

Separator Row O&M Manual



CubicM3's Separator Row provides a convenient and cost-effective means of maintaining RainSafe stormwater management systems. It also serves as a highly effective means of enhancing the overall removal of silt and other suspended pollutants from the storm water system. All RainSafe stormwater tanks must include at least one Separator Row.

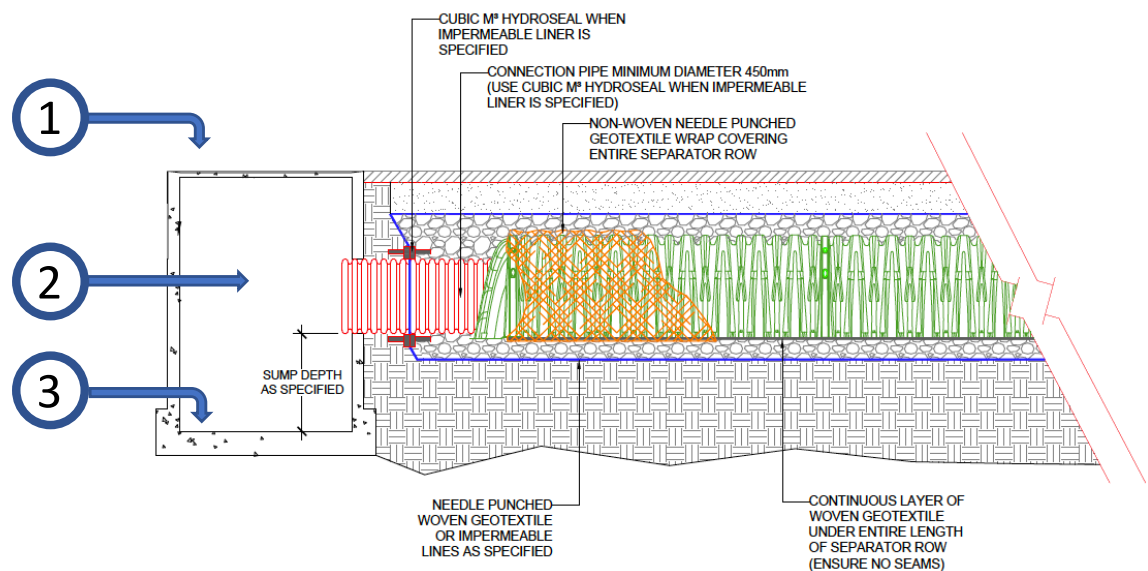


In RainSafe Stormwater tanks, the Separator Row is connected to the Inlet Manhole and sits on and is surrounded by geotextile. This filters the stormwater entering the tank and captures suspended silt not already removed in upstream measures. This protects the rest of the system from clogging up avoiding the consequent reduction in performance and capacity. CubicM3 recommends that the Separator Row is included as an overall pollutant management strategy including upstream interceptor and manhole silt traps.

While the frequency of maintenance will vary according to the specific design of the tank and local conditions, the steps detailed below will apply whenever maintenance is being carried out. CubicM3 recommends carrying out and logging the results of inspection and maintenance of the Separator Row after exceptional storm events and in any case, at least twice during the first year of operation in order to establish an appropriate frequency for inspection and maintenance going forward.

Maintenance Procedure

Fig 1 – Key Elements of Separator Row



Step 1 - Inspection

Remove Inlet Manhole cover and inspect Separator Row via inlet pipe for sediment accumulation. Generally, the requirement for maintenance can easily be established visually but when in doubt if the depth of accumulated silt at the start of the Separator Row has reached a depth of approx. 70-75mm cleaning should be carried out.

Note: Manholes should be treated as confined spaces and appropriate precautions and health and safety measures should be taken before entering any manholes.

Step 2 – Cleaning Procedure

- i. Insert a self-propelling culvert cleaning jetting unit with rear-facing nozzles and feed out to the far end of the Separator Row from the inlet;
- ii. Draw the unit back towards the inlet slowly, flushing silt towards and out through the inlet pipe into the manhole sump;
- iii. Repeat Step ii until all silt has been flushed out of the Separator Row;
- iv. Remove silt and debris from manhole sump using a vacuum unit.

Note: Cubic M³ recommends photographing before and after jetting of the Separator Row for recording as part of a Maintenance Log and to assist refining required frequency of inspections and maintenance.

Step 3 – Completion

Ensure manhole covers are safely replaced and area around them cleaned and clear of silt and debris. Observations and actions taken should be recorded in a Maintenance Log.

Upstream elements such as other manhole sumps, interceptors should be inspected and cleaned, if necessary, as part of the overall storm system maintenance.