



Arboriculture Research Note

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Pre-View Cable and TV Routes

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Summary

Urban areas of Britain are currently being serviced with a network for the supply of cable television. In many instances, the service is being buried in pavements; this can result in severance to tree roots. This Note reviews the legal framework under which the cable TV companies are operating. Suggestions are made for actions that arboriculturists should take to minimise damage to trees.

Introduction

1. Many towns and cities throughout Britain are currently being serviced with cable TV networks. The operation is likely to continue for several years until the majority of urban areas are able to receive cable television.
2. The system is based on a fibre-optic cable laid, often at less than 300mm depth, in the pavement with spurs taken into individual premises as required. For engineers, the simplest and most economical installation technique is to “plough” a narrow trench into the pavement. Plastic ducts are then usually laid into the trench; the trench is backfilled and the surface reinstated. At a later date, the cable is pulled through the ducts from inspection pits. Because of the restricted width of pavements and the presence of other underground apparatus, such continuous trenches often pass close to the boles of trees, the roots of which present little resistance to trenching machines. If as a result major roots are severed, there may be very serious potential consequences for both the stability and the health of the tree. Local authority arboriculturists will then have to decide whether to prune, or to fell the tree if it is judged to be unsafe as a result of the damage.

The Legal Framework

The Cable TV Companies

3. The cable TV companies are licensed by the Secretary of State for Trade and Industry (DTI) under the Telecommunications Act 1984. Each licence holder is entitled to run telecommunication systems within their franchise area, subject to a range of conditions.

Licences

4. the licensed cable company is required to install and run a cable system capable of servicing every home in the franchise area within a specific period of time and then provide a telecommunication service to every person within the area who requests one. Depending on the number of houses within the franchise area the specified period is in the order of 5 years with annual targets. Licences granted to date cover nearly 14.5 million homes in Britain, mainly in urban areas. So far, cable capable of servicing nearly 3 million homes has been installed. However, about half of the current licence holders have yet to start installing cable. A second round of licensing will cover largely rural areas.

5. Under the terms of each licence, the cable companies enjoy a range of rights (set out in the telecommunications code which is contained in schedule 2 to the 1984 Act), including a right to install and maintain cable apparatus in streets, but subject to conditions.

Obligations

6. Licences are not mere catalogues of rights. The Secretary of State (DTI) has a duty under the Act to ensure that licences contain adequate conditions for the protection of the environment. These conditions are set out in a separate schedule to each licence, and usually include:-
 - A requirement to take all reasonable steps to secure and maintain effective liaison with street and highway authorities before, during and after the carrying out of work;
 - A requirement that before any cable apparatus is installed in the highway any representations made by a street authority in accordance with the provisions of the *New Roads and Street Works Act 1991* are considered;
 - A requirement to consult highway and street authorities and other utilities about the appropriate depth and lateral position of cable apparatus before it is installed;
 - A requirement that all underground cables are, whenever practicable installed in ducts.
7. It is essential that these measures are fully appreciated and applied in practice. Licensed cable companies, are, therefore, required to give instructions to their employees and agents on how these conditions are to be met. The Director General of the Office of Telecommunications (OFTEL) must be furnished with details of these instructions within three months of the licence coming into force.
8. Once a licence has been granted, responsibility for monitoring and enforcing all aspects of an operator's street works rests with the local planning and highways authorities.

Consultation

9. Each licence may only be granted after a period of consultation which is required by the 1984 Act. Local authorities are included in this process. The Chief Executive of each authority is invited to comment on the draft licence for their particular area. This provides an opportunity for authorities to express their views on the desirability of making provision for the protection of specific features including trees. DTI considers all comments or objections before a licence is granted.

Planning Permission

10. Licensed cable companies enjoy certain permitted development rights to install and maintain their cable systems under *The General Development Order 1988*. In practical terms, for cable systems which are installed underground, this means that planning permission is automatically granted without the need for the cable company to apply to the local planning authority.

Street Works

11. Undertakers in England and Wales (including cable companies and others executing street works) are also bound by Part III of the *New Roads and Streets Works Act 1991* (Part IV contains equivalent provisions for Scotland). The Act provides a framework for the control and co0ordination of street works which need to be carried out from time to time.

Procedure

12. Each stage in the street works process is controlled by the 1991 Act:-
 - Before carrying out any works (including boring or tunnelling under a street) the cable company must give notice to the street authority (usually the highway authority). Installing cable ducts on a rolling programme is a major operation requiring one months notice. The company is required in law to co-operate with the authority and under the terms of its licence the company must consider any representations made by the authority. Any concerns about the effect the cabling works may

have on trees should be put to the company. Any differences should be resolved in a positive and constructive way;

- Ideally, concerns should be raised as early as possible. Local Highway Authorities and Utilities Committee (HAUC) groups have been set up comprising street authorities and representatives from all utility groups. These groups meet at least four times a year to discuss work programmes; they provide an excellent forum to enable planning authorities to discuss their concerns with the cable companies (and indeed other undertakers) well before work commences.
- Street authorities may inspect street works at any stage during excavation or reinstatement of the street. A Non-statutory code of practice for inspections has been issued by the Department of Transport on behalf of HAUC. One of the main purposes of this code is to provide sufficient guidance to enable the resolution of disputes by conciliation or arbitration;
- Under the Act, undertakers have a duty to reinstate the street after they have installed their cable apparatus. A code of practice has been approved under the Act, giving practical guidance about the standards requires. The code states that “*where practicable, damage to tree roots shall be avoided*” and again in the guidance notes, “*particular attention is drawn to the need to excavate carefully where trees, shrubs and other planted areas are involved*”.

Emergency Works

13. The 1991 Act makes special provision for streamlining emergency works, but in view of the definition of emergency works given in Section 52 of the Act, it is unlikely that these will apply to the installation of cable apparatus.

Compensation

14. The 1991 Act for cable companies, as for other undertakers, to pay compensation for any loss or damage suffered as a result of their actions.

Co-operation

15. It is an offence under the 1991 Act for an undertaker to fail to comply with his duty to co-operate with the street authority.

Enforcement

16. Whether a failure to co-operate on matters relating to street trees constitutes an offence under the 1991 Act, or whether compensation rights include damage to and loss of trees is a matter for the courts to decide.

So What To Do?

17. The value- both visual and monetary- of trees along the proposed routes of cables should be assessed especially in relation to the council’s tree policy. Specific trees should be highlighted and realistic measures to safeguard them should be agreed with the street authority and the cable company. These measures might relate to hand digging or the use of trenchless technology close to trees. These techniques may be unattractive to the cable TV companies because of the cost of using specialised equipment, the need for varying depths of trenches and the problems of threading ducts under roots. Hand digging or tunnelling could also mean that lengths of pavement are disrupted for a longer time than with continuous trenching system. This may be justified if, as a result, important trees can be retained.
18. Where licences have already been issued local authority officers should:-
 - Liaise with the responsible street and planning authority officers, emphasising the implications of root damage for both the safety of people and property and the amenity of the area, and agree lines of communication so that tree officers are consulted at appropriate stages;
 - Meet the cable company at the earliest opportunity; request sight of their instructions to staff and agents; establish a flexible working relationship;

- Seek representation at local HAUS meetings. Discuss the cable company's work programmes. Make full use of the notification procedures under the 1991 Act. Even if work has already commenced, arrange for discussions with the company at the earliest opportunity;
 - Agree both with the street authority and the cable company ways of monitoring cable installation programmes and enforcing licence conditions.
19. Where licences have not been issued, much the same applies, except the following;
- Find out when licences are likely to be issued in your area;
 - In anticipation of consultation determine which trees are most likely to be affected by cable installation operations;
 - Make full use of the statutory rights to comment on the draft licence, when it is circulated by DTI;
 - Seek to learn from experiences of other local authorities who have established successful working relationships with cable companies.
20. there should be a clear understanding between the street authority, arboriculturists, the cable company and their contractors. The importance of local agreements through negotiation cannot be over-emphasised. If trees cannot be safeguarded, disputes procedures, penalties and claims for compensation may be considered but only as a last resort. At least one authority has negotiated with undertakers and recovered the costs of investigating damaged trees, site clearance and replanting.

The Future

21. Once a cable is installed the trench should not need reopening, except perhaps when a property has to be connected to the network. In these instances openings in pavements are likely to be small causing only localised damage to the roots of a nearby tree in either pavement or garden. However, special care will be needed in the routing of such spur trenches if the roots on one side of the tree have been damaged previously.
22. Where faults occur lengths of cable may have to be replaced, in the case of a ducted cable there should be no need to reopen the trench. In contrast, where there is fault in a cable that is not in a duct, or if mechanical damage occurs to a TV cable, then extensive excavations may be necessary.
23. Roots may flourish, at least initially, in the backfill material in the trench but this should not cause damage to the cables. However if a root sheaths a duct or a cable, it is possible that strong winds may result in the cable being pulled as the tree sways in the wind. In extreme cases joints in the cable may be damaged.
24. Excavations to remove tree stumps or for planting new trees may inadvertently damage or sever cables. While fibre-optic TV cables do not pose a threat to the safety of arboriculturists, this could nevertheless prove particularly costly since jointing fibre-optic cables is expensive as whole new lengths of cable may have to be re-laid.

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