

**When viewing the property you should quite easily be able to look at the following things that will give you some idea as to the general condition of the drains.**

1. If possible lift the covers of any drain inspection chambers on the property. Although usually lightweight and easily lifted, you might need a screwdriver to lever off the cover. On no account try to lift a heavy cover without the correct tools. Look at the chamber, if any of the following can be seen then there might be cause for concern:
  - (a) Tree roots growing in the chamber, particularly in the drainage half-channel at the bottom of the chamber.
  - (b) Water lying, rather than flowing, through the main drainage half-channel.
  - (c) Cracks or erosion in the chamber walls, the main half-channel or the concrete benching at the bottom of the chamber.
  - (d) Staining of the chamber walls which might indicate that the drains have previously been blocked and surcharged.
  - (e) Look at the drainpipes that enter the chamber (not the half-channel in the bottom of the chamber but the actual drainpipes at the edges of the chamber). If they are black in colour they are probably pitch fibre; if there are signs of previous blockages this might suggest that they have crushed, deformed or blistered – this could be very serious and expensive to repair.
2. Look at the gullies around the house. These are the traps, normally found against the outside walls, to which the various waste pipes and roof rainwater pipes discharge. There is usually one outside the kitchen, perhaps another to collect the bath and basin waste pipes and often two or three others to collect roof water. The gullies themselves are normally clayware or plastic and surrounded with concrete. Discharge from the various waste and rainwater pipes often erodes this concrete surround and this allows water to soak into the ground rather than into the gully. Poke around with a screwdriver - in the worst cases pronounced voiding can be seen. Being normally situated right against the house wall, leakage from gullies can easily undermine the house foundations and is a prime cause of subsidence. Look for any cracks in the house walls in the vicinity of gullies.

3. Look for the soil pipe, which serves the upstairs toilet. Usually the stack is on the outside wall but sometimes it is inside the house, perhaps boxed in behind a panel. Look for cracks in the wall close to the stack or cracks in the concrete around the base of the stack.
4. Are there any trees, shrubs or similar in the vicinity of the drains. Roots can travel a long way, in particular those of willow, poplar, oak and elm trees. Roots often penetrate drains, to cause blockages and to break pipes.
5. Look for cracks and settlement in paths, lawns or other ground surfaces covering the drains. Such cracks could indicate that the drains are leaking.
6. Other things to look for include:
  - (a) That rainwater pipe gullies are free flowing. Often rainwater gullies drain to soakaways in the garden rather than to the drainage system. If these soakaways block then they can be quite expensive and disruptive to replace.
  - (b) That all ancillary fittings and equipment, e.g. washing machines, bedroom washbasins etc., are connected to the foul drainage system. It is quite common to find that these kinds of appliances have been connected to rainwater gullies that run to soakaways; this is both "illegal" and undesirable. Eventually soaps, grease, hair and other debris will almost certainly block the soakaway.
  - (c) If the drains run under or close to any retaining walls, look for any signs of leakage from the drains at the lower side of the wall. You might actually see water running but stains or damp patches might indicate a problem.
7. If it is a rural or semi-rural property, the drains might not connect to a sewer but to a septic tank in the garden. If so, look out for the following signs that might indicate a problem:
  - a) Look at the ground around the septic tank, does it look like the tank has ever overflowed?
  - b) The tank is likely to be either a glass-fibre "onion" type (more likely if the property is relatively new) or a traditional brick or block built unit (more likely if the house is quite old). If the "onion" type, all that

can be seen is a small 450mm or 600mm circular shaft under a manhole cover and, on either side, a 100mm (4") vertical pipe: these are the inlet and outlet "dip-pipes" for the septic tank and if you look down them with a torch you should see the actual inlet and outlet drains coming in from the side. Check that water is not lying in the drains, they should be free-flowing. If water is lying, particularly in the outlet drain, this might suggest that the septic tank's soakaway is defective. If a traditional, brick or block built tank you should see a fairly large tank, or two tanks, when you lift the inspection cover(s). Most importantly, there should be dip-pipes on the inlet and outlet pipes. Again, if there is evidence if water laying to any significant degree in the outlet pipe it might suggest that the soakaway is defective. When you look in the tank there should be a good crust on the surface of the effluent - it will look like earth. If you cannot see a crust and instead actually see water then there is possibly a problem.

- c) All the water that enters the tank has to be disposed off; this is normally accomplished by a soakaway or irrigation drain. Ineffective soakaways are perhaps the most common problem with septic tank installations. If the soakaway, or the ground around it, cannot cope properly with the amount of water then the septic tank will normally surcharge and this in turn can cause all the drains to block and for flooding to occur. Signs that a soakaway is not working effectively include:
  - Extraneous growth of vegetation - you might see marsh reeds or very lush grass in the vicinity of the soakaway.
  - Black, perhaps foul smelling liquid rising to the ground surface.
  - Surcharging of the septic tank.
  - Septic tanks should not, in the normal event, drain into ditches, streams or rivers. Check any such watercourses in the vicinity of the tank. If you see black, perhaps foul smelling liquid then there is almost certainly a problem.

If you have any concerns following your own drain inspection, it might be worthwhile employing the services of a drainage specialist to carry out a thorough drain survey.



**WHAT SHOULD YOU EXPECT FROM A SPECIALIST DRAINAGE SURVEY?**

A comprehensive written report, including photography, which should include the following information:

1. A sketch plan showing the drainage layout.
2. A CCTV survey of all the accessible drains, i.e. all those which run directly to inspection chambers, including the main outfall drain that connects to the main sewer or septic tank.
3. Leak tests of individual drainage runs, in particular those in close vicinity of the building where any leakage could lead to subsidence.
4. Details of any noticeable defects with gullies, soil stacks, interceptor traps etc.
5. Advice as to whether rainwater gullies run to soakaways or to the main drainage system.
6. Recommendations and estimates for the repair of any defects found
7. The contractor should be allowed a reasonable period of time to programme the survey and then to prepare and post the report - we suggest about 1 week.

Drainology undertake Homebuyers' Drainage Surveys throughout the South-West

**PRICES START AT ONLY £99.00 INCL. VAT.**

To arrange a survey call  
Drainology

on

**0800 092 5065**

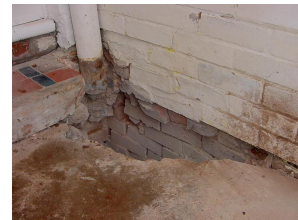
**A HOMEBUYER'S GUIDE TO DRAIN INSPECTION**



Cracked by leaking drain



Damaged by leaking drain



Foundation Damage



Cracked due to leaking drain



Dip-pipes missing



Good condition dip-pipes



Uninvited guest!!!



Eroded Gully

**A HOMEBUYER'S GUIDE TO DRAIN SURVEYS**



Collapsed drain



Dropped pipe



Drain full of roots



Drain full of roots



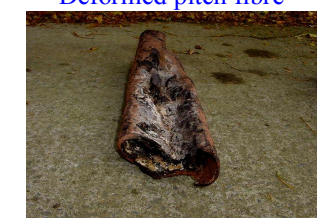
Service pipe through drain



Deformed pitch fibre



Fence post through drain



Collapsed pitch-fibre pipe