

September 2018 Maintenance Report

1) Treatment Plant Issues: all have been corrected

- parts of the plant not functioning as designed
- flow meter not functioning
- pumps operating for long periods of time

Incorrect timing of an important operation permitted sludge to build up, until it began to infiltrate the pump chamber. The timing has been corrected to ensure there is not a repeat of this situation.

It was necessary to force the system to re-process a 12' deep compartment (13, 250L), 4" at a time with a 30 minute recovery period. This took several days to complete.

The effluent in the pump chamber at the septic field has been checked for clarity every 2-3 days and at last check, is visibly clear, very pale yellow-tan and consistent through the full 1.2m of depth, exactly as it should be.

The flow meter did not function while installed, but tested fine on its own. The flow rate was calculated using a minutes/inch observation at the septic field and determined to be just under 5 gallons per minute, with a flow velocity below .5 feet per second. Both numbers fall below the minimum operating specifications of the flow meter. At such a low flow rate and velocity, the possibility of solids settling out and eventually constricting the line was considered quite high. The line was flushed, which took some time as its calculated volume is 2500 gallons (~9500L). Once complete, the system was restarted and the flow meter functioned as designed.

This situation has led to a planned re-design of the pipe work leaving the plant. It will include a 3"-4" diameter 'quick flush' line allowing us to flush the line backwards into a lift station instead of forward into the septic field pump chamber. This way any settled solids will be re-processed instead of being sent to the septic field.

- 2) The waterslide pool has been drained, cleaned and pressure washed in preparation for another paint application, unfortunately the weather has not co-operated with us so far.
- 3) The majority of the waterslide components have been put away (signs, seat, hoses, etc.).
- 4) All sprinkler systems have been shut down.
- 5) The shop yard is being re-organized, cleaned and tidied up.
- 6) Oxygenator has been stored for the season.
- 7) Several of the drainage lines that enter Main Pond have been located and opened up after discovering they were plugged up with moss and roots.
- 8) Both well houses have been stained with Sunfast; they were accidentally missed and not part of the painting contract from earlier this year.
- 9) The process of cleaning the room at the security / maintenance site has begun; the carpet has been removed and disposed of; the ceiling has been cleaned with a citrus degreaser. Likely next step will be to place an ozone generator in the room for a couple days. The opening has been boarded up to protect it from weather.
- 10) The large Shelter Logic structure at the shop has suffered an end to end tear in the main cover.
- 11) Repaired one of the dryers at the lower facilities: Part of the timing mechanism had come loose and was permitting free use.