

MAINTENANCE ACTIVITY SCHEDULE

Item	Description / Specification	U.O.M	Rates
M1	River Pumps (Services) – per Pump	Once a week	
	<i>10-off Borehole Pumps</i>	-	-
1.1	Inspect borehole flowmeter for flow. Troubleshoot if there is no flow.	-	-
1.2	Inspect all pumps, pipes and valves for leak. Repair if detected.	-	-
1.3	Record all deviations and defects. Report to OTC Artisan: Fitter and Turner for initiation of necessary work orders	-	-
1.4	Clean and remove sand from the borehole(s) and surrounding areas	-	-
M2	Fehlman wells (Services) – per Pump	Once a week	
	<i>4-off Fellmann Pumps</i>	-	-
2.1	Inspect for vibration and noise	-	-
2.2	Inspect all pumps, pipes and valves for leakage. Repair if detected	-	-
2.3	Record flow meter readings	-	-
2.4	Inspect and top-up thrust bearing assembly unit oil when necessary	-	-
2.5	Rotate pumps according to the schedule	-	-
2.6	Clean thoroughly inside of the building	-	-
2.7	Record all deviation and defects	-	-

Item	Description / Specification of activity	U.O.M	Rate
M3	Town Booster Pumps (Weekly Service)	Once a week	
	<i>4-off Town Booster Pumps</i>	-	-
3.1	Inspect pipe work for leakage	-	-
3.2	Inspect glands for leakage	-	-
3.3	Grease bearings	-	-
3.4	Inspect coupling for wear and alignment	-	-
3.5	Clean up excess grease and oil	-	-
3.6	Inspect for vibration and noise	-	-
3.7	Change pumps running sequence	-	-
3.8	Record all deviations and defects	-	-
3.9	Clean the building	-	-
3.10	Pumps stop / start on request by Artisan/Maintenance Coordinator/Contract Manager	on request	-

M4	Town Booster Pumps	Once a month	
4.1	Open and inspect non-return valves for correct operation	-	-

M5	Cleaning Reservoirs by request only	Quotation	-
5.1	Cleaning and resealing of 4-off Town reservoirs	Once a year	-
5.2	Cleaning and resealing of 2-off Swartkops Reservoirs	Once a year	-
5.3	Cleaning and resealing of 1-off Mine Reservoir	Once a year	-

M6	Golf Course Pumps per pump	Once a month	
	<i>5-off Pumps</i>	-	-
6.1	Open and inspect pumps as per schedule	-	-

Item	Description / Specification of activity	U.O.M	Rate
M7	Sewage Treatment Plant Pumps & Equipment -	Once a week	
7.1	2-off Golf course pumps	-	-
7.2	2-off Tree belt pumps	-	-
7.3	2-off Mixers	-	-
7.4	2-off Aerators	-	-
7.5	2-off Sludge pumps	-	-
7.6	1-off Bridge settling tank (Clarifier)	-	-
7.7	Inspect pipe work for leakage	-	-
7.8	Inspect glands for leakage	-	-
7.9	Inspect for vibration and noise	-	-
7.10	Record all deviations and defects	-	-
7.11	Clean the platform	-	-

Item	Description / Specification of activity	U.O.M	Rate
M8	Sewage Stations Pumps (Service)	Once a week	
8.1	20-off Sewage Stations	-	-
8.2	Grease bearings	-	-
8.3	Inspect non-return valves for correct operation as per schedule	-	-
8.4	Inspect coupling for wear and alignment	-	-
8.5	Inspect for vibration and noise	-	-
8.6	Winch out and clean screening basket (where applicable)	-	-
8.7	Regularly grease winch and rope	-	-

M9	Major Pump Repair (Labour)	On request	Rate per hr
9.1	Replace v- belts, (when applicable)	each	
9.2	Replace air release valve plunger rod, if applicable	each	
9.3	Replace front impeller clearance (wear plate)	each	
9.4	Replace rear impeller clearance (seal plate)	each	
9.5	Replace leaking or worn seal or gasket	each	
9.6	Replace suction pipe or hose	each	
9.7	Clean or replace check valves	each	
9.8	Adjust discharge or suction valves	each	
9.9	Repairing pressure relief valve, if applicable	each	
9.10	Service suction and discharge flange	each	
9.11	Unchoke pump	each	
9.12	Any other work not listed above	each	

M10	Overhaul Rotating assembly	On request	Quotation
10.1	Inclusive of mechanical seal, new bearings, shaft inspection and oil seals	each	-
M11	Replace Rotating Assembly	unit	Quotation
11.1	Inclusive of strip-out, replacements, re-adjust shins and re-set v-belts	each	-
M12	Complete Pumps and Equipment Overhauls	unit	Quotation
12.1	1-off sewage treatment plant pumps	each	-
12.2	1-off mine booster pumps	each	-
12.3	1-off town booster pumps	each	-
12.4	1-off golf course pumps	each	-
12.5	1-off Fehlman Wells pumps	each	-
12.6	1-off river pumps	each	-

M13	Valve boxes per valve box	When required	
13.1	Clean inside and around the valve box	-	-
13.2	Pump out any accumulated water	-	-

M14	Sewage Plant Daily Operators (2-off Operators)	Monthly	
	<i>Fixed monthly rate for 2-off Operators - fixed rate</i>	-	-
	<i>a. Inlet Work</i>	-	-
14.1	Fixed bar screens clean, remove plastic, stone, rags etc. twice a day	-	-
14.2	Duplicate channels alternated	-	-
14.3	Screenings removed immediately	-	-
14.4	Inlet channels clear of solids, remove solids	-	-
14.5	Flow measurement equipment in order, check the flow rate and record at 09h00, calculate the operational time if it's correct, report immediately fault finding.	-	-
	<i>b. Anoxic basin</i>	-	-
14.6	Duty pump alternated between the 2 mixers	-	-
14.7	Is mixers operating satisfactorily?	-	-
14.6	Weirs, baffles and tanks inside walls hosed and brushed.	-	-
14.8	Weirs and baffles at equal elevation.	-	-
	<i>c. Aeration Basin</i>	-	-
14.9	Aerators and time switches operating satisfactorily	-	-
14.10	Gearbox oil and motor lubricant correct	-	-
14.11	Weirs, baffles and tanks inside walls hoses and brushed	-	-
14.12	Weirs and baffles at equal elevation	-	-
14.13	No sign of foaming or uneven surface aeration	-	-
14.14	1/2 hour settlement test carried out and result recorded	-	-
	<i>d. Classification tank</i>	-	-
14.15	Bridge structure operating satisfactorily	-	-
14.16	Scum removal equipment operating satisfactorily	-	-
14.17	Sludge removal equipment operating satisfactorily	-	-
14.18	No rising or floating sludge evident	-	-
14.19	No fermentation (tank bubbling)	-	-
14.20	Effluent launders, weirs plates and baffle plates hosed and brushed	-	-
14.21	Return sludge pumps operating satisfactorily.	-	-
14.22	Clean and brushed the clarifier twice a day, add solchlor after two days	-	-
	<i>e. Sludge drying beds</i>	-	-
14.23	Empty beds forked for free drainage	-	-
14.24	Sludge on beds not thicker than 225mm	-	-

14.25	De-sludge to the drying bed, after sludge dry remove the manure	-	-
14.26	Good house keeping	-	-
14.27	Inspect for leaks	-	-
14.28	Remove plastic, rags in the sump	-	-
14.29	Check visual inspection	-	-
14.30	Check the sewer station if its overflow, pump not working	-	-
14.31	Clean the dry beds	-	-
	f. Chlorination tank		
14.32	Clean the tank once a month		
14.33	Test Chlorine residue		
14.34	Keep records		

M15	Swartkops Trickling Filter Plant	Once a week	
	<i>1-off Trickling Filter Plant</i>	-	-
	a. Weekly task list	-	-
15.1	Clean stainless-steel screens in the first chambers and inflow to the septic tank.	-	-
15.2	Check HTH Duration Fill and Replace if necessary.	-	-
15.3	Check all building lights and indicating lights on the electrical panel. If ant pump/motor has tripped, a red light as well as the general alarm (strobe) light will come on.	-	-
15.4	Record all deviations and defects and report back to call center for generation of work orders.	-	-
15.5	Clean the building and yard.	-	-
15.6	Inspect pipe work and pump glands for leaks.	-	-
15.7	Inspect pumps for vibration and noise.	-	-
15.8	Rotate pumps on weekly basis.	-	-
15.9	Check nozzles of trickling filter weekly and clean. If a nozzle does not spray water, it is clogged. Manually clean nozzle with a piece of wire. Use extreme care and put on safety gloves when working with effluent.	-	-
15.10	Record all deviations and defects and report back to call center for generation of work orders.	-	-
15.11	Check functionality of all manual valves by opening and closing each valve, and replace if necessary.	-	-
15.12	Remove accumulated sludge and grime on the level probes in each sump	-	-
15.13	Check sludge and scum accumulation in the septic tank. If sludge is above threshold limit, report to call center and generate a works order for the honey sucker to empty the sludge.	-	-
15.14	Anti-rusting treatment	-	-

Item	Description / Specification of Activity	U.O.M	Rate
M16	Manhole Covers – by request only	Quotation	-
	<i>Supply, delivery and installation of manhole covers</i>	-	-
16.1	Install 450 x 600mm x 74 kg Type 8A cast iron double seal manhole cover	each	
16.2	Install 550mm Diameter x 75kg type 4A cast iron manhole cover	each	
M17	Blockages	-	-
	<i>Unblocking</i>	-	-
17.1	Unblocking main sewer lines	Per hour	
M18	Cleaning	-	-
	<i>Clean out and remove blockage, debris, sewerage, etc and flush out with clean water on completion;</i>	-	-
18.1	Cleaning sewer manhole	Per hour	
18.2	Cleaning a sewer station sump	Per hour	
M19	Septic Tanker / Honey Sucker – wet rate (driver + diesel)		
19.1	Drain and dispose within town to the main Treatment Plant	Per hour	
19.2	Drain and dispose from Swartkop to the main Treatment Plant	Per hour	
M20	Transportation, Hourly rate and After Hours Call-outs	-	-
20.1	After Hours Emergency Call outs (Weekdays including Saturdays)	hour	
20.2	After Hours Emergency Call outs (Public Holidays and Sundays)	hour	
M21	Hourly rate	-	-
21.1	Any other work not included in the Price Activity Schedule	hour	
M22	Burst pipe	-	-
22.1	Burst pipe, including excavation	hour	
22.2	Burst pipe, excluding excavation	hour	

Priced Activity Schedule Authorised By:

Name:		Signature:	
Position:		Date:	
Authorised for and on behalf of:	Company		