

Table LBS6.6: Pumping station parameters - Future system

Pump station	Pump station											Rising main			
	SEWSAN Code	No. of pumps (Oper/StBy)	Design flows or comments		Discharge from own drainage area			Upstream pumps (ℓ/s)	Maximum flow (ℓ/s)	Future capacity required (ℓ/s)	Surplus/ Deficit (ℓ/s)	Diam. ID (mm)	Diam. Nom (mm)	Length (m)	Maximum Flow velocity (m/s)
			Pump capacity* (ℓ/s)	Static Head (m)	IPDWF (ℓ/s)	+ 30 % Spare (ℓ/s)	Total (IPDWF) (ℓ/s)								
Ashton															
Unipack	Unipack PS	1/1	11	5	0.8	0.3	1.1		1.1	1.1	9.9	145	150	143	0.67
Ashton PS	Ashton PS	1/1	80	30	45.9	19.7	65.5	11	76.5	76.5	3.5	286	315	2465	1.25
Zolani PS	Zolani PS	1/1	5		1.3	0.5	1.8		1.8	1.8	3.2	99	99	639	0.65
Ash Fut PS1	FDA_A_PS1	1/1	5	5	1.1	0.5	1.6		1.6	1.6	3.4	80	90	300	0.99
Bonnievale															
Pump 1	PS_1	1/1	12	25	5.4	2.3	7.8		7.8	7.8	4.2	145	160	373	0.73
Pump 2	PS_2	1/1	25	60	8.7	3.7	12.4	12.0	24.4	24.4	0.6	182	200	494	0.96
Pump 3	PS_3	1/1	120	20	5.7	2.4	8.2	98.0	106.2	106.2	13.8	322	355	1413	1.47
Pump 4	PS_4	1/1	40	35	7.6	3.3	10.9	29.0	39.9	39.9	0.1	227	250	1314	0.99
Pump 5	PS_5	1/1	8	5	1.0	0.4	1.5		1.5	1.5	6.5	100	110	177	1.02
Pump 6	PS_6	1/1	50	5	15.3	6.5	21.8	25.0	46.8	46.8	3.2	227	250	827	1.24
Pump 7	PS_7	1/1	24		25.2	10.8	36.0		24.0	24.0	0.0	145	160	1177	1.45
Bon Fut PS1	Bon_fut_PS1	1/1	5		3.3	1.4	4.8		4.8	4.8	0.2	80	90	924	0.99
McGregor															
McG Fut PS1	FDA_Mc_PS1	1/1	5		0.0	0.0	0.0		0.0	0.0	5.0	80	90	210	0.99
Montagu															
Avalon Springs	Avalon Springs	1/1	14	15	9.2	3.9	13.1		13.1	13.1	0.9	113	125	1100	1.40
Ashbury	Ashbury PS	1/1	8	5	0.0	0.0	0.0		0.0	0.0	8.0	100	110	508	1.02
Montagu PS M1	Montagu PS M1	1/1	120	40	44.7	19.2	63.8	55.0	118.8	118.8	1.2	322	355	1305	1.47
Montagu PS M2	Montagu PS M2	1/1	41	5	28.0	12.0	40.1		40.1	40.1	0.9	227	200	1605	1.01
Robertson															
Nkqubela PS 1	Nkqubela PS 1	1/1	6.5	5	1.8	0.8	2.6		2.6	2.6	3.9	100	110	427	0.83
Nkqubela PS 2	Nkqubela PS 2	1/1	8	5	0.8	0.4	1.2	6.5	7.7	7.7	0.3	100	110	493	1.02
Nkqubela PS 3	Nkqubela PS 3	1/1	6.5	5	4.5	1.9	6.4		6.4	6.4	0.1	100	110	376	0.83
Robertson PS	Robertson PS	1/1	27	10	8.1	3.5	11.6	14.5	26.1	26.1	0.9	182	200	183	1.04
Silwerstrand PS	Silwerstrand	1/1	13	15	8.9	3.8	12.8		12.8	12.8	0.2	145	150	1777	0.79

* Pump capacity - Black = existing pump remains as is

Red = existing pump upgraded

Green = Decommission existing pump

Blue = future pump