



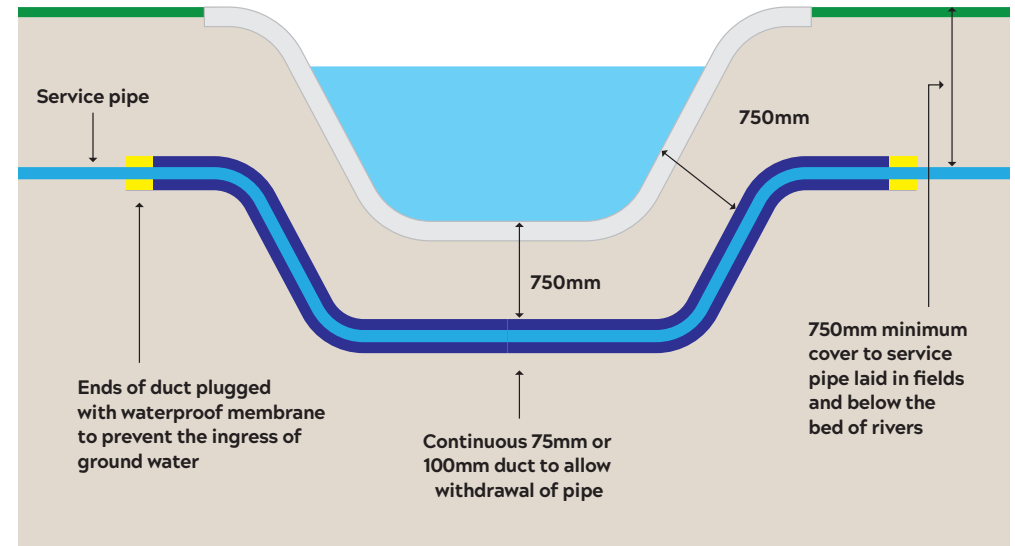
# Ditch crossing and frost protection

A guide on laying pipes  
across a river or ditch

## Laying pipes across a river or ditch

Here's a quick guide on what you'll need to consider if your plans involve needing to lay pipes across a river or ditch.

What you need to do will depend on who is responsible for the waterway.



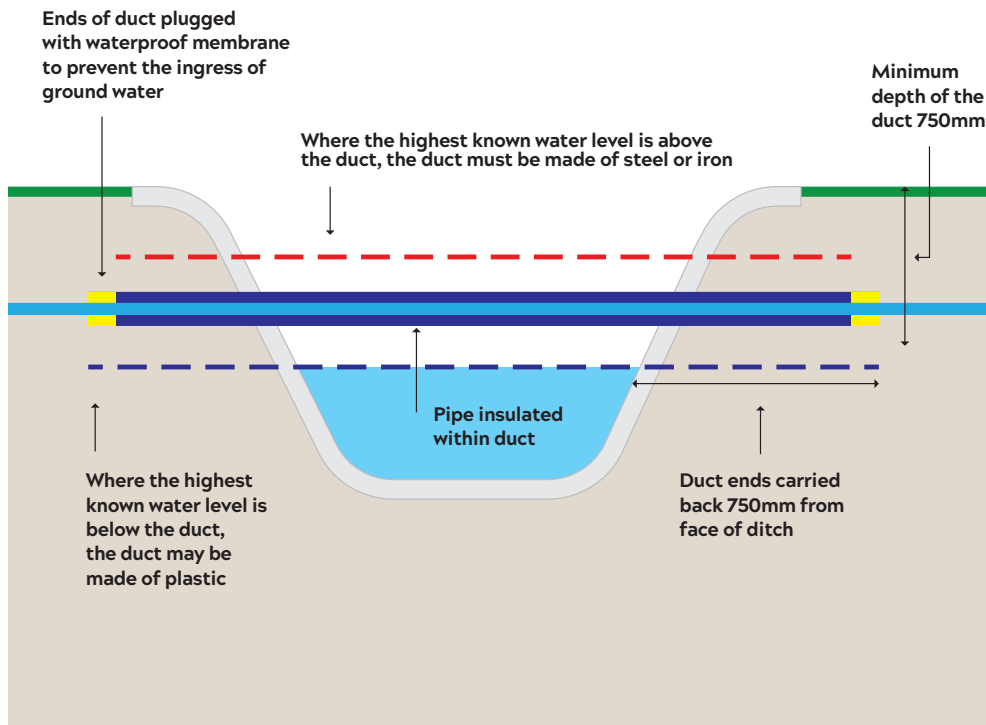
### Managed by the Environment Agency, local drainage board or other authority

If it's managed by the Environmental Agency or a local drainage board, you may find they require the pipes to be installed **750mm** below the watercourse to prevent any damage during regular maintenance work like dredging.

The pipes should be placed within a waterproof duct (**75mm-100mm**) and either sealed with a sealant that's not oil-based, or capped.

**Before starting any work, it's important to contact the agency or board in charge of the river or ditch to make sure your proposed work meets their requirements.**





### Privately owned

If the river or ditch is privately owned, you might have the option to lay the pipe through the ditch rather than underneath it.

But you still must make sure the pipe is at least **750mm** below ground level on both sides of the ditch. The pipe should pass through the ditch in a duct, which extends at least **750mm** into the ground from the ditch's edge.

If the highest water level in the ditch is lower than the duct, you can use a plastic duct.

If the water level is higher than the bottom of the duct, you have to use a steel or iron duct instead. In all cases, the duct should be sealed with a sealant that's not oil-based, or capped.

### How to protect pipes against frost

In either scenario, to make sure your water supply isn't affected during cold weather you'll need insulation for your pipes to protect against a temperature of **-10°C for 12 hours**.

As a guide, the insulation must be at least **25mm** thick for MDPE or barrier pipe. But it's good practice to consider using thicker insulation. Water Regs UK have a handy online tool to help calculate the thickness of insulation you'll need.

You should use waterproof, closed-cell insulation (like nitrile rubber or polyethylene foam) for outdoor or damp environments.

This will prevent water absorption which can stop the insulation's effectiveness.



## For further information

Please contact Anglian Water if you have any further questions about laying pipes across a river or a ditch.

Call: **0345 60 66 087** and choose option 1

Email: [developmentsservices@anglianwater.co.uk](mailto:developmentsservices@anglianwater.co.uk)

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