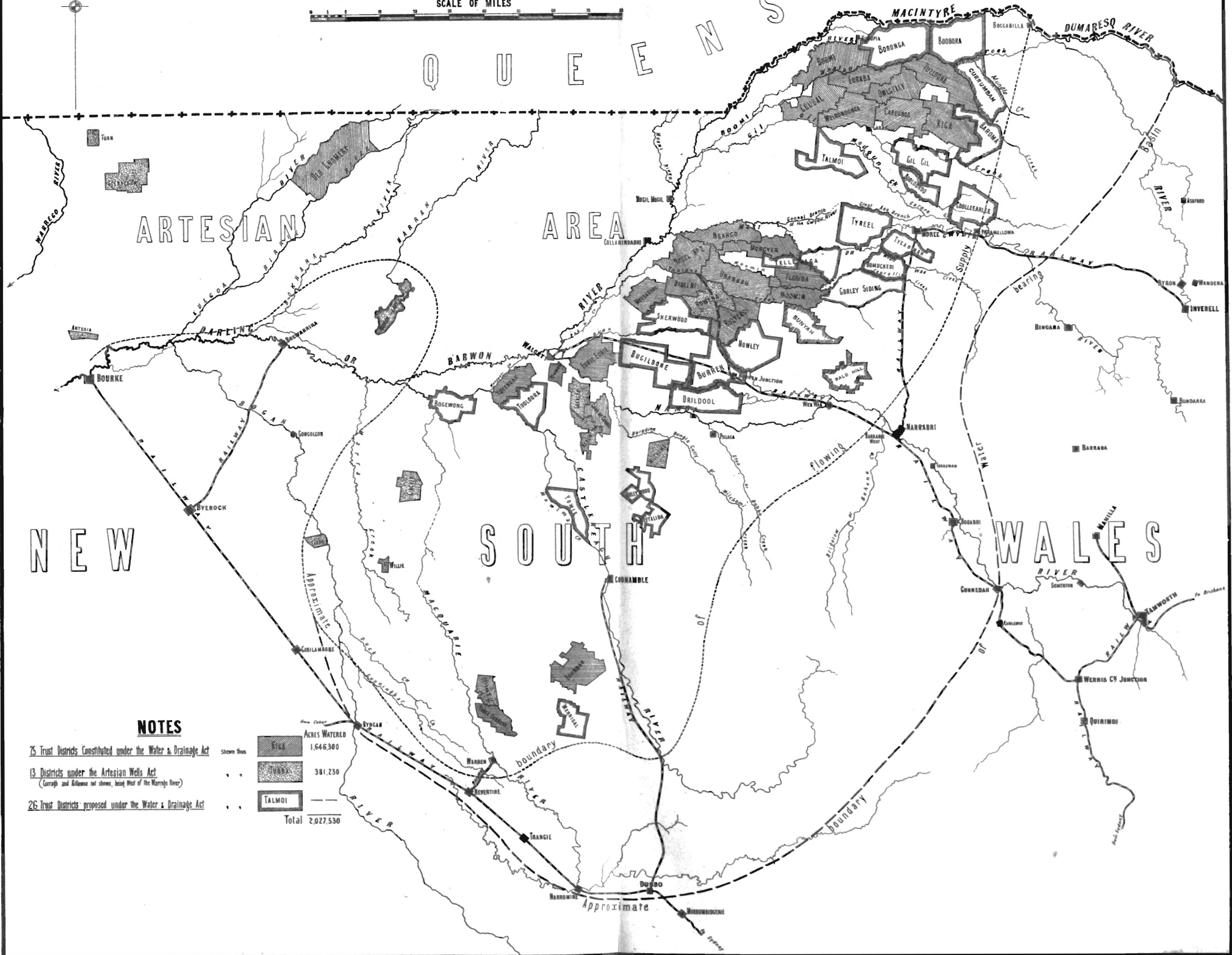


# MAP

SHOWING THE BORE TRUST DISTRICTS CONSTITUTED AND APPLIED FOR UNDER THE WATER AND DRAINAGE ACT, AND DISTRICTS UNDER THE ARTESIAN WELLS ACT

SCALE OF MILES



## NOTES

75 Trust Districts Constituted under the Water & Drainage Act

13 Districts under the Artesian Wells Act

(Corragh and Kilmore not shown, being West of the Warrego River)

26 Trust Districts proposed under the Water & Drainage Act

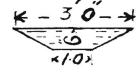
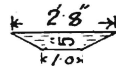
Shows that	ACRES WATERED
TERRA	1,646,300
TERRA	381,230
TALMOI	—
Total	2,027,530

APPENDIX A.

Table I.—Showing Discharge of Bore Drains.

$$C = \left\{ \frac{1.811}{n} + 41.6 + \frac{.00281}{s} \right\} \div \left[ 1 + \left( 41.6 + \frac{.00281}{s} \right) \times \frac{n}{\sqrt{r}} \right]$$

Side slopes 2 to 1.



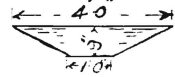
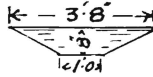
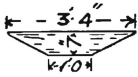
Fall in feet per mile.	4" Deep. W P = 2.491; R = .223; Area = .555 sq. ft.				5" Deep. W P = 2.863; R = .267. Area = .764 sq. ft.				6" Deep. W P = 3.236; R = .309; Area = 1.00 sq. ft.			
	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.
.5	30.08	.138	.077	41,580	32.30	.163	.125	67,500	34.16	.185	.185	99,900
.75	31.46	.177	.098	52,920	33.70	.208	.159	85,860	35.57	.236	.236	127,440
1.0	32.29	.210	.117	63,180	34.53	.246	.188	101,520	36.41	.279	.279	150,660
1.25	32.84	.239	.133	71,820	35.09	.279	.212	114,480	36.97	.316	.316	170,640
1.5	33.23	.264	.147	79,380	35.49	.309	.236	127,440	37.36	.350	.350	189,000
1.75	33.53	.288	.160	86,400	35.78	.337	.257	138,780	37.65	.381	.381	205,740
2.0	33.76	.310	.172	92,880	36.02	.362	.277	149,580	37.89	.410	.410	221,400
2.25	33.94	.331	.184	99,360	36.20	.386	.295	159,300	38.07	.437	.437	235,980
2.5	34.09	.350	.194	104,760	36.36	.409	.312	168,480	38.22	.462	.462	249,480
2.75	34.21	.368	.204	110,160	36.48	.430	.329	177,660	38.34	.486	.486	262,440
3.0	34.32	.386	.214	115,560	36.59	.450	.344	185,760	38.45	.509	.509	274,860
3.25	34.41	.403	.224	120,960	36.67	.470	.359	193,860	38.54	.532	.532	287,280
3.5	34.49	.419	.233	125,820	36.76	.489	.374	201,960	38.62	.553	.553	298,620
3.75	34.56	.435	.241	130,140	36.83	.507	.387	208,980	38.69	.573	.573	309,420
4.0	34.62	.450	.250	135,000	36.89	.525	.401	216,540	38.75	.593	.593	320,220
4.25	34.67	.464	.258	139,320	36.94	.542	.414	223,560	38.80	.612	.612	330,480
4.5	34.72	.478	.265	143,100	36.98	.558	.426	230,040	38.85	.630	.630	340,200
4.75	34.77	.492	.273	147,420	37.02	.574	.439	237,060	38.88	.648	.648	349,920
5.0	34.80	.505	.280	151,200	37.06	.590	.451	243,540	38.93	.666	.666	359,640
5.25	34.83	.519	.288	155,520	37.10	.604	.461	248,940	38.96	.683	.683	368,820
5.5	34.86	.530	.294	158,760	37.13	.619	.473	255,420	39.00	.700	.700	378,000
5.75	34.89	.544	.302	163,080	37.16	.633	.484	261,360	39.03	.716	.716	386,640
6.00	34.92	.555	.308	166,320	37.18	.647	.494	266,760	39.05	.732	.732	395,280
6.25	34.94	.566	.314	170,640	37.21	.661	.505	272,700	39.08	.747	.747	403,380
6.5	34.97	.579	.321	173,340	37.23	.675	.516	278,640	39.10	.763	.763	412,020
6.75	34.98	.591	.328	177,120	37.26	.688	.526	284,040	39.13	.778	.778	420,120
7.00	35.00	.600	.333	179,820	37.28	.701	.536	289,440	39.15	.792	.792	427,680
7.25	35.02	.614	.341	184,140	37.30	.714	.545	294,300	39.17	.807	.807	435,780
7.5	35.04	.624	.346	186,816	37.31	.726	.555	299,700	39.18	.821	.821	443,340
7.75	35.06	.634	.352	190,080	37.33	.739	.565	305,100	39.20	.835	.835	450,900
8.00	35.07	.645	.358	193,320	37.35	.751	.574	309,960	39.22	.849	.849	458,460
8.25	35.09	.654	.363	196,020	37.36	.763	.583	314,820	39.23	.862	.862	465,480
8.5	35.10	.665	.369	199,250	37.37	.774	.591	319,140	39.24	.875	.875	472,500
8.75	35.11	.675	.375	202,500	37.39	.786	.601	324,540	39.26	.888	.888	479,520
9.00	35.13	.685	.380	205,200	37.40	.797	.609	328,860	39.27	.901	.901	486,540
9.25	35.14	.695	.386	208,440	37.41	.808	.617	333,180	39.28	.914	.914	493,560
9.5	35.15	.704	.391	211,140	37.42	.820	.626	338,040	39.29	.926	.926	500,040
9.75	35.16	.714	.396	213,840	37.43	.831	.635	342,900	39.30	.939	.939	507,060
10.00	35.17	.722	.401	216,540	37.44	.841	.643	347,220	39.31	.951	.951	513,540

## APPENDIX A—continued.

Table II.—Showing Discharge of Bore Drains.

$$C' = \left\{ \frac{1.811}{n} + 41.6 + \frac{.00281}{s} \right. \\ \left. 1 + \left( 41.6 + \frac{.00281}{s} \right) \times \frac{n}{\sqrt{r}} \right\}$$

Side slopes 2 to 1.



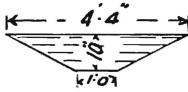
Fall in feet per mile.	7" Deep. W.P. = 3.610; R = .350; A = 1.264 sq. ft.				8" Deep. W.P. = 3.981; R = .391; A = 1.555 sq. ft.				9" Deep. W.P. = 4.354; R = .431; A = 1.875 sq. ft.			
	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.
.5	35.82	.206	.260	140,400	37.32	.227	.353	190,620	38.68	.247	.463	250,020
.75	37.23	.262	.331	178,740	38.73	.289	.449	242,460	40.08	.314	.589	318,060
1.0	38.07	.310	.392	211,680	39.56	.340	.529	285,660	40.91	.370	.694	374,760
1.25	38.62	.352	.445	240,300	40.11	.386	.600	324,000	41.46	.419	.786	424,440
1.5	39.02	.389	.492	265,680	40.50	.427	.664	358,560	41.84	.463	.868	468,720
1.75	39.32	.424	.536	289,440	40.80	.464	.722	389,880	42.13	.504	.945	510,300
2.0	39.54	.455	.575	310,500	41.02	.499	.776	419,040	42.35	.541	1.014	547,560
2.25	39.72	.485	.613	331,020	41.20	.532	.827	446,580	42.54	.576	1.080	583,200
2.5	39.87	.513	.648	349,920	41.36	.563	.875	472,500	42.68	.610	1.144	617,760
2.75	40.00	.540	.683	368,820	41.47	.592	.921	497,340	42.79	.641	1.202	649,080
3.0	40.10	.565	.714	385,560	41.58	.620	.964	520,560	42.91	.671	1.258	679,320
3.25	40.19	.590	.746	402,840	41.66	.646	1.005	542,700	42.99	.700	1.313	709,020
3.5	40.27	.613	.775	418,500	41.74	.672	1.045	564,300	43.07	.728	1.365	737,100
3.75	40.34	.636	.804	434,160	41.81	.697	1.084	585,360	43.13	.754	1.414	763,560
4.0	40.39	.658	.832	449,280	41.87	.721	1.121	605,340	43.20	.781	1.464	790,560
4.25	40.44	.679	.858	463,320	41.92	.744	1.157	624,780	43.24	.805	1.509	814,860
4.5	40.50	.699	.884	477,360	41.97	.766	1.191	643,140	43.28	.829	1.554	839,160
4.75	40.54	.719	.909	490,860	42.01	.788	1.225	661,500	43.33	.853	1.599	863,460
5.0	40.59	.739	.934	504,360	42.04	.809	1.258	679,320	43.37	.876	1.643	887,220
5.25	40.65	.758	.958	517,320	42.08	.830	1.291	697,140	43.40	.899	1.686	910,440
5.5	40.69	.777	.982	530,280	42.12	.850	1.322	713,880	43.43	.920	1.725	931,500
5.75	40.71	.795	1.005	542,700	42.14	.870	1.353	730,620	43.46	.942	1.766	953,640
6.00	40.74	.812	1.026	554,040	42.17	.889	1.382	746,280	43.49	.962	1.806	975,240
6.25	40.76	.830	1.049	566,460	42.19	.908	1.412	762,480	43.51	.983	1.843	995,220
6.5	40.79	.847	1.071	578,340	42.22	.926	1.440	777,600	43.53	1.003	1.881	1,015,740
6.75	40.81	.863	1.091	589,140	42.24	.944	1.468	792,720	43.56	1.022	1.916	1,034,640
7.00	40.83	.880	1.112	600,480	42.26	.962	1.496	807,840	43.58	1.042	1.954	1,055,160
7.25	40.85	.896	1.133	611,820	42.28	.980	1.524	822,960	43.60	1.061	1.989	1,074,060
7.5	40.87	.911	1.152	622,080	42.30	.997	1.550	837,000	43.61	1.079	2.023	1,092,420
7.75	40.88	.927	1.172	632,880	42.31	1.014	1.577	851,580	43.62	1.097	2.057	1,110,780
8.00	40.90	.942	1.191	643,140	42.33	1.030	1.602	865,080	43.64	1.115	2.091	1,129,140
8.25	40.91	.957	1.210	653,400	42.34	1.047	1.628	879,120	43.66	1.133	2.124	1,146,960
8.5	40.92	.971	1.227	662,580	42.35	1.063	1.653	892,620	43.67	1.150	2.156	1,164,240
8.75	40.94	.986	1.246	672,840	42.37	1.078	1.676	905,040	43.68	1.167	2.188	1,181,520
9.00	40.95	1.000	1.264	682,560	42.38	1.094	1.701	918,540	43.69	1.184	2.220	1,198,800
9.25	40.96	1.014	1.282	692,280	42.39	1.109	1.724	930,960	43.70	1.201	2.252	1,216,080
9.5	40.97	1.028	1.299	701,460	42.40	1.125	1.749	944,460	43.71	1.217	2.282	1,232,280
9.75	40.98	1.042	1.317	711,180	42.41	1.140	1.773	957,420	43.72	1.234	2.314	1,249,560
10.00	40.99	1.055	1.334	720,360	42.42	1.154	1.794	968,760	43.73	1.250	2.344	1,265,760

## APPENDIX A—continued.

Table III.—Showing Discharge of Bore Drains.

$$C = \left\{ \frac{1.811}{n} + 41.6 + \frac{.00281}{s} \right\} \left\{ 1 + \left( 41.6 + \frac{.00281}{s} \right) \times \frac{n}{\sqrt{r}} \right\}$$

Side slopes 2 to 1.



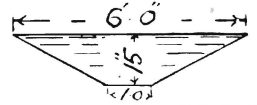
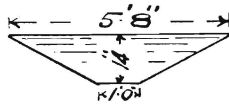
Fall in feet per mile.	10' deep. W.P. = 4.73; R = .469; A = 2.22 sq. ft.				11' deep. W.P. = 5.10; R = .510; A = 2.60 sq. ft.				12' deep. W.P. = 5.47; R = .548; A = 3.00 sq. ft.			
	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.
.5	39.93	.266	.591	319,140	41.12	.285	.741	400,140	42.22	.304	.912	492,480
.75	41.30	.337	.748	403,920	42.47	.361	.939	507,060	43.55	.384	1.152	622,080
1.0	42.12	.397	.881	475,740	43.28	.425	1.105	596,700	44.33	.452	1.356	732,240
1.25	42.65	.449	.997	538,380	43.82	.481	1.251	675,540	44.88	.511	1.533	827,820
1.5	43.03	.496	1.101	594,540	44.19	.531	1.381	745,740	45.24	.564	1.692	913,680
1.75	43.32	.540	1.199	647,460	44.48	.578	1.503	811,620	45.52	.613	1.839	993,060
2.0	43.53	.580	1.288	695,520	44.69	.621	1.615	872,100	45.74	.659	1.977	1,067,580
2.25	43.72	.618	1.372	740,880	44.87	.661	1.719	928,260	45.91	.702	2.106	1,137,240
2.5	43.86	.653	1.450	783,000	45.01	.699	1.817	981,180	46.05	.742	2.226	1,202,040
2.75	43.98	.687	1.525	823,500	45.12	.735	1.911	1,031,400	46.16	.780	2.340	1,263,600
3.0	44.08	.719	1.596	861,840	45.23	.769	1.999	1,079,460	46.26	.816	2.448	1,321,920
3.25	44.21	.751	1.667	900,180	45.31	.802	2.085	1,125,900	46.35	.851	2.553	1,378,620
3.5	44.25	.780	1.732	935,280	45.38	.834	2.168	1,170,720	46.42	.885	2.655	1,433,700
3.75	44.31	.809	1.796	969,840	45.45	.864	2.246	1,212,840	46.48	.917	2.751	1,485,540
4.0	44.37	.836	1.856	1,002,240	45.50	.894	2.324	1,254,960	46.55	.948	2.844	1,535,760
4.25	44.42	.863	1.916	1,034,640	45.55	.922	2.397	1,294,380	46.59	.978	2.934	1,584,360
4.5	44.46	.889	1.974	1,065,960	45.60	.950	2.470	1,333,800	46.63	1.008	3.024	1,632,960
4.75	44.50	.914	2.029	1,095,660	45.64	.976	2.538	1,370,520	46.67	1.036	3.108	1,678,320
5.0	44.54	.938	2.082	1,124,280	45.68	1.003	2.608	1,408,320	46.71	1.064	3.192	1,723,680
5.25	44.57	.962	2.136	1,153,440	45.71	1.029	2.675	1,444,500	46.74	1.091	3.273	1,767,420
5.5	44.61	.986	2.189	1,182,060	45.74	1.054	2.740	1,479,600	46.76	1.116	3.348	1,807,920
5.75	44.63	1.009	2.240	1,209,600	45.77	1.079	2.805	1,514,700	46.78	1.143	3.429	1,851,660
6.0	44.66	1.031	2.289	1,236,060	45.79	1.102	2.865	1,547,100	46.81	1.170	3.510	1,895,400
6.25	44.68	1.053	2.338	1,262,520	45.82	1.126	2.928	1,581,120	46.84	1.191	3.573	1,930,300
6.5	44.70	1.074	2.384	1,287,360	45.84	1.149	2.987	1,612,980	46.86	1.208	3.623	1,956,400
6.75	44.73	1.095	2.431	1,312,740	45.86	1.171	3.045	1,644,300	46.89	1.242	3.725	2,011,400
7.0	44.75	1.116	2.478	1,338,120	45.88	1.193	3.102	1,675,080	46.90	1.261	3.783	2,042,800
7.25	44.76	1.136	2.522	1,361,880	45.90	1.215	3.159	1,705,860	46.91	1.285	3.856	2,082,200
7.5	44.78	1.155	2.564	1,384,560	45.91	1.236	3.214	1,735,560	46.94	1.310	3.929	2,121,660
7.75	44.80	1.176	2.611	1,409,940	45.93	1.254	3.260	1,760,400	46.95	1.332	3.996	2,157,840
8.0	44.82	1.195	2.653	1,432,620	45.94	1.277	3.320	1,792,800	46.97	1.354	4.062	2,193,480
8.25	44.84	1.214	2.695	1,455,300	45.96	1.297	3.372	1,820,880	46.98	1.375	4.125	2,227,500
8.5	44.85	1.232	2.735	1,476,900	45.97	1.317	3.424	1,848,960	46.99	1.396	4.188	2,261,520
8.75	44.87	1.251	2.777	1,499,580	45.98	1.337	3.476	1,877,040	47.00	1.417	4.251	2,295,540
9.0	44.88	1.269	2.817	1,521,180	45.99	1.356	3.526	1,904,040	47.02	1.437	4.311	2,327,940
9.25	44.88	1.287	2.857	1,542,780	46.00	1.375	3.575	1,930,500	47.03	1.457	4.371	2,360,340
9.5	44.89	1.304	2.895	1,563,300	46.01	1.394	3.624	1,956,960	47.04	1.477	4.431	2,392,740
9.75	44.90	1.322	2.935	1,584,900	46.02	1.412	3.671	1,982,340	47.05	1.497	4.491	2,425,140
10.00	44.90	1.338	2.975	1,606,500	46.03	1.431	3.721	2,009,340	47.06	1.516	4.548	2,455,920

## APPENDIX A—continued.

Table IV.—Showing Discharge of Bore Drains.

$$C = \left\{ \frac{1.811}{n} + 41.6 + \frac{.00281}{s} \right\} \div \left\{ 1 + \left( 41.6 + \frac{.00281}{s} \right) \times \frac{n}{\sqrt{r}} \right\}$$

Side slopes 2 to 1.



Fall in feet per mile.	13" Deep. W P = 5.84; R = .587; A = 3.430 sq. ft.				14" Deep. W P = 6.217; R = .625; A = 3.889 sq. ft.				15" Deep. W P = 6.59; R = .663; A = 4.375 sq. ft.			
	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.	C.	V.	Cusecs.	Gallons per day.
.5	43.25	.322	1.104	596,160	44.20	.340	1.322	713,880	45.11	.357	1.562	843,480
.75	44.56	.407	1.396	753,840	45.50	.428	1.664	898,560	46.39	.450	1.969	1,063,260
1.0	45.35	.478	1.640	885,600	46.28	.503	1.956	1,056,240	47.16	.528	2.310	1,247,400
1.25	45.87	.541	1.856	1,002,240	46.79	.569	2.213	1,195,020	47.67	.597	2.612	1,410,480
1.5	46.24	.597	2.048	1,105,920	47.15	.628	2.442	1,318,680	48.02	.659	2.883	1,556,820
1.75	46.51	.649	2.226	1,202,040	47.42	.682	2.652	1,432,080	48.28	.716	3.132	1,691,280
2.0	46.73	.697	2.391	1,291,140	47.63	.733	2.851	1,539,540	48.49	.768	3.360	1,814,400
2.25	46.90	.742	2.545	1,374,300	47.79	.780	3.033	1,637,820	48.65	.817	3.574	1,929,960
2.50	47.03	.784	2.689	1,452,060	47.93	.824	3.205	1,730,700	48.78	.864	3.780	2,041,200
2.75	47.13	.824	2.826	1,526,040	48.04	.867	3.372	1,820,880	48.89	.908	3.972	2,144,880
3.0	47.25	.863	2.960	1,598,400	48.14	.907	3.527	1,904,580	48.98	.951	4.161	2,246,940
3.25	47.31	.899	3.084	1,665,360	48.22	.945	3.675	1,984,500	49.06	.991	4.336	2,341,440
3.5	47.39	.935	3.207	1,731,780	48.29	.983	3.823	2,064,420	49.13	1.030	4.506	2,433,240
3.75	47.45	.969	3.324	1,794,960	48.35	1.018	3.959	2,137,860	49.19	1.067	4.668	2,520,720
4.0	47.52	1.002	3.437	1,855,980	48.40	1.053	4.095	2,211,300	49.24	1.104	4.830	2,608,200
4.25	47.55	1.034	3.547	1,915,380	48.45	1.087	4.227	2,282,580	49.29	1.138	4.979	2,688,660
4.5	47.60	1.065	3.653	1,972,620	48.49	1.119	4.352	2,350,080	49.33	1.173	5.132	2,771,280
4.75	47.65	1.095	3.756	2,028,240	48.53	1.151	4.476	2,417,040	49.37	1.206	5.276	2,849,040
5.0	47.68	1.124	3.855	2,081,700	48.56	1.181	4.593	2,480,220	49.40	1.238	5.416	2,924,640

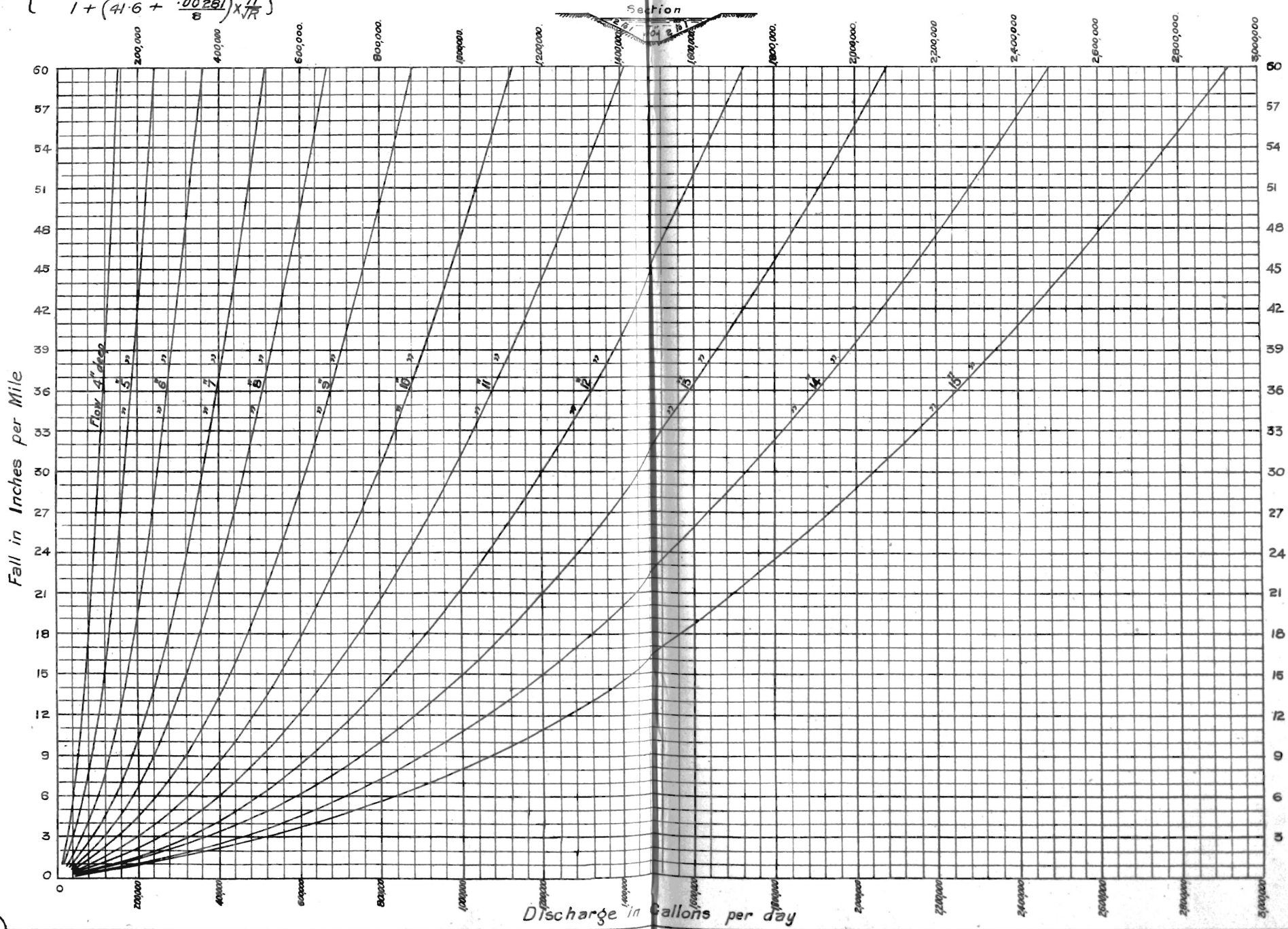
# DIAGRAM

## DISCHARGE OF BORE DRAINS

Calculated by Kutter's formula for "n" = 0.025

Kutter's Formula

$$C = \left\{ \frac{\frac{1.486}{n} + 41.6 + \frac{.00281}{S}}{1 + (41.6 + \frac{.00281}{S}) \times \sqrt{R}} \right\}$$



## APPENDIX B.

Department of Public Works,  
Sydney, 16th March, 1906.

“WATER AND DRAINAGE ACT, 1902.”

“WELBONDONGA BORE WATER TRUST.”

*Notification of proposal for the construction of works of Water Supply, and the constitution of a Trust for maintaining, administering, and extending such works.*

WHEREAS Section 6 of the “Water and Drainage Act, 1902,” provides amongst other things that in respect of any works of water supply, the Minister shall notify in the manner therein enacted proposals for the construction of such works, and the constitution of a Trust for maintaining, administering, and extending such works: Now, therefore, I, The Honorable CHARLES ALFRED LEE, the Secretary for Public Works for the time being in and for the State of New South Wales, in the Commonwealth of Australia, in pursuance of the powers conferred upon me by the hereinbefore in part recited section of the said Act, do hereby notify that it is proposed to construct the works of water supply referred to in the proposal hereto, and to constitute a Trust for maintaining, administering, and extending such works, to be called and known as the “Welbondonga Bore Water Trust,” in accordance with the particulars set forth and described in the proposal hereto, that is to say:—

The proposal hereinbefore referred to is as follows:—

- (a) *Description of the purpose for which it is proposed to constitute the Trust:—*To utilise for stock purposes the water which may flow from the proposed artesian bore by an equitable distribution of the water in the drains amongst the several holdings within the District.
- (b) *Plan and description of the works and of the land, whether covered with water or not, proposed to be taken or acquired for the purposes of such works and of their cost or estimated cost:—*
- (I.) *Plan of the works and of the land.* (See Plan, page 55.)

(II.) *Description of the works:—*

The proposed works consist of an artesian bore, distributing tank, piping from bore to tank, distributing drains, divisors, culverts over drains, fencing round bore, and minor works incident thereto.

(III.) *Description of the land to be taken or acquired:—*

The proposed bore will be situated on all that piece or parcel of land to be taken or acquired in the parish of Greaves, county of Benarba, and State of New South Wales, being a measured portion of 5 acres, marked A.W.

A strip of land 33 feet wide to be taken or acquired for each of the drains as shown on the foregoing plan. A proposed main drain will start at the distributing tank on portion A.W., parish of Greaves, county of Benarba, and will run in a generally south-westerly direction for a distance of about 20 miles 40 chains, and will pass through portions A.W., 19, 18, 8, 7, and 14, parish of Greaves; portion 16, parish of Carraa; portion 14 again, parish of Greaves; portions 7, 44, 3, 1, C.L. 425, and C.L. 108, parish of Carraa; portions 7 and 6, parish of Brigalow; portions 11 and 33, parish of Wadden; portions 9, 10, 11, C.L. 4,127, 16, 34, 33, 35, 23, and 39, parish of Balerang; and terminate on portion 6, parish of Tala.