

3.9.3 Retained features will require attention if they are to survive development, continue to thrive and justify their retention. The following information must form part of any design seeking to retain existing site features:

- **ACCURATE DIMENSIONAL IDENTIFICATION ON PLAN.**  
*All features must be accurately identified on the site plan and those to be removed must be clearly indicated. The proposed development, including dwellings, services and highways, should be shown.*
- **SURVEY OF GENERAL CONDITION.** *The developer should prepare a comprehensive survey of all existing site features, and include an appraisal of the importance of each feature, its condition, the nature and extent of any repair or remedial work, and the part it will play in the completed development.*

- **PROVISION FOR PROTECTION DURING DEVELOPMENT.**  
*Most mature trees which fail to survive development do so because inadequate protective measures were taken during the course of building works. Fencing, at least out to the canopy edge, will be required prior to the commencement of works. Where buildings and structural items are retained, a full structural survey should be obtained with recommendations for protection.*

- **SUFFICIENT SPACE FOR DEVELOPMENT, SAFETY AND MAINTENANCE.** *The layout must show that sufficient space has been provided for the growth and safety of the retained feature and that buildings and gardens are orientated to avoid excessive shading.*

3.9.4 Existing features may also be subject to statutory protection. Developers must obtain any necessary consent before work is begun. Statutory protection may involve:

- *Tree Preservation Orders: Local Authority*
- *Felling Licences: Forestry Commission*
- *Conservation Area Protection: Local Authority*
- *Listed Buildings: Local Authority*
- *Scheduled Ancient Monuments: Dept. of National Heritage*
- *Sites of Special Scientific Interest: English Nature*

3.9.5 **In any event, professional assistance should be sought in retaining or removing existing features. Even where a consent has been obtained, irreversible damage could be caused, and prosecution could result, from working without the necessary understanding and experience.**



## Use of Planting

3.10.1 Form, colour, rate of growth, autumn and winter colouring, may all play a part in the overall design and will be assessed in considering any proposed scheme. A random selection of plant species is unlikely to produce an effective scheme.

3.10.2 Good quality plant material is vital to the establishment of any landscape scheme. Plants should be vigorous, healthy, free from defects and of good form.

3.10.3 The density of planting (distance from plant to plant) will dictate the speed at which the design begins to have an impact. A well-stocked area can tolerate the loss of an occasional individual without loss of effect or possibly the need to replace. Plants spaced too far apart take considerable time to develop into a pleasing state and will require higher maintenance for longer than beds which are well stocked.

3.10.4 Plants may be used to perform a number of 'tasks' in design, besides creating an harmonious and pleasing environment. These include:

- *providing privacy;*
- *shielding unsightliness;*
- *softening the visual harshness of new development;*
- *guiding pedestrians in desirable directions;*
- *preventing access;*
- *improving the appearance of car parking areas;*
- *keeping pedestrians away from moving vehicles.*

3.10.5 A variety of plant forms and species may also satisfy a number of aims. These may include:

- *shade for parking;*
- *colour, particularly in autumn and spring;*
- *height;*
- *wildlife encouragement;*
- *creating vistas;*
- *providing focal points.*

3.10.6 Large trees give a sense of scale and grandeur to a development as they mature and sufficient space must be provided for them to develop and thrive. It will not be acceptable to populate new estates exclusively with small ornamental trees. Professional advice should be sought to ensure that the specimens selected are both appropriate for the site and suitable for their particular location within it.

3.10.7 Trees planted within hard paved or impervious surfaces must be allowed adequate access to water. Herbaceous weeds and grass compete for water and nutrients, thus making the establishment of all new planting difficult - **See Appendix D.**

3.10.8 The use of bare-rooted, heavy standard trees is to be avoided unless there is a substantial maintenance commitment.

## Maintenance

3.11.1 Securing and maintaining adequate management of planting is often disregarded during the planning process. This leads to confusion over responsibility, scope of work, timing and access. It is probably the single most common cause of the failure of otherwise admirable designs. The maintenance of retained features and landscaping should be itemised and its responsibility clearly identified and agreed prior to implementation. Where the local authority is prepared to adopt areas of open space, a commuted sum for maintenance may be required. **Attention is drawn to the items listed in Appendix D.**



3.10.5. USE OF PLANTING



# INTERPRETATION OF HIGHWAY DESIGN STANDARDS

## INTRODUCTION

3.12.1 The most successful layouts are those which, from the outset, ensure equal attention is given to all aspects of design and which respect the context of the site. Mediocre layouts often arise when undue emphasis is placed upon one aspect of the design at the expense of other equally important factors.

3.12.2 In recent years this failure to take a more coordinated approach has given rise to many road dominated designs which lack interest and variety. Equally it has to be said that attempts have been made to reduce the dominance of roads, but the design and arrangement of the buildings has failed to capitalise on the opportunity. Sketches in the Guide draw on traditional street forms, giving examples of how enclosure, focus and interest may be introduced to layouts, in order to create visually stimulating residential development.

3.12.3 It is acknowledged that there has, in the past, been a lack of imaginative interpretation of road design standards. The potential for imaginative design is increased at the lower end of the hierarchy where traffic flows and speeds will normally be commensurately lower.

3.12.4 Furthermore, in conservation areas and other environmentally sensitive areas, the local planning authority has a duty to ensure new development respects the appearance and character of the area. Special care is also required where the setting of listed buildings is affected. In such locations imaginative design and thoughtful interpretation of road design standards will be required to meet such planning objectives.

## TRADITIONAL FEATURES

3.13.1 The towns and villages in Lincolnshire are varied in character. The appearance and configuration of roads are an intrinsic part of that character.

3.13.2 Roads in historic areas have a very different appearance and character to roads on new housing estates. This is in part due to their alignment, width, construction and form, and, in part, to the inter-relationship between the roads and the buildings and boundaries around them. Indeed the spaces between the buildings, in this case the roads, squares, village greens etc, are as important as the buildings themselves; it is the view from and along the street that it is seen by all and creates the strongest impression and sense of place. Some of these characteristics are illustrated in the sketches following.

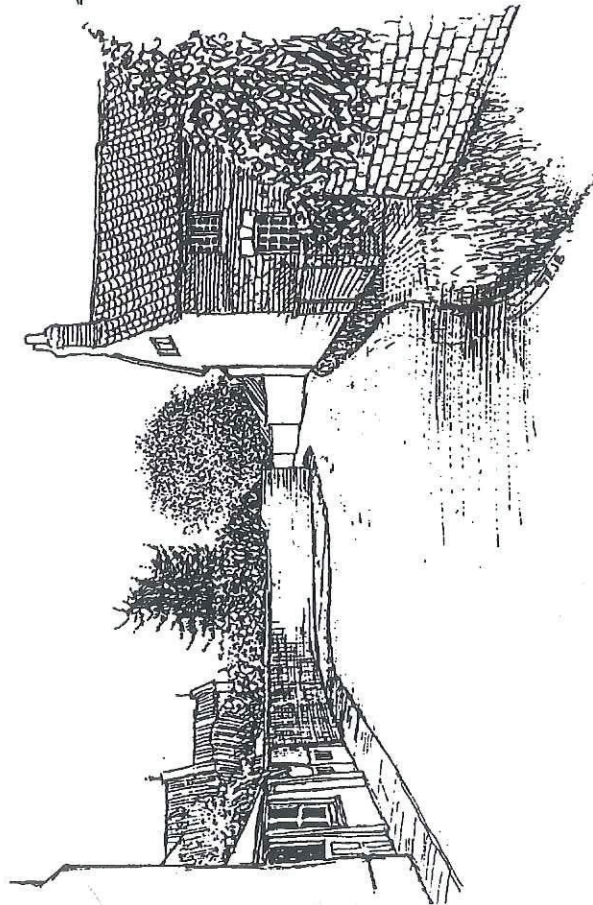
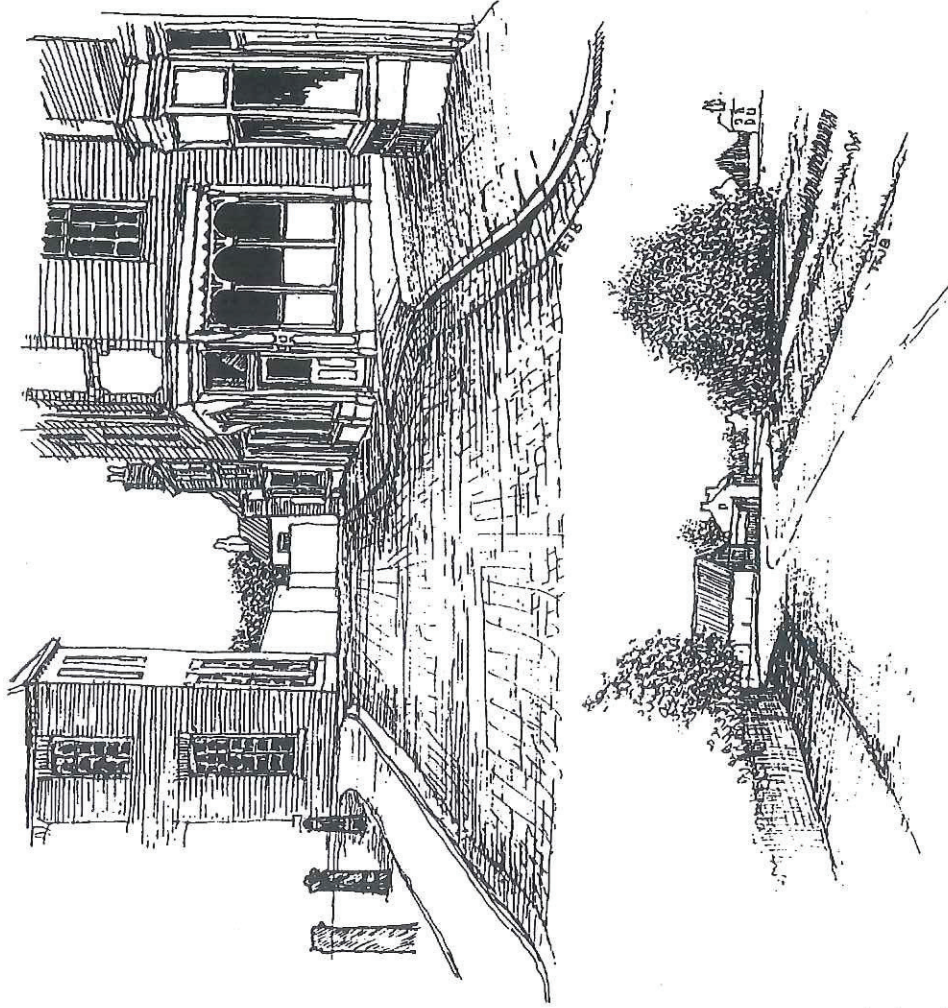
3.13.3 There is scope at the lower end of the hierarchy to reflect this tradition in a safe, secure and visually attractive environment.

3.13.4 In preserving and enhancing local character, new road design should, where practicable, reflect the form and pattern of historic roads in towns and villages. The main elements to be borne in mind are:-

- (i) *Historically, the majority of road layouts in towns and villages have evolved on an informal basis, often from earlier tracks and paths. Careful interpretation should ensure that this informality is carried through into the design of the new development. Formal, planned layouts may be appropriate in some locations, however.*
- (ii) *Carriageways, footways and verges should vary in width to fill and reflect the shape of the space formed by buildings and/or roadside boundaries.*



Hard paved surfaces such as setts, cobbles and flags are more likely to be found in historic towns.



In villages and other predominantly rural areas surfaces are more likely to be bituminous with or without surface dressing.

**CARRIAGEWAYS, FOOTWAYS AND VERGES VARY IN WIDTH TO SUIT THE SPACE AVAILABLE UP TO ROADSIDE BOUNDARIES OR BUILDINGS.**

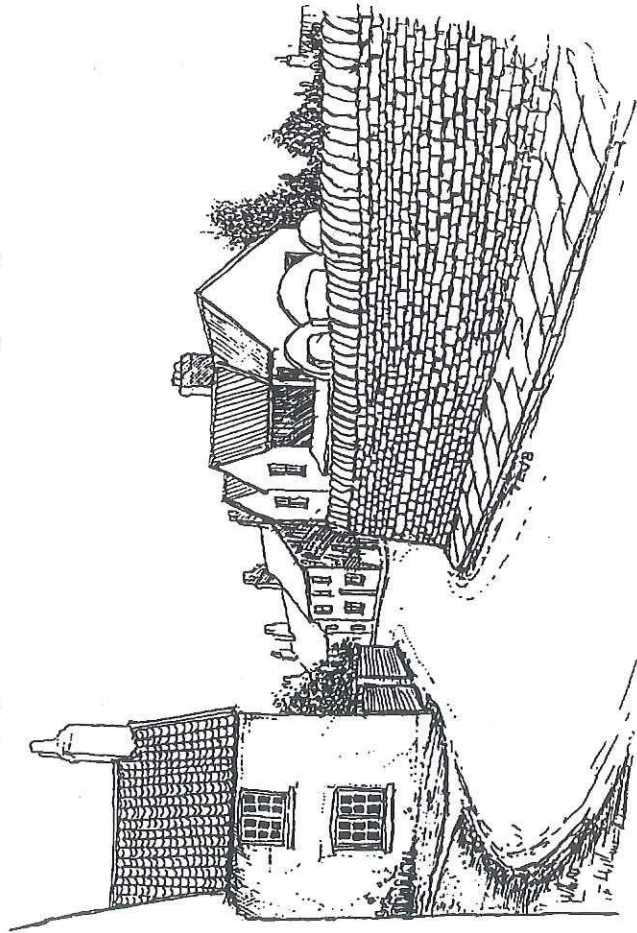


- (iii) *Visibility lines can be accommodated by widening roads or incorporating wide verges on the approach to a junction. This will often emphasise the buildings at the junction which then form a focus to views down the road.*
- (iv) *The informal manner in which village streets have evolved over the years often results in junctions occurring on bends with varying junction radii. Whilst recognising that the design of today's junctions into residential developments must cater safely and adequately for the movement of the traffic generated, there may be scope for incorporating such informal design elements, provided the safety of pedestrians and drivers is not compromised.*
- (v) *The majority of traditional village streets have evolved to form minor through routes rather than culs-de-sac, thereby reducing the circumstances where vehicle turning spaces are required. In new designs, through routes may therefore be more appropriate than culs-de-sac. Where turning spaces are required, they should complement the design and blend with the appearance and character of the area, bearing in mind the turning manoeuvres set out at paragraph 3.15.4.*
- (vi) *Where a junction onto a minor access road results in the secondary road having a length of 40 metres or less, vehicles can be expected to use the junction as a turning head.*
- (vii) *Not all village streets are served by footpaths. On some busier roads and/or where visibility is restricted, it may prove necessary to provide a footway if requested. However, there are circumstances as set out in Chapter 6, where either a single footway or shared surface will be acceptable in new development - to suit the character of the locality while satisfying highway safety requirements.*

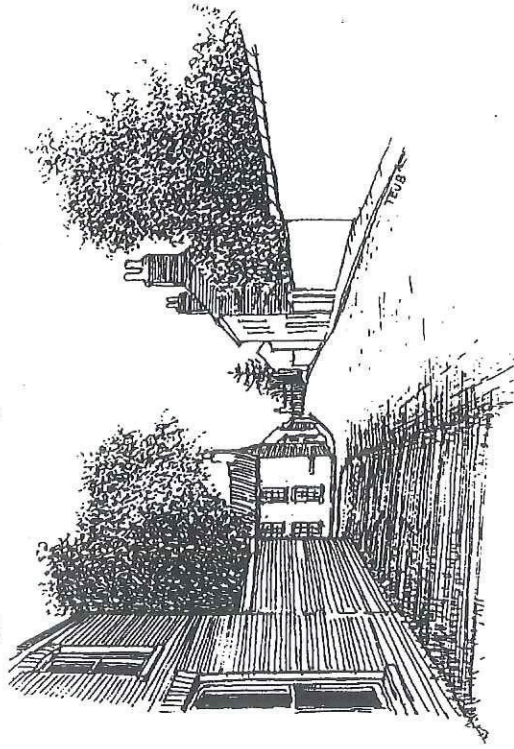
- (viii) *Approaches into towns and villages are often emphasised by buildings at right angles to the road forming, in essence, a 'gateway'. Careful design can emulate these features in new development, possibly to complement carriageway narrowing as part of a speed reduction proposal, without compromising visibility or other highway safety requirements.*
- (ix) *Informal groupings of houses are often emphasised by buildings at right angles to the road. As above, this could coincide with a narrowing of the carriageway. Such design elements can be incorporated in new development provided the safety of pedestrians and drivers is not impaired.*
- (x) *Where the linear form of the road is to be softened visually, carriageway construction that utilises dark coloured small unit kerbs may be appropriate. Where the footway is separated from the carriageway by a verge, small unit kerbs can be taken around the edge of the drive, up to the footway. The visual effect of this contrasts markedly with the normal practice of carrying the line of the (dropped) kerb straight along the edge of the carriageway. Whilst this would not entirely replicate older village streets with no footways or carriageway edge restraint, it is likely to be more sympathetic than a standard precast concrete kerb.*
- (xi) *Where materials, other than those specified in the guide, are proposed to be used, for example in conservation areas and sensitive rural areas, these will be investigated on a site specific basis, as set out in Chapter 4.*
- (xii) *In most historic towns and villages roadside boundaries are defined by brick or stone walls or by hedges or occasionally railings. The choice of boundary treatment in new development*



Cottage forms focus and creates 'gateway'

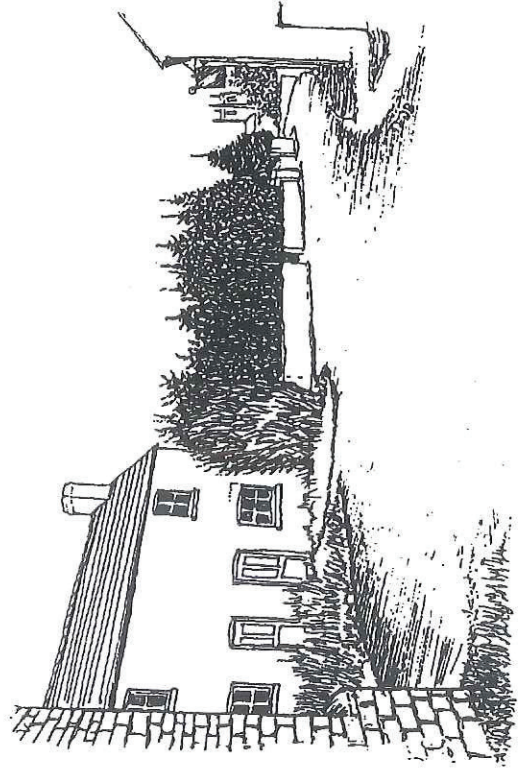


Houses on opposite sides of a junction form focus to views



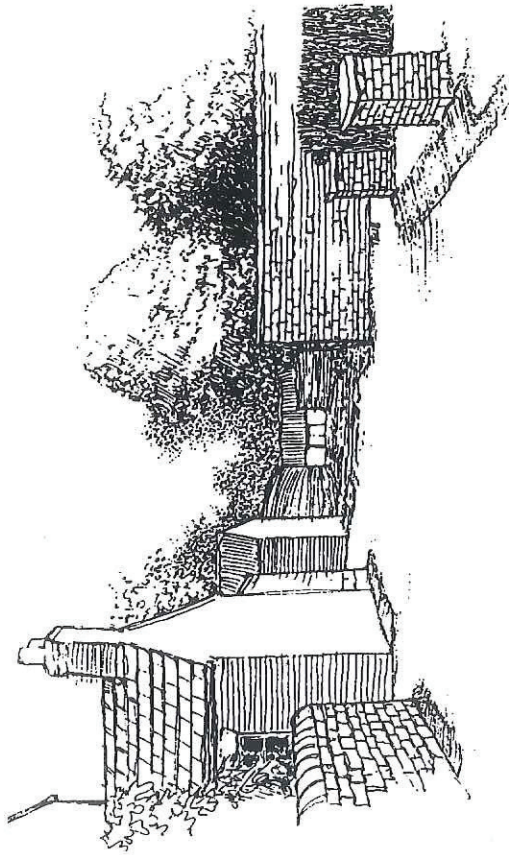
Simple wide verge provides visibility and strengthens rural character

Roadside boundaries are predominantly defined by walls or hedges.

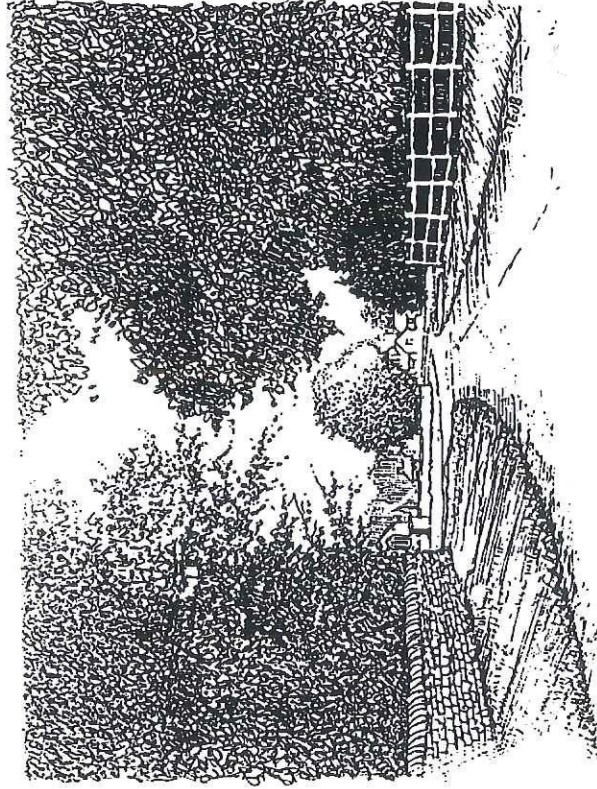
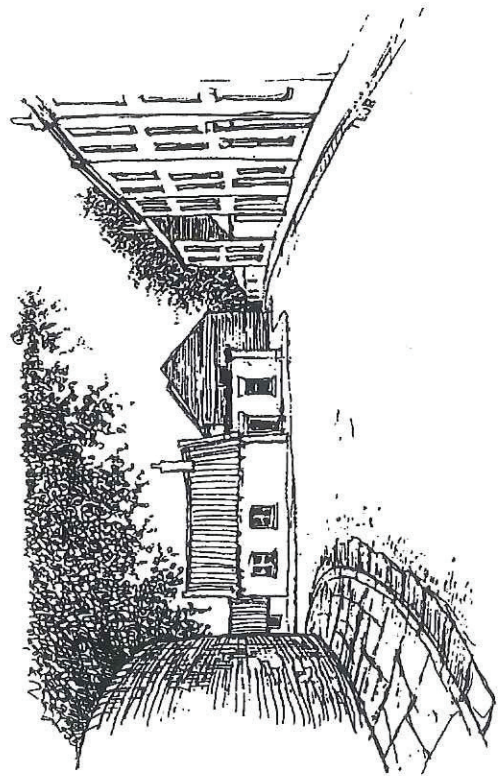


BUILDINGS, PARTICULARLY IN VILLAGES, ARE OFTEN GROUPED INFORMALLY. AT JUNCTIONS BUILDINGS MAY BE SITED TO FORM AN EYECATCHING FOCUS TO VIEWS. AS PART OF THE STREET SCENE THEY MAY FORM 'GATEWAYS' OR 'PINCH-POINTS'. HOUSES SITED THIS WAY MAY HELP SLOW TRAFFIC SPEEDS AND IMPROVE SECURITY.



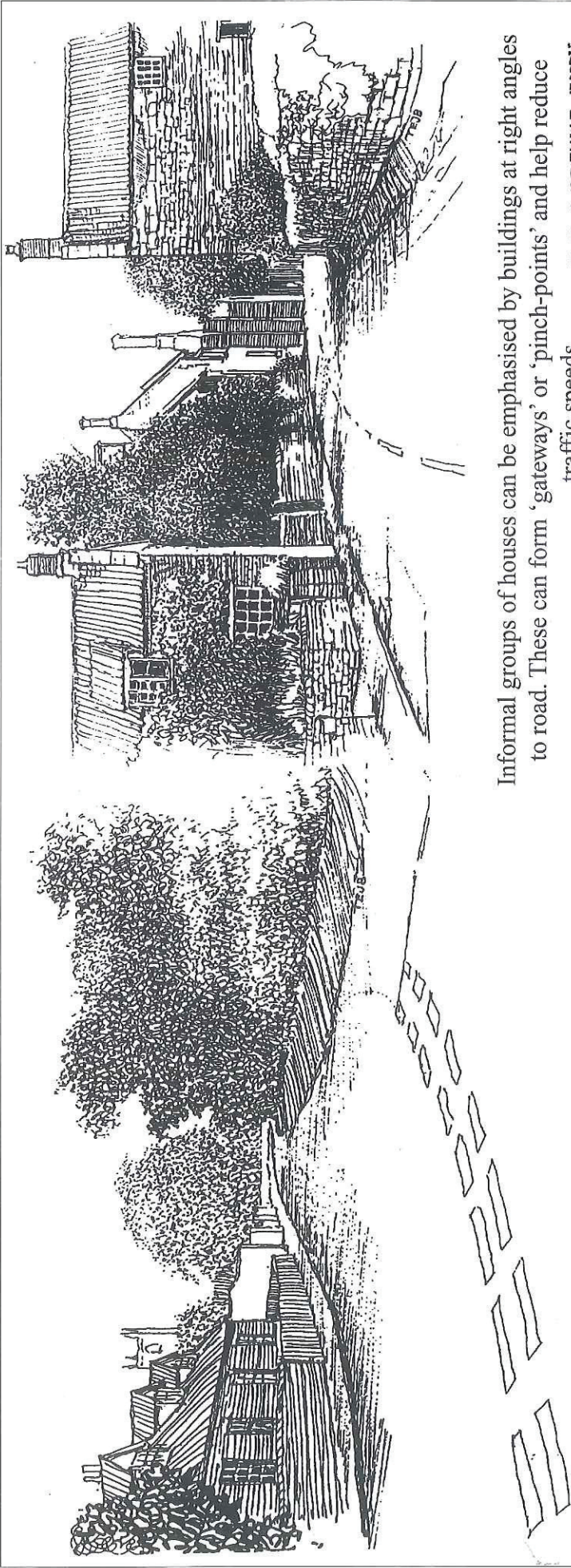


Roadside boundaries in historic towns and villages are predominantly defined by walls or hedges



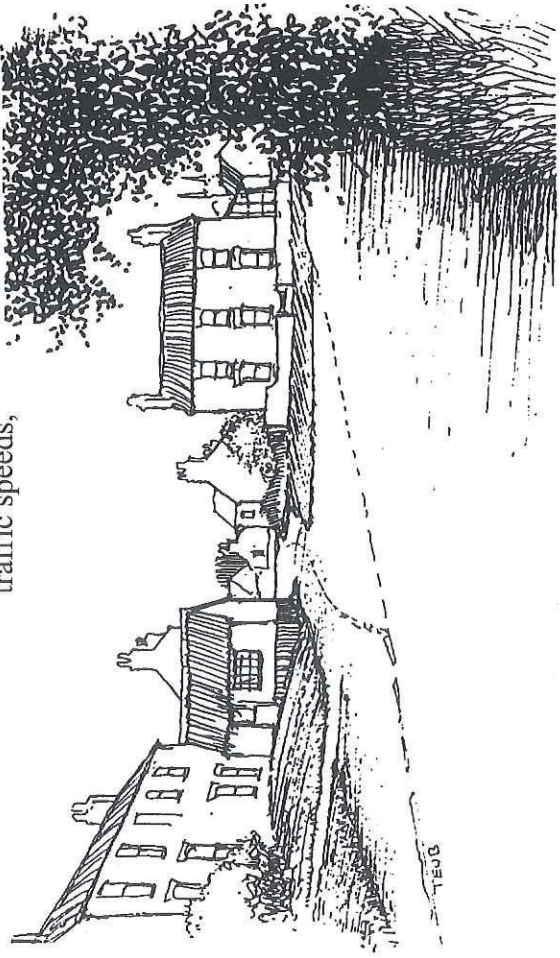
TURNING AREAS BLEND IN WITH THE APPEARANCE AND CHARACTER OF VILLAGES AND CAN BE EITHER 'HARD' URBAN SPACES OR 'SOFT' RURAL SPACES





Roads and lanes often broaden out at junctions which assists visibility and turning manoeuvres.

Informal groups of houses can be emphasised by buildings at right angles to road. These can form 'gateways' or 'pinch-points' and help reduce traffic speeds,



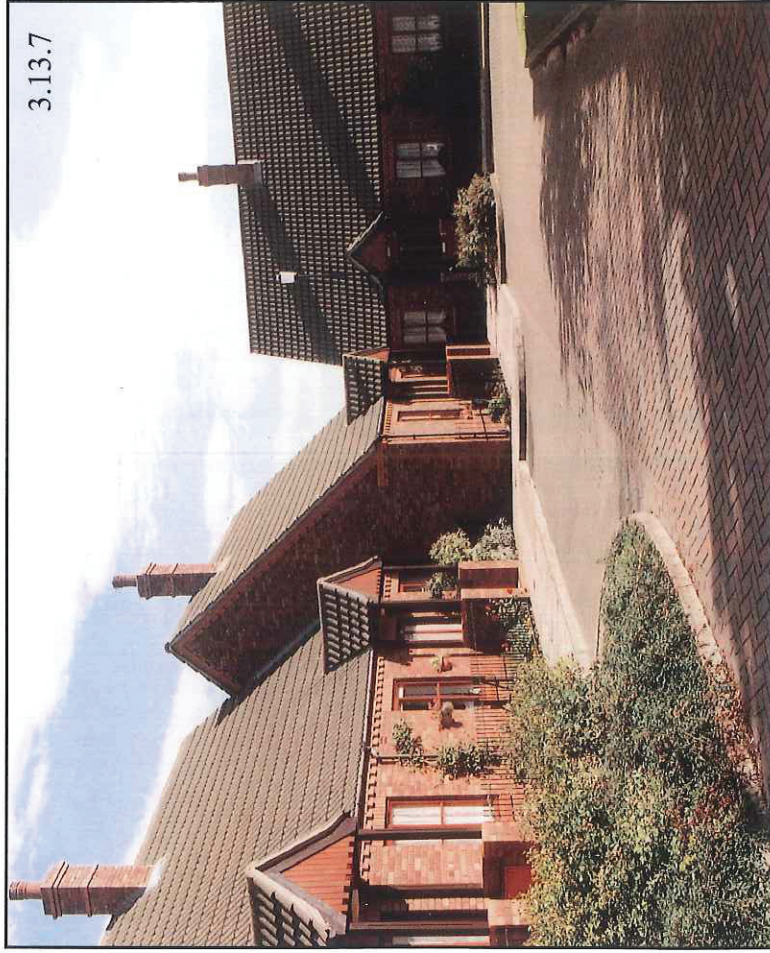
ROADS IN VILLAGES OFTEN HAVE SOFT EDGES AND NO FOOTPATHS. VERGES VARY IN WIDTH.

*should reflect the nature of the area, local materials and the status of the property.*

**3.13.5** The intention here, therefore, is to introduce more variety than hitherto and to maintain a strong continuity of local tradition in the interpretation of road design standards. The aim is for a holistic approach, incorporating the design parameters for roads, footways, verges and turning movements into the overall concept for the site - rather than becoming the dominant feature of the development with everything else being 'bolted on' around the road design.

**3.13.6** Where a conservation area, a listed building, or an archaeological feature or site forms the setting for proposed residential development, additional emphasis will be placed on the achievement of a sympathetic form of development. Only those proposals which pay special attention to the special architectural, historic, or archaeological context will be acceptable to the local planning authority.

**3.13.7** Positive commitment to a sensitive, creative and thoughtful development package, combining design, grouping and layout with appropriate landscaping and materials will, therefore, be sought to enhance the appearance and character of the locality. Layouts and designs which ignore this approach to highway standards will be unacceptable to the local planning authorities.



# HIGHWAYS

## DESIGN CONSIDERATIONS

3.14.1 The design parameters for residential estate roads and the hierarchical approach to their layout set out in Chapter 6 of this guide are similar to the parameters suggested in Design Bulletin 32 (Second Edition), Departments of the Environment and Transport. This guide and DB32 share a common philosophy in respect of requirements and recommendations for the layout of roads and footpaths in new residential development, aimed at achieving an environment which is attractive, convenient, safe and economical to construct and maintain. The guidance and standards given are drawn largely from experience gained and standards derived over many years. The local authorities will need to be satisfied that any proposals for departure from this guidance will not compromise the interests of highway safety, nor the requirements of any other legislation administered by the appropriate authority.

## THE ROAD LAYOUT

3.14.2 The general layout and design of development roads should comply with the hierarchy set out in Chapter 6 of this guide. Application of the hierarchical approach will help ensure that, at the lower end of the scale, the impact of traffic upon residents will be minimised, particularly in respect of non-local traffic. However, it may not be possible or desirable to conform in all respects with the hierarchy, particularly in relation to the nature of the existing road from which the site is to be served - say for some small sites, or extensions to existing developments. In such circumstances the developer should consult both the local planning authority and the highway authority in

order to establish an acceptable solution, particularly for junction standards.

3.14.3 The design of the road layout should reflect the anticipated vehicle usage and the impact this may have on residential amenity and highway safety. The layout of residential roads should discourage their use by non-access traffic - which should be directed onto distributor roads. This may be achieved, for example, by the use of culs-de-sac and short loops, designed to moderate the speed of local access traffic, and incorporating speed reduction measures as appropriate, to minimise the risk of accidents.

3.14.4 In order to further minimise traffic hazards and the impact of noise and vehicle emissions, layouts should incorporate dedicated routes for pedestrians and cyclists, connecting with adjacent developments or phases of the same development. These routes should be sufficiently safe and attractive to encourage residents to leave their cars at home, and should provide convenient access to bus stops. On larger developments it should be possible for public transport to pass within reasonable walking distance of all dwellings. Both the local planning authority and the highway authority should be consulted at an early stage over likely bus routes and potential bus stopping places.

3.14.5 It will be necessary to provide adequate facilities for emergency and service vehicles to gain access to the development. It should normally be possible for a refuse vehicle to approach to within 25 metres of refuse collection points in the curtilages of individual dwellings and to within 9 metres of refuse storage points in flats and other communal facilities.



## LAYOUT GUIDANCE

3.15.1 Within the framework of the estate road hierarchy there may be a need for interpretation of the highway design parameters, where site constraints demand innovative layouts. The highway authority will need to be satisfied that the new highways will be laid out and constructed in such a manner that they are appropriate for future adoption.

### Number of Dwellings Served

3.15.2 The maximum number of dwellings which may be served by any road within the estate road hierarchy will be the cumulative total of dwellings gaining direct access to that road plus all other dwellings served by any other estate roads having junctions onto it. There may be circumstances where the maximum numbers of dwellings indicated in the hierarchy descriptions will be reduced due to existing development elsewhere on, or adjacent to, the proposed development roads.

### Looped Road Layouts

3.15.3 A loop road will normally comprise two points of access from the adjacent road network and the looped road layout should conveniently connect between these points. Alternatively, a loop may comprise a circuit with a single stem of the shortest practicable length. In order to maintain emergency access to the loop, should the carriageway of the stem become blocked, a verge of at least 3 metres width will be required between the carriageway and one of the footways. Direct vehicular accesses to dwelling curtilages along stems may be restricted in order to permit the free flow of traffic to and from loops. However, where they are permitted they should normally be shared and incorporate a turning space to enable vehicles to enter and leave the dwelling curtilages in forward gear.

