00	0,0594	0,145	0,205	1,500	150	0,00450	517,258	516,886	515,431	515,026	1,827	1,860	1,860	515,026	0,260	122,629	0,023	0,260	0,414	1,023	2,833
133	144	1	95,00	0,0627	0,205	0,267	1,500	150	0,00449	516,886	516,268	515,026	514,599	1,860	1,669	1,669	514,599	0,260	122,629	0,023	0,260	0,414	1,022	2,833
Rua																								
167	168	1	62,05	0,0410	0,000	0,041	1,500	150	0,00450	516,513	516,464	515,663	515,384	0,850	1,080	1,080	515,384	0,260	122,629	0,023	0,260	0,414	1,023	2,833
168	169	1	44,73	0,0295	0,041	0,070	1,500	150	0,00450	516,464	516,341	515,384	515,183	1,080	1,159	1,159	515,183	0,260	122,629	0,023	0,260	0,414	1,023	2,833
169	170	1	44,72	0,0295	0,070	0,100	1,500	150	0,00450	516,341	516,411	515,183	514,981	1,159	1,430	1,430	514,981	0,260	122,629	0,023	0,260	0,414	1,024	2,833
170	171	1	62,52	0,0413	0,100	0,141	1,500	150	0,00450	516,411	516,428	514,981	514,700	1,430	1,728	1,728	514,700	0,260	122,629	0,023	0,260	0,414	1,023	2,833
Rua																								
162	163	1	50,00	0,0330	0,000	0,033	1,500	150	0,00450	516,753	516,749	515,753	515,528	1,000	1,221	1,221	515,528	0,260	122,629	0,023	0,260	0,414	1,023	2,833
163	164	1	35,00	0,0231	0,033	0,056	1,500	150	0,00449	516,749	516,774	515,528	515,371	1,221	1,403	1,403	515,371	0,260	122,629	0,023	0,260	0,414	1,020	2,833
164	166	1	30,00	0,0198	0,056	0,076	1,500	150	0,00450	516,774	516,631	515,371	515,236	1,403	1,395	1,395	515,236	0,260	122,629	0,023	0,260	0,414	1,023	2,833
Rua																								
165	166	1	53,97	0,0356	0,000	0,036	1,500	150	0,00450	516,117	516,631	515,317	515,074	0,800	1,557	1,557	515,074	0,260	122,629	0,023	0,260	0,414	1,024	2,833
Rua																								
146	147	1	60,00	0,0396	0,000	0,040	1,500	150	0,10664	576,405	570,006	575,205	568,806	1,200	1,200	1,200	568,806	0,120	81,072	0,011	0,120	1,266	12,070	1,998
147	148	1	65,00	0,0429	0,040	0,083	1,500	150	0,05759	570,006	566,263	568,806	565,063	1,200	1,200	1,200	565,063	0,140	87,891	0,013	0,140	1,024	7,527	2,147
148	149	1	55,00	0,0363	0,083	0,119	1,500	150	0,18416	566,263	556,134	565,063	554,934	1,200	1,200	1,200	554,934	0,110	77,479	0,010	0,110	1,576	19,204	1,918
149	150	1	70,00	0,0462	0,119	0,165	1,500	150	0,13137	556,134	546,938	554,934	545,738	1,200	1,200	1,200	545,738	0,120	81,072	0,011	0,120	1,405	14,869	1,998
150	151	1	70,00	0,0462	0,165	0,211	1,500	150	0,19939	546,938	532,981	545,738	531,781	1,200	1,200	1,200	531,781	0,110	77,479	0,010	0,110	1,639	20,791	1,918
151	152	1	63,91	0,0422	0,211	0,253	1,500	150	0,20221	532,981	520,058	531,781	518,858	1,200	1,200	1,200	518,858	0,110	77,479	0,010	0,110	1,651	21,086	1,918
152	153	1	100,00	0,0660	0,253	0,319	1,500	200	0,03357	520,058	516,701	518,858	515,501	1,200	1,200	1,200	515,501	0,110	77,479	0,014	0,110	0,815	4,667	2,215
153	154	1	90,06	0,0594	0,319	0,379	1,500	200	0,00476	516,701	516,792	515,501	515,072	1,200	1,720	1,720	515,072	0,180	100,416	0,022	0,180	0,416	1,045	2,782
154	155	1	54,98	0,0363	0,379	0,415	1,500	200	0,00478	516,792	516,749	515,072	514,809	1,720	1,940	1,940	514,809	0,180	100,416	0,022	0,180	0,417	1,050	2,782
155	156	1	24,86	0,0164	0,415	0,432	1,500	200	0,00483	516,749	516,774	514,809	514,689	1,940	2,085	2,085	514,689	0,180	100,416	0,022	0,180	0,419	1,059	2,782
156	157	1	39,84	0,0263	0,432	0,458	1,500	200	0,00472	516,774	516,631	514,689	514,501	2,085	2,130	2,130	514,501	0,180	100,416	0,022	0,180	0,414	1,035	2,782
Rua																								
141	142	1	88,00	0,0581	0,000	0,058	1,500	150	0,00450	517,425	517,275	516,575	516,179	0,850	1,096	1,096	516,179	0,260	122,629	0,023	0,260	0,414	1,023	2,833
142	143	1	40,00	0,0264	0,058	0,084	1,500	150	0,00450	517,275	517,308	516,179	515,999	1,096	1,309	1,309	515,999	0,260	122,629	0,023	0,260	0,414	1,023	2,833
143	145	1	40,00	0,0264	0,084	0,111	1,500	150	0,00450	517,308	517,253	515,999	515,819	1,309	1,434	1,434	515,819	0,260	122,629	0,023	0,260	0,414	1,023	2,833
145	140	1	58,14	0,0384	0,111	0,149	1,500	150	0,00451	517,253	517,135	515,819	515,557	1,434	1,578	1,578	515,557	0,260	122,629	0,023	0,260	0,415	1,025	2,833
135	136	1	70,00	0,0462	3,494	3,541	3,541	200	0,00300	516,743	516,670	515,743	515,533	1,000	1,137	1,137	515,533	0,310	135,333	0,035	0,310	0,452	1,054	3,520
136	137	1	70,00	0,0462	3,541	3,587	3,587	250	0,00300	516,670	516,572	515,533	515,323	1,137	1,249	1,249	515,323	0,230	114,633	0,034	0,230	0,443	1,023	3,469
137	138	1	70,06	0,0462	3,587	3,633	3,633	250	0,00300	516,572	516,558	515,323	515,113	1,249	1,445	1,445	515,113	0,230	114,633	0,034	0,230	0,443	1,022	3,469
138	139	1	94,94	0,0627	3,633	3,696	3,696	250	0,00300	516,558	516,796	515,113	514,828	1,445	1,968	1,968	514,828	0,230	114,633	0,034	0,230	0,443	1,024	3,469
139	140	1	99,10	0,0654	3,696	3,761	3,761	250	0,00300	516,796	517,135	514,828	514,531	1,968	2,604	2,604	514,531	0,230	114,633	0,034	0,230	0,443	1,022	3,469
Rua																								
144	173	1	79,88	0,0527	3,447	3,500	3,500	250	0,00300	516,268	516,277	514,499	514,259	1,769	2,018	2,018	514,259	0,230	114,633	0,034	0,230	0,443	1,023	3,469
173	172	1	73,12	0,0483	3,500	3,548	3,548	250	0,00300	516,277	516,450	514,259	514,040	2,018	2,410	2,410	514,040	0,230	114,633	0,034	0,230	0,443	1,023	3,469

PREFEITURA MUNICIPAL DE DOUTOR PEDRINHO - SC

Sistema de Coleta e Tratamento de Esgotos Sanitários

PLANILHA MEMORIAL DE CÁLCULO - REDE COLETORA DE ESGOTOS SANITÁRIOS **EE-SB04**

Acessório Montante	Acessório Jusante	Trecho Número	Extensão	ontribuiçã do Trecho	Vazão Montante	Vazão Jusante	Vazão de Cálculo	Diâmetro	Declividade	Cota Ter. Montante	Cota Ter. Jusante	Cota Colet Montante	Cota Colet Jusante	Prof.Colet. Montante	Prof.Colet. Jusante	cess.Jusa rofundidad	cess.Jusan. Cota	H/D	ÂNGULO TETA	RAIO HIDR.	LAM	VELC	TENS TRAT.	VCRT
			(m)	(l/s)	(l/s)	(l/s)	(l/s)	(mm)	(m/m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)				(y/d)	(m/s)	(Pa)	(m/s)
172	171	1	100,00	0,0660	3,548	3,614	3,614	250	0,00300	516,450	516,428	514,040	513,740	2,410	2,688	2,688	513,740	0,230	114,633	0,034	0,230	0,443	1,023	3,469
Rua																								
171	161	1	12,47	0,0082	3,756	3,764	3,764	250	0,00449	516,428	516,428	513,740	513,684	2,688	2,744	2,744	513,684	0,210	109,099	0,031	0,210	0,514	1,414	3,333
Rua																								
166	157	1	11,37	0,0075	0,112	0,119	1,500	150	0,04548	516,631	516,631	515,074	514,557	1,557	2,074	2,074	514,557	0,150	91,146	0,014	0,150	0,950	6,336	2,217
Rua																								
157	158	1	79,82	0,0527	0,577	0,630	1,500	200	0,00485	516,631	516,464	514,501	514,114	2,130	2,350	2,350	514,114	0,180	100,416	0,022	0,180	0,420	1,064	2,782
158	159	1	40,00	0,0264	0,630	0,656	1,500	200	0,00482	516,464	516,441	514,114	513,921	2,350	2,520	2,520	513,921	0,180	100,416	0,022	0,180	0,419	1,059	2,782
159	160	1	30,22	0,0199	0,656	0,676	1,500	200	0,00480	516,441	516,411	513,921	513,776	2,520	2,635	2,635	513,776	0,180	100,416	0,022	0,180	0,418	1,053	2,782
160	161	1	80,00	0,0528	0,676	0,729	1,500	200	0,00470	516,411	516,428	513,776	513,400	2,635	3,028	3,028	513,400	0,180	100,416	0,022	0,180	0,413	1,031	2,782
Rua																								
140	105	1	90,00	0,0594	3,910	3,970	3,970	250	0,00300	517,135	516,496	514,531	514,261	2,604	2,235	2,235	514,261	0,240	117,335	0,035	0,240	0,454	1,062	3,533
105	175	1	90,00	0,0594	3,970	4,029	4,029	250	0,00300	516,496	516,231	514,261	513,991	2,235	2,240	2,240	513,991	0,240	117,335	0,035	0,240	0,454	1,062	3,533
175	176	1	94,00	0,0620	4,029	4,091	4,091	250	0,00300	516,231	516,460	513,991	513,709	2,240	2,751	2,751	513,709	0,240	117,335	0,035	0,240	0,454	1,062	3,533
176	161	1	106,19	0,0701	4,091	4,161	4,161	250	0,00300	516,460	516,428	513,709	513,390	2,751	3,038	3,038	513,390	0,250	120,000	0,037	0,250	0,465	1,101	3,596
Rua																								
161	177	1	10,00	0,0066	8,654	8,661	8,661	300	0,00250	516,428	516,428	513,390	513,365	3,038	3,063	3,063	513,365	0,290	130,331	0,050	0,290	0,521	1,247	4,194
--					Vazão Total =>	8,66																		