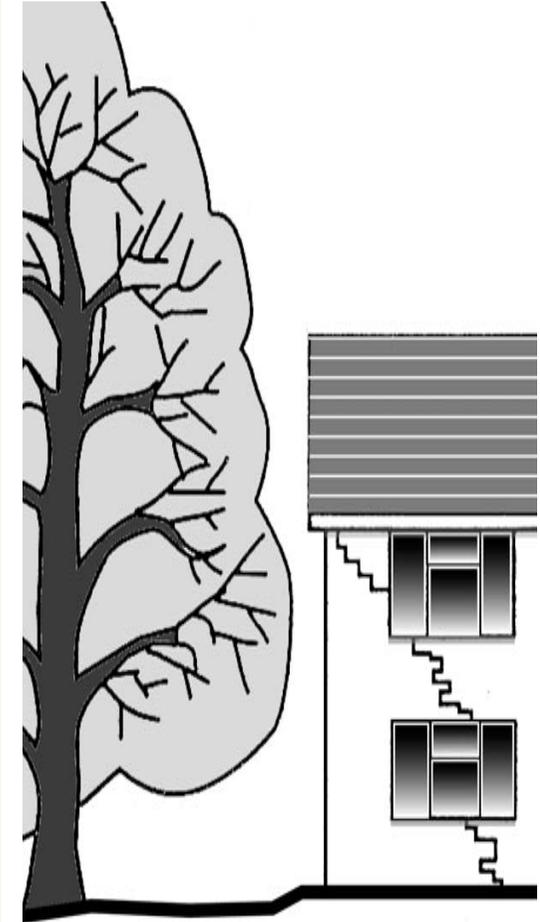


Planning conditions, tree preservation orders or works within a conservation area may make requirements for protection of trees. This may restrict building works, laying of services, etc., to ensure root damage is avoided as this might cause instability of the tree or the tree to die.

Where trees are to be removed the likely effect on the ground nearby and any adjacent buildings should be considered. If the tree has caused shrinkage of the subsoil removal can result in expansion as moisture is taken up. If heave precautions and adequate foundation depths have not been provided damage to buildings can occur.

Further information may be obtained from your Local Authority Building Control Surveyor. Guidance is also included in BS5837 1991, 'Trees in Relation to Construction', and building guarantee/warranty scheme technical manuals. When planting trees near buildings advice on their mature height, water demand and growth rate should be obtained to ensure they are suitable for the proposed location

# Trees and Buildings



# Working together to provide the Best in Building Control

Wiltshire Council

**Northern Office**

Tel: 01249 706535

Fax: 01249 460810

**Southern Office**

Tel: 01722 434519

Fax: 01722 434247

**Eastern Office**

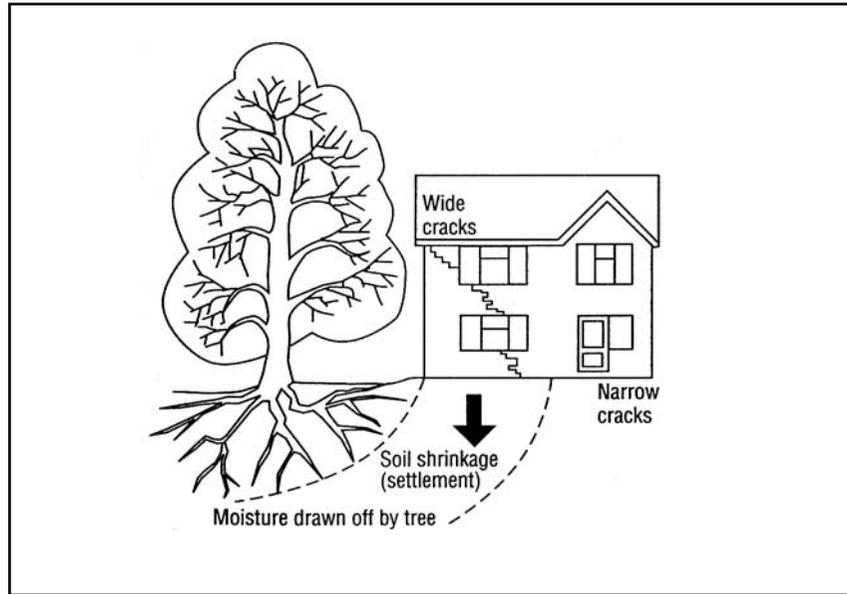
Tel: 01380 734777

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**Western Office**

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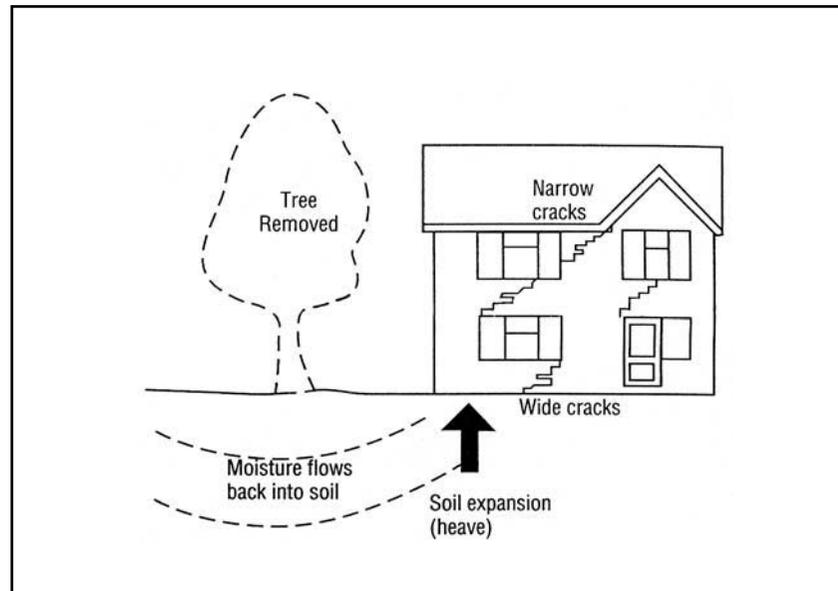
## Damaging effect of Clay Shrinkage

Trees benefit the environment, but can lead to problems with buildings if care is not taken at the planting or building construction stage.

Trees may affect the adequacy of a building's foundations depending upon the distance between them and the building, their type and height and the nature of the subsoil. Some high water demand trees such as oak, willow and poplar can affect required foundation depths to a distance of over 20 metres.

Foundation depths for new building works should be established to avoid potential problems from existing or proposed trees and to accommodate ground conditions where trees have been removed. Heave precautions are also required in certain instances. Care should be taken with tree planting and landscaping after construction to ensure separation is maintained.

## Damaging effect of Clay Heave



Clay soils expand and contract depending on their moisture content. Clay shrinkage can occur in dry weather and from moisture extraction by vegetation. Normally a foundation depth of 1 metre in clay is acceptable, as movement at this level is unlikely to cause structural problems. Where trees are sited nearby a substantially deeper foundation may be required to avoid shrinkage or heave problems.

Specific guidance on required depths of foundations should be obtained from the relevant Building Control Authority when the site conditions are known.

Shallow or light structures in any subsoil conditions may also be affected by tree root growth and should therefore take account of this. Roots can result in drainage problems, particularly in older drains where adequate protection is not afforded.