# **Developer Services** Guidance to development in proximity to Southern Water assets

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Southern Water encourages Planning Authorities to consult us, with regards to any Development proposals, which may have an impact on our assets. These assets may be water or sewerage and either above or below ground.

We respond with regards to potential damage to such assets and publish guidance with regards to stand off distances. Details of these are available on this section of our web site.

We also review the risk of nuisance arising from odour, flies, noise, vibration and light.

We note that our assets are shown on our public records to the best of our knowledge. Their actual locations may differ to those shown. Our comments at Planning Consultation stage will be on the basis of our records. Site investigations, in consultation with Southern Water, will be required to determine actual locations, which may impact on the proposed development plans in order to safeguard our assets.

Due to changes in legislation that came in to force on 1st October 2011, regarding the future ownership of sewers it is possible that a sewer now deemed to be public could be crossing the Site and not recorded on the Sewer records. Should any such sewer be found prior to or during construction works an investigation will be required to ascertain its condition, the number of properties served and potential means of access before any further works commence on site.

Our advice in particular is:

# **Development in proximity to existing Waste Water Treatment Works (WWTW)**

Southern Water will object to any proposed Development within the 1.5 OdU contour of an existing WWTW. Such contour may not be known at planning consultation stage. In this case we will object, as general guidance, to any proposed development within 500 metres of the perimeter fence to an existing Waste Water Treatment Works. A subsequent Odour Survey may be carried out to a specification agreed with Southern Water, to identify and agree the 1.5 OdU contour, as a limit to proposed development.

Southern Water may also comment on issues such as visual impact and light with regards to proximity to WWTW's



Southern Water will review the impact of any proposed Development to the access roads to WWTW's to which we require 24 hours a day /7 days a week unhindered access.

# **Development in proximity to Pumping Stations.**

The detailed arrangement of proposed pumping stations may not be available at planning consultation stage. Our comments will hence be that proposed development should not be carried out within 15 metres of the perimeter fence of a pumping station. For reasons of noise, odour and vibration. It is Southern Waters preference that the 15 metre zone should be wholly within the Development Site, with no encroachment on adjacent sites.

The same guidance will be used to comment on the proximity of proposed development to existing Southern Water pumping stations and of proposed pumping stations to existing development.

Existing access arrangements to Pumping Stations are to be maintained with regards to tankering and unhindered 24/7 access for maintenance. i.e. existing vehicle tracking to be maintained.

In this regard it should be noted that Southern Water operates a closed gates policy for maintenance work, for Health and Safety reasons.

# We also review the impact of Sustainable Urban Drainage (SUDs) proposals:

## Soakaways and other SUDs features

No new soakaways, swales, ponds, watercourses or any other surface water retaining or conveying features should be located within 5 metres of a public or adoptable gravity sewer, rising main or water main.

Permeable Paving located in the proximity of public sewers. (Adopted or proposed for adoption.)

Our policy for sewers is as noted below. This does not include water mains, for which a separate policy applies:

Permeable paving systems differ in function and construction and details will need to be reviewed on a Project specific basis.

The base approach however is:

## Where acting as an attenuation system.

i.e. Impermeable liner used and is acting as a tanked system.

This liner would be cut through in order to carry out replacement or maintenance or to make new connections to the sewer (public sewer in due course).

There is a risk that the lining would not be reinstated in a manner to ensure that the tanked system would operate as designed. (i.e. sealed system).

Leakage through poorly reinstated joints could soften the underlying soils, weakening the ability of the paving to withstand applied loads.

There is also the issue that water collecting in the tanked system would need to be dealt with to allow access to the pipe below.



This would not be acceptable to Southern Water.

### Where acting as a Soakaway

i.e. Permeable liner is used

If the contributing area is just the area of pavement replacing the existing ground, then this situation is essentially as existing and subject to agreed construction details, it would be acceptable for a sewer to be laid under permeable paving in this case.

If the contributing area is greater and the paving acts as a soakaway, then Southern Water would treat this as a Soakaway and request a minimum clearance of 5 metres at Planning Consultation stage. It may be possible to reduce this clearance, subject to detail review of ground conditions and construction details.

#### In all cases

If a structural grid is used to stabilise the stone layer and/or as a structural element to reduce stone layer depth, then this would be of concern as such a grid would be cut through during maintenance and replacement and access to the pipe. Structural replacement would require an adequate overlap to the manufacturer's requirements.

There is a risk that this would not be carried out and that the ability of the paving system to accommodate applied loads would be reduced.

Southern Water can not accept liability for such a risk.

### Cellular Tanks

Southern Water currently will permit cellular storage on sewers that are proposed to connect to the public sewerage system, provided that they are off-line.

However, the sewers that are to be offered for adoption should be designed to accommodate the 1 in 30 year event and hence should not be designed to convey the 1 in 100 plus 40% (exceedance flows/allowance for Climate Change) flows to the off line storage.

Provided that the cellular storage systems, of reputable make, are sound, sealed and do not allow entry of groundwater, land drainage etc., then Southern Water is content for such facilities to connect to the public surface water system. Southern Water would not adopt surface water systems that include on - line cellular storage, either in part (e.g. pipes upstream of, or linking more than one facility) or in whole, although subject to the caveats given above it would be prepared to adopt adequately designed surface water pipe work/ culverts etc., downstream of such facilities.

If the cellular storage is located off-line, sealed and does not allow the entry of groundwater, land drainage etc., Southern Water will adopt the piped system only. The off-line facility and any connecting pipe work will remain private and any discharge from the piped system to the cellular storage will have to be covered by a deed of grant of easement for the right to discharge from the facility in perpetuity. Such facilities will have to be owned by and maintained by a management company or similar.

Cellular storage tanks will need to be located at a sufficient distance from any public sewer in their immediate vicinity to ensure that any maintenance carried out to either the sewer or the cellular storage tank, including excavation and replacement, does not cause structural or other damage. A minimum clearance of 5m is considered appropriate at planning consultation stage subject to adequate ground conditions, type and depth of asset and pipe diameter etc.

