

Positioning & Access Requirements for Soakage Devices

✓ Positioning Soakage Devices

Positions for soakage devices should be considered before percolation tests are carried out.

Soakage devices must be placed in an appropriate position on the property if they are to work effectively. The positioning of soakage devices needs to be considered before percolation tests are carried out, to guide the location of the percolation tests. The following points give guidelines for locating soakage devices:

1. Soakage devices must not be located within flood plains. They should also be located away from overland flow paths.
2. Soakage devices must be located where there is adequate access for maintenance.
3. Soakage devices must not be located close to buildings. A clearance of 3 m is generally required, but this can be reduced to 2 m for rockbores and 1 m for porous paving. Where it is not practically possible to meet these guidelines, a site-specific geotechnical design must be completed to take into account the effect of the soakage device on building foundations. An assessment should be carried out to determine the risk of flooding to neighboring properties.
4. Soakage devices should not be located beside retaining walls. For walls less than 2 m high, the clearance must not be less than a horizontal distance equal to the retaining wall height plus 1.5 m, unless a site-specific design is carried out. The site-specific design must take into account geotechnical considerations and ensure stormwater from the soakage device will not enter the cut-off drain for the retaining wall. For walls higher than 2 m, a site-specific design must always be carried out.
5. Soakage devices must not be located within 2 m of sanitary sewers.
6. Soakage devices should not be positioned on unstable slopes.
7. Soakage devices should be positioned above the winter water table. The position of the winter water table can be estimated when boreholes or test-pits are constructed.
8. Soakage devices should not be shared between properties unless a legally constituted "Body Corporate" is established to take responsibility for maintenance and eventual replacement.
9. Consideration should be given to the path that water will follow during storms that exceed the design capacity of the soakage device (overflow path).
10. Locate the soakage devices so that all site runoffs can be fed to them.

✓ Access Requirements

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Effective maintenance relies on ready access to the soakage or pre-treatment device. The following points should be considered:

1. Soakpits needs to be to be within 20 to 30m from the street. Soak pits can be cleaned most effectively using vacuum-type systems. These systems are generally mounted on trucks and can only be used if the vacuum pipes are able to stretch from the truck to the soakage or pre-treatment device. Smaller trucks normally need to be within 20 to 30m of the soakhole. Large street-cleaning trucks may have pipes that can stretch 75m or more but will be much more expensive to hire.
2. All soakage devices (except Rockbore Soakholes) may eventually require excavation of soil or scoria/gravel layers, so that repairs can be made. An access way at least 2m wide should be allowed for, so that at least a small excavator can gain entry.
3. Re-drilling Rockbore Soakholes normally requires an access way that is around 3 m wide. This is not a regular maintenance procedure but may be required eventually.