

Local Authority Building Control

Technical Information Note 9 Non mains drainage

NON MAINS DRAINAGE

The guidance in the Building Regulations for septic tanks, treatment plants and cesspools can appear confusing and contradictory. Furthermore, if the guidance is not interpreted correctly, then development within could be severely restricted.

Advice and research indicates that, providing tanks are effectively sealed and adequately vented, then health risks are minimal and precautions are mainly for structural reasons.

We therefore, interpret the guidance as follows:

CESSPOOLS

Considering a 2.6m diameter tank, allowing for neck and disturbance due to digging, an overall depth of 3m is assumed.

Taking a `worst case` scenario of any adjacent foundations (on the site or adjacent land) being at ground level, then:

- Tank to be 4.5m min from any building on the site or adjacent land
- Tank to be a minimum of 3.5m from site boundaries to allow for future building on adjacent land
- The tank may be built closer to buildings **within** the boundaries of the proposal providing foundations or the tank surround are designed accordingly
- Tank to be 3.5m from any road unless suitable structural design undertaken
- Tank to be 10m from any watercourse unless suitable precautions –such as surrounding in 200mm of structural concrete – are taken
- Tank to be within 30m of vehicular access for emptying

TREATMENT PLANTS

Considering a tank of 2m diameter and allowing for neck and digging, a maximum depth of 2.5m is assumed.

- Tank to be 4.5m min from any building on the site or adjacent land
- Tank to be a minimum of 3.5m from site boundaries to allow for future building on adjacent land
- The tank may be built closer to buildings **within** the boundaries of the proposal providing foundations or the tank surround are designed accordingly
- Tank to be 3.5m from any road unless suitable structural design undertaken
- Tank to be 10m from any watercourse unless suitable precautions –such as surrounding in 200mm of structural concrete – are taken
- Tank to be within 30m of vehicular access for emptying
- Prior consent required from Environment Agency for any discharge

SEPTIC TANKS

Considering a 1.8m diameter tank and allowing for neck and digging, a depth of 2.5m is assumed.

- Tank to be 4.5m min from any building on the site or adjacent land
- Tank to be a minimum of 3.5m from site boundaries to allow for future building on adjacent land
- The tank may be built closer to buildings **within** the boundaries of the proposal providing foundations or the tank surround are designed accordingly

- Tank to be 3.5m from any road unless suitable structural design undertaken
- Tank to be 10m from any watercourse unless suitable precautions –such as surrounding in 200mm of structural concrete – are taken
- Tank to be within 30m of vehicular access for emptying
- Prior consent required from Environment Agency for any discharge

FIELD DRAINAGE

Treatment Plants

Where there is no watercourse available, and assuming that the unit achieves a discharge standard suitable for discharge direct to a watercourse (with Environment Agency/Internal Drainage Board approval), then the plant may discharge to field drainage system providing:

- A soakage test is carried out to determine the suitability of field drainage use and the area/length of field drains required (see Technical Information Note 8 – Percolation Test and Septic Tank Drainage)
- Field drainage is sited at least 4.5m from buildings, boundaries and roads

Septic Tanks

Latest research, such as that carried out by University of Abertay Dundee and now incorporated in the Scottish Building Regulations, show that there is minimal health risks associated with field drainage to properly working and maintained septic tanks. Field drainage to septic tanks will therefore be satisfactory providing:

- A soakage test is carried out to determine the suitability of field drainage use and the area/length of field drains required (see Technical Information Note 4 – Percolation Test and Septic Tank Drainage)
- Field drainage is sited at least 4.5m from buildings, boundaries and roads
- Field drainage is at least 10m from any watercourse

RAINWATER DISCHARGE

Soakaways are the usual method for rainwater disposal. Soakaways should be:

- Designed, following a soakage test, in accordance with clause 3.29 of AD H or BS EN 752-4 or BRE Digest 365. This applies to all non domestic buildings and to sites of 3 or more dwellings or where the ground is known to have poor permeability.
- 4.5m from any building within the site or on adjacent land
- 3.5m from any boundary
- 3.5m from any field drainage system within the site

Where the distances indicated for soakaways cannot be achieved, alternatives should be considered such as:

- Lining one side of the soakaway with polythene extending 450mm beyond the soakaway. The capacity of the soakaway should be increased to compensate.
- Eaves drop systems instead of soakaways
- Rain dispersal eaves system instead of gutters & soakaways
- Rainwater recovery systems
- Shallow storm cells with low/slow infiltration rates.

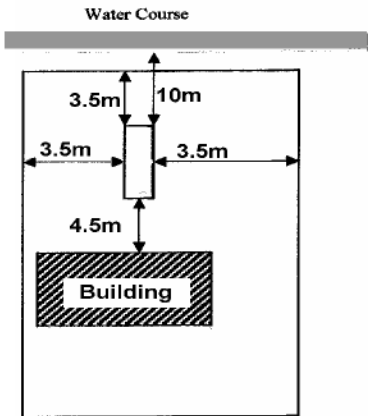
Where any of these options are proposed, full details and design must be provided by a suitable drainage specialist and/or manufacturer.

FIRST TIME RURAL SEWERAGE

The justification to reduce capacities of cesspools or reduce field drainage/site closer to buildings/boundaries as a temporary measure pending completion of a sewerage scheme rests with the owner/applicant.

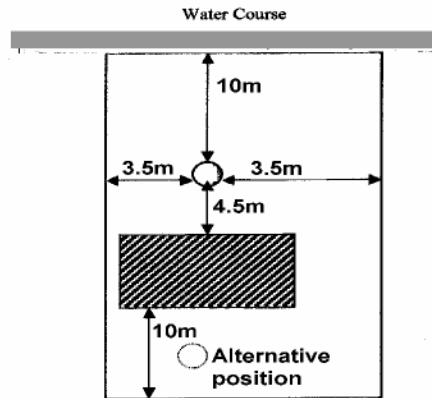
The basis for agreement of such a temporary measure is:

- Deposited/approved plans must show full compliance with the Building Regulations/ Approved Document
- Relevant information and signed Anglian Water agreement for future connection must be provided
- Connection to the new sewer must be within 9 months of the reduced size cesspool or field drainage being installed. If the sewer connection is not carried out within the 9 months, then a Building Regulations contravention notice (Section 36) will be served
- A separate application must be deposited (with fee) for the sewer connection within the 9 month period
- Any agreement must include a signed statement from owner/applicant covering these factors
- A completion certificate for both the dwelling and sewer connection will only be issued at completion of the connection to the sewer



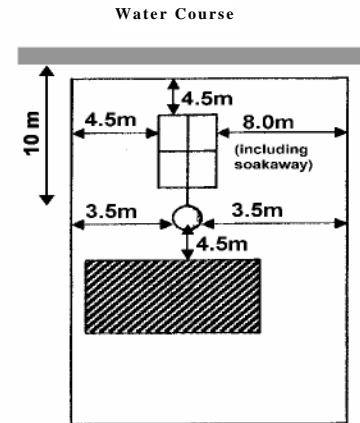
CESSPOOL

4 Person Tank - 2.6m O x 7.5m
 Garden required = 15.5 x 9.6 (149m²)



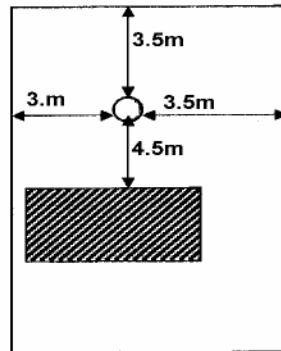
TREATMENT PLANT - To Ditch

5 Person 2m O Tank
 Garden required = 16.5m x 9m (149m²)



TREATMENT PLANT / SEPTIC TANK

To field drains
 5 Person 2mO Tank 24m Field Drains
 Garden = 16m x 17.5m (280m²)



SOAKAWAYS

Garden required = 9m x 8m² (72m²)

NON MAINS DRAINAGE
 Typical Minimum Garden
 Areas/Sizes Required