REVISED HYDRAULIC PARTICULARS OF PULIVENDULA BRANCH CANAL FROM Km 0.00 TO Km 35.025

S.No	Chainage in Kms		Dist in Km.s	Discharge in Cumecs		Bed width in mts	F.S.D.in Mts	Free Board in Mts	Side Slopes	surface fall	Value of 'n'	V' in Mts/sec	Loss of head in Mts due to			Bed level in Mts		F.S.L in Mts		T.B.L in Mts		Remarks
	From	To		Required	Designed								Bed fall	Structures	Total	At Start	At End	At Start	At End	At Start	At End	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	0.000	0.225	0.225	15.860	16.059	3.700	1.800	0.750	1 1/2 : 1	1 in 900	0.018	1.9396	0.250	0.000	0.250	258.719	258.469	260.519	260.269	261.269	261.019	
2	0.225	0.250	0.025	TRASITION									0.002	0.200	0.202	258.469	258.267	260.269	260.067	261.019	260.817	0.20 Mts Drop @ Km
3	0.250	3.785	3.535	15.860	16.087	11.500	1.700	0.750	1 1/2 : 1	1 in 10200	0.018	0.6735	0.347	0.000	0.347	258.267	257.920	260.067	259.720	260.817	260.470	
4	3.785	3.815	0.030	TRASITION									0.008	0.000	0.008	257.920	257.912	259.720	259.712	260.470	260.462	
5	3.815	4.700	0.885	15.860	15.912	5.000	2.300	0.750	1 1/2 : 1	1 in 3800	0.018	1.1249	0.233	0.000	0.233	257.912	257.679	259.712	259.479	260.462	260.229	
6	4.700	4.725	0.025	TRASITION									0.008	0.000	0.008	257.679	257.671	259.479	259.471	260.229	260.221	
7	4.725	9.075	4.350	15.860	15.968	7.100	1.500	0.750	1 1/2 : 1	1 in 2750	0.018	1.1434	1.582	1.318	2.900	257.671	254.771	259.471	256.571	260.221	257.321	1.318 Mts Drop @ Km 9.075
8	9.075	9.100	0.025	TRASITION									0.003	0.000	0.003	254.771	254.768	256.571	256.568	257.321	257.318	
9	9.100	11.175	2.075	15.860	15.968	10.000	1.700	0.750	1 1/2 : 1	1 in 8000	0.018	0.7485	0.259	0.000	0.259	254.768	254.509	256.568	256.309	257.318	257.059	
10	11.175	11.200	0.025	TRASITION									0.005	0.000	0.005	254.509	254.504	256.309	256.304	257.059	257.054	
11	11.200	11.600	0.400	15.860	16.570	10.000	1.500	0.750	1 1/2 : 1	1 in 4800	0.018	0.9018	0.083	0.303	0.386	254.504	254.118	256.304	255.918	257.054	256.668	0.303 Mts Drop/Regulator @ Km 11.600
12	11.600	17.008	5.408	12.373	12.525	10.000	1.250	0.750	1 1/2 : 1	1 in 4470	0.018	0.8438	1.210	0.292	1.502	254.118	252.616	255.918	254.416	256.668	255.166	0.292 Mts Drop/Regulator @ Km 17.008
13	17.008	17.800	0.792	8.346	8.813	10.000	1.000	0.600	1 1/2 : 1	1 in 4200	0.018	0.7663	0.189	1.173	1.362	252.616	251.254	254.416	253.054	255.166	253.804	2 Drops of 0.583 Mts & 0.59 Mts each at Km 17.750 & 17.800
14	17.800	17.850	0.050	8.346	8.813	10.000	1.000	0.600	1 1/2 : 1	1 in 4200	0.018	0.7663	0.012	1.200	1.212	251.254	250.042	253.054	251.842	253.804	252.592	0.60 Mts & 0.60 Mts Drop at Km.17.850 & 18.00
15	17.850	18.100	0.250	8.346	8.813	10.000	1.000	0.600	1 1/2 : 1	1 in 4200	0.018	0.7663	0.060	0.600	0.660	250.042	249.382	251.842	251.182	252.592	251.932	0.60 Mts Drop @ Km 18.100
16	18.100	18.750	0.650	8.346	8.437	10.000	0.750	0.600	1 1/2 : 1	1 in 1700	0.018	1.0181	0.382	0.000	0.382	249.382	249.000	251.182	250.800	251.932	251.550	
17	18.750	21.200	2.450	KAMASAMUDRAM TANK									3.599	0.401	4.000	249.000	245.000	250.800	246.800	251.550	247.550	Head Regulator
18	21.200	21.900	0.700	8.190	8.233	8.500	1.100	0.600	1 1/2 : 1	1 in 4900	0.018	0.7374	0.143	0.300	0.443	245.000	244.557	246.800	246.357	247.550	247.107	0.300 Mts Drp @ 21.800
19	21.900	23.175	1.275	8.190	8.258	6.200	1.300	0.600	1 1/2 : 1	1 in 4900	0.018	0.7794	0.260	0.450	0.710	244.557	243.847	246.357	245.647	247.107	246.397	0.450 Mts Drop @ Km 23.175
20	23.175	23.670	0.495	8.190	8.258	6.200	1.300	0.600	1 1/2 : 1	1 in 4900	0.018	0.7794	0.101	1.000	1.101	243.847	242.746	245.647	244.546	246.397	245.296	1.00 Mts Existing Drop @ Km.23.670
21	23.670	23.770	0.100	8.190	8.393	5.800	1.400	0.600	1 1/2 : 1	1 in 5500	0.018	0.7588	0.018	1.000	1.018	242.746	241.728	244.546	243.528	245.296	244.278	1.00 Mts Existing Drop @ Km.23.770
22	23.770	23.960	0.190	8.190	8.329	5.800	1.350	0.600	1 1/2 : 1	1 in 4900	0.018	0.7885	0.039	0.240	0.279	241.728	241.449	243.528	243.249	244.278	243.999	S.P/0.240 Mts Drop @ Km.23.960
23	23.960	24.057	0.097	8.190	8.329	5.800	1.350	0.600	1 1/2 : 1	1 in 4900	0.018	0.7885	0.020	0.250	0.270	241.449	241.179	243.249	242.979	243.999	243.729	S.P/0.250 Mts Drop @ Km.24.057
24	24.057	24.376	0.319	8.190	8.329	5.800	1.350	0.600	1 1/2 : 1	1 in 4900	0.018	0.7885	0.065	1.220	1.285	241.179	239.894	242.979	241.694	243.729	242.444	1.220 Mts Drop @ Km.24.375
25	24.376	25.068	0.692	8.190	8.207	5.900	1.350	0.600	1 1/2 : 1	1 in 5200	0.018	0.7671	0.133	0.000	0.133	239.894	239.761	241.694	241.561	242.444	242.311	
26	25.068	25.175	0.107	7.833	7.980	5.900	1.350	0.600	1 1/2 : 1	1 in 5500	0.018	0.7459	0.019	0.365	0.384	239.761	239.377	241.561	241.177	242.311	241.927	S.P/0.365 Mts Drop @ Km.25.175
27	25.175	27.000	1.825	7.833	7.980	5.900	1.350	0.600	1 1/2 : 1	1 in 5500	0.018	0.7459	0.332	0.350	0.682	239.377	238.695	241.177	240.495	241.927	241.245	0.350 Mts Drop @ Km.27.000
28	27.000	32.800	5.800	7.833	7.980	5.900	1.350	0.600	1 1/2 : 1	1 in 5500	0.018	0.7459	1.055	0.000	1.055	238.695	237.640	240.495	239.440	241.245	240.190	
29	32.800	32.825	0.025	TRASITION									0.006	0.000	0.006	237.640	237.634	239.440	239.434	240.190	240.184	
30	32.825	33.540	0.715	4.894	5.923	4.000	1.250	0.600	1 1/2 : 1	1 in 3900	0.018	0.7718	0.183	0.000	0.183	237.634	237.451	239.434	239.251	240.184	240.001	
31	33.540	35.025	1.485	4.894	4.988	4.000	1.250	0.600	1 1/2 : 1	1 in 5500	0.018	0.7217	0.270	0.000	0.270	237.451	237.181	239.251	238.981	240.001	239.731	
													10.876	**10.662**	**21.538**						**21.538**	

Bed Level	Starting	258.719	**FSL**	Starting	260.519	**TBL** Starting 261.269	**FSD** Starting 1.800
	Ending	237.181		Ending	238.981	Ending 239.731	Ending 1.250
	Difference	**21.538**		Difference	**21.538**	Difference **21.538**	Difference **0.550**

REVISED HYDRAULIC PARTICULARS OF PULIVENDULA BRANCH CANAL FROM Km 35.025 TO Km 68.000

S.No	Chainage in Kms		Dist in Km.s	Discharge in Cumecs		Bed width in mts	F.S.D.in Mts	Side Slopes	surface fall	Value of 'n'	V' in Mts/sec	Loss of head in Mts due to			Bed level in Mts		F.S.L in Mts		Remarks
	From	To		Required	Designed							Bed fall	Structures	Total	At Start	At End	At Start	At End	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	35.025	37.450	2.425	4.894	4.988	4.000	1.250	1 1/2 : 1	1 in 5500	0.018	0.6792	0.441	0.000	0.441	237.181	236.740	238.431	237.990	
2	37.450	37.475	0.025	4.549	5.620	TRANSITION						0.010	0.000	0.010	236.740	236.730	237.990	237.980	
3	37.475	38.250	0.775	4.549	5.620	3.200	1.200	1 1/2 : 1	1 in 2600	0.018	0.9367	0.298	0.000	0.298	236.732	236.434	237.932	237.634	
4	38.250	38.275	0.025	3.996	4.920	TRANSITION						0.008	0.000	0.008	236.434	236.426	237.634	237.626	
5	38.275	39.524	1.249	3.996	4.920	3.000	1.200	1 1/2 : 1	1 in 3070	0.018	0.8541	0.407	0.000	0.407	236.426	236.019	237.626	237.219	
6	39.524	39.656	0.132	EXISTING SUPER PASSAGE WITH BARREL LENGTH OF 132.00 Mts											236.019	235.950	237.219	237.219	
7	39.656	39.913	0.257	3.996	5.215	2.000	1.200	1 1/2 : 1	1 in 1525	0.018	1.1436	0.190	0.000	0.190	235.950	235.781 235.681	237.150	236.981 236.881	0.100 Mts. New Drop at Km 39.313
8	39.913	42.825	2.912	3.996	4.225	3.200	1.200	1 1/2 : 1	1 in 4600	0.018	0.7042	0.633	0.000	0.633	235.681	235.048	236.881	236.248	
9	42.825	42.850	0.025	2.194	2.943	TRANSITION						0.010	0.000	0.010	235.048	235.038	236.248	236.238	
10	42.850	44.200	1.350	2.194	2.943	2.100	1.000	1 1/2 : 1	1 in 2500	0.018	0.8174	0.540	0.000	0.540	235.038	234.498	236.038	235.498	
11	44.200	48.000	3.800	2.163	2.773	2.650	1.000	1 1/2 : 1	1 in 4000	0.018	0.6682	0.950	0.000	0.950	234.498	233.548	235.498	234.548	
12	48.000	48.550	0.550	2.163	2.180	2.800	0.650	1 1/2 : 1	1 in 1000	0.018	1.0734	0.550	0.000	0.550	233.548	232.998	234.198	233.648	
13	48.550	48.750	0.200	2.163	2.262	4.400	0.650	1 1/2 : 1	1 in 3700	0.018	0.6470	0.054	0.000	0.054	232.998	232.944	233.648	233.594	
14	48.750	51.400	2.650	2.163	2.189	4.900	0.650	1 1/2 : 1	1 in 4000	0.018	0.5732	0.663	0.000	0.663	232.944	232.281	233.594	232.931	
15	51.400	52.150	0.750	1.940	1.980	4.400	0.650	1 1/2 : 1	1 in 4000	0.188	0.5666	0.188	0.000	0.188	232.281	232.093	232.931	232.743	
16	52.150	56.300	4.150	1.496	1.528	4.500	0.650	1 1/2 : 1	1 in 7000	0.593	0.4294	0.593	0.711	1.304	232.094	230.790	232.743	231.439	0.330 & 0.381 Mts.New Drops at kms.52.640 & 53.969
17	56.300	58.675	2.375	0.904	0.939	2.400	0.550	1 1/2 : 1	1 in 3300	0.720	0.5291	0.720	0.445	1.165	230.790	229.625	231.340	230.175	0.445 Mts.New Drop at km.57.250
18	58.675	62.500	3.825	0.694	0.701	1.700	0.550	1 1/2 : 1	1 in 3300	1.159	0.5048	1.159	1.070	2.229	229.625	227.396	230.175	227.946	0.100.28,0.35 & 0.34 Mts.New Drops at Kms.58.70,59.05,59.975 & 61.975
19	62.500	65.400	2.900	0.562	0.597	1.800	0.550	1 1/2 : 1	1 in 5000	0.580	0.4134	0.580	0.930	1.510	227.396	225.886	227.946	226.336	0.324,0.28,0.156 & 0.17 Mts.New Drops at km.s
20	65.400	67.850	2.450	0.466	0.485	1.700	0.450	1 1/2 : 1	1 in 3300	0.742	0.4540	0.742	0.210	0.952	225.886	224.934	226.336	225.284	0.130 & 0.080 Mts.New Drops at Kms.65.676 & 66.100
21	67.850	68.000	0.150	0.265	0.309	1.700	0.350	1 1/2 : 1	1 in 3300	0.045	0.3969	0.045	0.000	0.045	224.934	224.889	225.284	225.239	

Bed Level	Starting	237.181	FSD	Starting	1.250	FSL	Starting	238.431
	Ending	224.889		Ending	0.350		Ending	225.239
		12.292			**0.900**	FSL Difference		**13.192**
						FSD Differnce		0.900
						Net Difference		**12.292**