



12. Services - Location, Paved Margins and Verges

12.1 General

As well as making provision for pedestrians and vehicles, most residential roads and footways provide routes for statutory and other services underground. These services are an essential and integral part of the layout and their efficiency and safety in use are vital.

When considering service provision for housing estates the following principles should be followed:

- a balance should be struck between housing, planning, highway and utility interests;
- all parties involved should work together to ensure services become an integral part of the initial design process;
- Residents' requirements for statutory services should be met efficiently and economically;
- the risk of damage to utility plant, apparatus and underground should be minimised.

12.2 Public Utilities

Public utility apparatus on residential estates should be provided in the most economic manner consistent with consumer convenience, ease of maintenance and good appearance. The developer must consult with the statutory undertakers and co-ordinate the location of mains and services during the initial design process. The developers should obtain copies of the National Joint Utilities Group publications:

- NJUG Publication No.7 (Dec.1986) '*Recommended Positioning of Utilities, Mains and Plant for new works*'.
- NJUG Publication No 10 (April 1995) '*The Planning, Installation and Maintenance of Utility Services in Proximity to Trees*'.



12.3 Location of statutory undertakers' services

The statutory undertakers prefer to establish routes for their apparatus within areas adoptable as public highway or in land to be maintained by local authorities. To minimise installation and maintenance costs and to avoid future disruption, apparatus will normally be laid in footways adjacent to the carriageway. The standard positions for services are shown in Appendix 29. Electricity and telephone cables must be laid underground for aesthetic reasons.



Figure 24 – Service margin

Trunk mains laid to large radius bends or requiring special protection should be accommodated within the local/distributor network, and should only be located within the residential areas if alternative routes are unavailable. Installations such as sub-stations and gas governor houses requiring heavy vehicle access should be located on local distributor or major access roads outside the limits of the public highway. They should be provided with sufficient parking to accommodate service vehicles clear of the highway. Some utility apparatus functions more efficiently if looped circuits can be installed, where culs-de-sac heads are linked this may provide suitable routing opportunities.

The siting of water valve boxes, hydrants, post office mail boxes and telephone boxes requires special attention and must be co-ordinated with the Statutory Undertakers and the emergency services. For aesthetic reasons all



surface boxes must be laid parallel to the line of footways/footpaths, and paved margins.

Developers should take account that services are usually laid on the side of the road fronting the most properties, and that it will be their responsibility to provide cross-carriageway ducts at agreed locations and to establish means of readily locating the duct ends.

In the event of the routes available in the adoptable highway being unsuitable, the developer must provide other land as necessary and arrange for satisfactory easements. Neither the Highway Authority nor the Local Authorities have the resources to maintain land that is required solely, for public utilities.

Where services are laid in land outside the control of the Highway Authority or Local Authority, any covenant required should be negotiated between the developer and the undertaker.

12.4 Verges and Paved Margins

On Local Distributors and Major Access Roads where verges are provided, the Public Utility companies will be discouraged from using them, so as to provide an area for tree planting and landscaping. This is to prevent large vehicular corridors being visually sterile.

If for some reason it is inevitable that some services need to be placed in verges, then the verge should be widened to accommodate them, if this is not practical then additional protection may be required to prevent root penetration of ducts etc.

Where services are to be laid in highway service verges which are contiguous with open plan gardens, the Statutory Undertakers may wish to draw specific attention to the status of the verge as a highway and to take additional measures to protect their apparatus. They may request a covenant in the conveyance to each purchaser drawing attention to the presence of their services. A recommended form of covenant is given in section 17. Any proposed changes to the form of the covenant should be agreed with the Highway Authority. As a further safety precaution, Statutory Undertakers may wish to attach a notice to each meter board warning against digging or planting in the verge and indicating the position of services.

Where paved margins (clearance strips 0.5 metres wide) are provided they must not be used for mains and cables; the exception being for household services and the provision of street lighting.



12.5 Cable Television apparatus

The developer should ascertain if a Cable Television Franchise has been entered into for the area. Should a franchise exist then the developer should ensure that all necessary ducts are accommodated.

12.6 Co-ordination

The estate layout design must reconcile the, sometimes conflicting, requirements of highway authority, public utilities and local authority, always bearing in mind that the main objective of these standards is to create a better housing environment.

Certain species of trees and shrubs in close proximity to public utilities should be avoided since their roots will cause damage, and the plants themselves will be damaged by excess excavation. Services planned near existing trees or proposed planting areas should be protected by root barrier materials or have sealed joints to prevent future root penetration.

Where possible the layout of several services should be co-ordinated and combined to reduce space, excavation and disruption. However, care must be taken to ensure the services do not conflict.

Developers must provide the public utilities with their proposals at the earliest possible stage, and the designers must consider services as a basic design element.

Each Statutory Undertaker will need copies of plans, sections, drainage and sewerage details including particulars of any underground structures or apparatus. These plans should show “start” and “finish” dates of construction phases. Street names and house numbers are needed as soon as possible. Other matters on which agreement between the developers and the undertakers should be reached are:

- programming cut-offs from any existing premises to be demolished;
- undeveloped land protection and diversion of existing service;
- providing services when routes from supply points cross;
- termination points in dwellings, entry details and meter reading facilities.

12.7 Public Sewers and Drains

The location of Public sewers and drains must be agreed with the appropriate Water Authority or the City Council who will normally require adoptable sewers to be laid within highway limits. In the case of drains catering solely



for the discharge of surface water from prospectively adoptable highways, the highway authority should be consulted.

Where practical, particularly on bends, manholes should be provided in roadside verges; this will provide a safer environment for those who need to use them, and be less disruptive for users of the carriageway.

12.8 Shared Private Drives

Developers are reminded that these will not be adopted but, dependent upon the position of the properties they serve, the statutory undertakers may require to lay main and cables, with their associated access boxes, within them. Proper and adequate protection will be required and they may also acquire a covenant in the conveyance to advise purchasers of their presence and need for access for future maintenance.