

Part Two

DETAILED DESIGN

2.1 Materials

The site analysis and design process will have highlighted possible appropriate materials.

2.1.1 General Considerations

These should include:-

- (a) use of materials which provide satisfactory level of safety;
- (b) use of natural materials is preferable to man made products in most instances;
- (c) the use of materials tried and tested elsewhere;
- (d) use of local materials wherever possible;
- (e) the use of environmentally sustainable materials from a known source;
- (f) use of recycled materials from a known source;
- (g) the use of approved British Standard materials manufactured under a Quality Assurance system;
- (h) weathering characteristics and life expectancy of material;
- (i) availability of replacement materials;
- (j) ease of future maintenance and reinstatement;
- (k) ease of extending the design into adjacent future schemes.

2.1.2 Specific Considerations

Ensure that the individual details of the scheme have been resolved before starting work on site as these are essential to its success.

These should include:-

- (a) Whether the layout details are simple and practical?

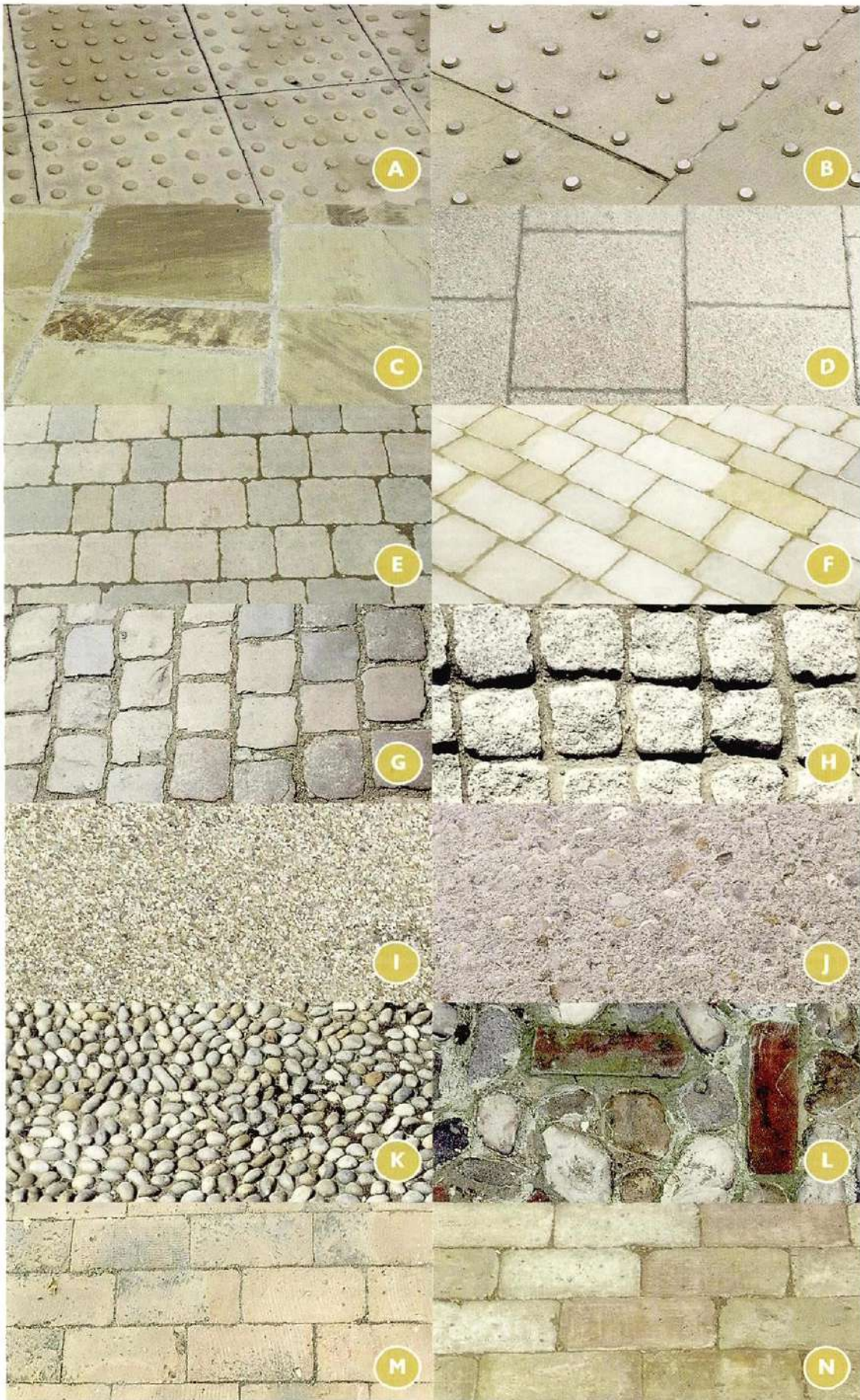
- (b) Is sufficient construction depth available?
- (c) Does the layout affect drainage?
- (d) Is re-use of existing good quality materials possible?
- (e) Use of materials which are appropriate and durable.
- (f) Defining uses of space with different colours, textures and patterns.
- (g) Use of textured materials to prevent slippery surfaces.
- (h) Can the products be adapted or cut around radius kerbs and covers or along frontages?
- (i) Can a neat and effective detail be achieved for drainage requirements?
- (j) Will routine maintenance problems occur, for example with mechanical sweepers removing sand around blocks?
- (k) Are products suitable to assist and guide those with special needs? For example, whether it is appropriate to use tactile slabs at road crossings.

A list of materials that have been used in the conservation areas of the County is included in Appendix C and information on carrying out a Local Agenda 21 audit is attached as Appendix D of this document.



Materials - a subtle palette of materials was used in North Street in Sudbury (above)

Materials - examples of some materials that have successfully been used in Suffolk's Conservation areas are shown opposite



KEY

- | | | | |
|--|---------------------------------|--------------------------------|--------------------------|
| A Tactile paving in Yorkstone | D Precast concrete slabs | H New grey granite sets | L Flint and brick |
| B Tactile paving with brass studs | E Precast concrete sets | I Surface dressing | M Red brick |
| C Riven Yorkstone | F Yorkstone sets | J Insitu concrete | N White brick |
| | G Old pink granite sets | K Cobbles | |

2.2 Street Furniture

2.2.1 Reducing Clutter

- (a) The possibility of reducing the amount of street furniture in an area should be investigated and any inappropriate, redundant or unnecessary poles, signs, bins, etc., should all be removed and reused or recycled wherever possible.
- (b) Existing historic street furniture such as bollards, lights, drinking troughs, pumps, metal drainage channels and covers, milestones, memorials, red telephone boxes, post boxes, old directional signs and so on, can make a major contribution to the local scene. They should be retained in their original locations wherever possible, or if not, should be re-sited as part of any scheme.
- (c) The uncluttered nature of many streets in Suffolk's conservation areas adds greatly to their charm. It is important that this character is maintained. In most instances, therefore, the provision of alien features, such as planting boxes and unnecessary bollards, should be avoided.
- (d) Clutter in the street scene can be reduced by making individual items of street furniture multi-functional. For example, a post can act as a bollard as well as supporting a traffic sign. The design and colour of posts and bollards can be matched if road safety is not compromised. Traffic signals and signs can be fixed to lamp columns; lamps and signs can be fixed to buildings, or walls. (See section on signs).

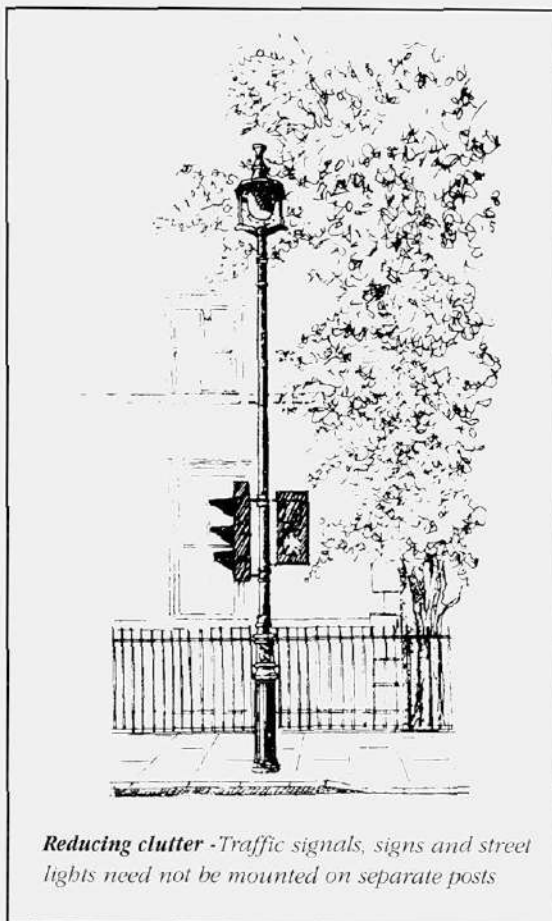
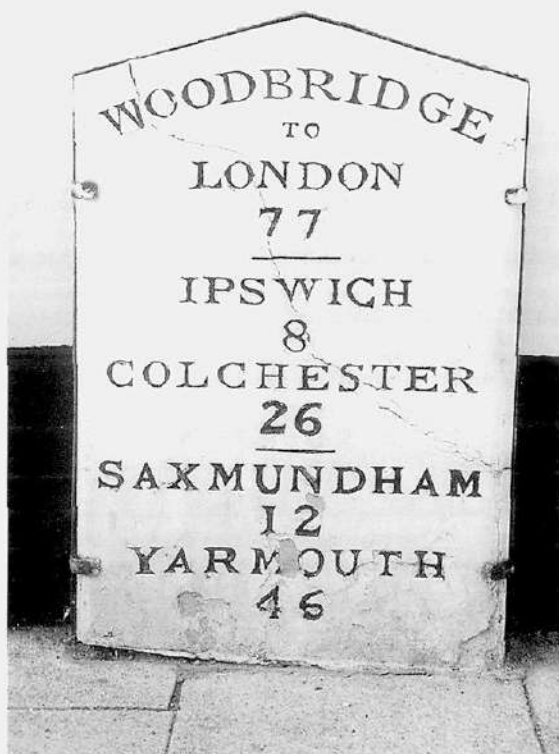
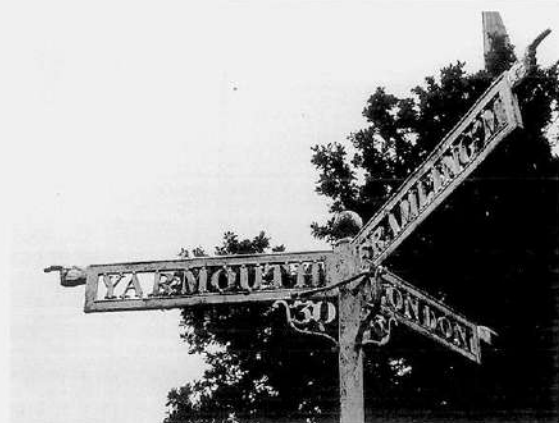


Reducing clutter -

"The uncluttered nature of many streets in Suffolk's conservation areas adds greatly to their charm." (above Rickingball and Botesdale)

Historic street furniture -

Existing historic street furniture should be retained



Reducing clutter - Traffic signals, signs and street lights need not be mounted on separate posts



2.2.2 Choice of Street Furniture

- (a) New street furniture should be part of the overall design concept; not added as an afterthought. It should be carefully integrated into the overall street scene in an unobtrusive manner.
- (b) In most cases street furniture should relate to other adjacent areas, helping to visually link together different parts of the conservation area and possibly acting as a coordinating theme throughout the area.
- (c) Street furniture should be of an appropriate material, design and size for its location. In villages the design should be simple, for example square oak posts may often be more appropriate than cast iron. In urban areas it may be that more elaborate styles can be accommodated, although "heritage" styles such as heavy, decorative Victorian types are unlikely to be appropriate in many locations in Suffolk.
- (d) Care should be taken when choosing street furniture from manufacturers' standard catalogues because many "heritage" products are a poor pastiche of original designs. It should not automatically be assumed that an "off the shelf" item is the only or best solution. Traditionally, in the past, much of the street furniture in conservation areas would have been made locally by craftsmen. It is often possible for simple designs to be specially produced in metal or wood for bollards, railings, seats, cycle racks, etc. This adds originality and local character to the scheme and is more environmentally sustainable.
- (e) Wherever possible schemes of highway/environmental enhancement should make special provision for cycle racks. Careful consideration should be given to the type and design of racks and the floorscape around them because they can form a particularly prominent feature in the street scene, especially when they are grouped together.
- (f) Where guard rails are required to protect pedestrians from vehicular traffic these should normally comply with current DoT standards. However, a wide variety of designs is now available. Given their strong visual impact every effort should be made to select designs which are compatible with the traditional character of the street.
- (g) In many areas, especially in the countryside and in villages, tubular metal rails supported on concrete posts all painted white have been traditionally used in the County as guard rails on bridges, alongside streams or as simple handrails alongside steps. Their continued use in appropriate locations will be encouraged.
- (h) Traffic calming measures can often involve the introduction of new street furniture in the street scene. Care should be taken to ensure that the type and design is sympathetic to the character of the area and does not create additional pollution from queuing traffic. In and around villages, for example, appropriate "gateways" can be created by using traditional timber picket fencing or white painted concrete posts and tubular metal rails. In such locations simple oak posts may be preferable to metal bollards. For sites with a more urban character more formal, permanent looking structures should be considered.

2.2.3 Location of Street Furniture

- (a) All street furniture should be located sensibly where it will be used and have the most effect. Any item of street furniture should also be sited so that it fits in harmoniously with the overall character and appearance of the street scene.
- (b) Objects placed in the street should not impede movement or create an obstruction. The needs of the disabled and those with mobility problems should be fully considered.

Choice of street furniture -



Co-ordinated street furniture recently installed in Eye.



Locally made wooden signs in Rickingham and Botesdale



Seat and litter bin in Mildenhall



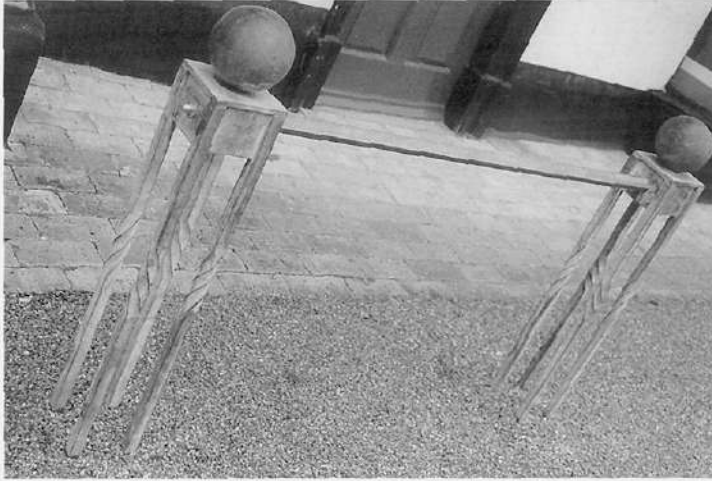
A simple wooden cycle stand



Not all street furniture in conservation areas have to be black and gold! This red colour was chosen for Sudbury.

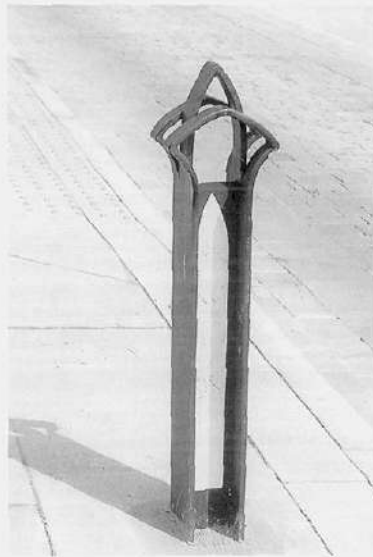


Choice of street furniture -



A metal cycle stand made by local craftsmen in Woolpit

Bollard and railings in Bury St Edmunds



Pedestrian barriers in Aldeburgh made by a local blacksmith

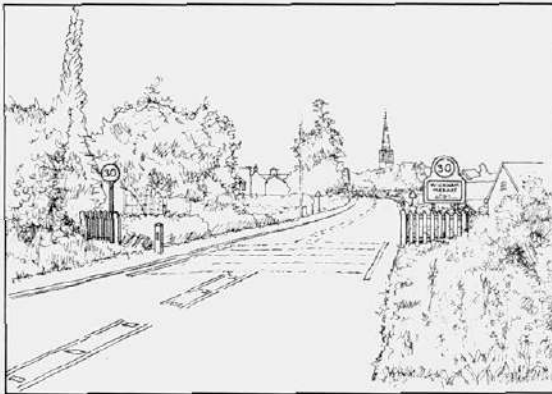




Simple black bollards in Mildenhall



Wooden posts and plain metal post and rails are appropriate to the character of Ixworth



In and around villages appropriate "gateways" can be created using traditional timber picket fencing or white painted concrete posts and tubular metal rails.

(Wickham Market above
Peasenball right)



White painted concrete posts and metal rails have been traditionally used in the County as guard rails on bridges, alongside streams etc. This example is in Grundisburgh

2.3 Planting and Soft Landscaping

2.3.1 Retaining Existing Landscape Features

(a) The retention of existing trees, hedges, shrubs and highway verges should be an important consideration in the design of any scheme. Retaining such features may impose constraints on the design of a new scheme but will positively add to its visual and ecological quality.

(b) Existing landscape features may be afforded statutory protection. These include:

- **Tree Preservation Orders (TPOs)** – consent would be required from the relevant Local Planning Authority or from the Department of Environment, Transport and the Regions for work which will affect any tree covered by a TPO. Although the consent of the Authority is not required if the trees are dead, dying or dangerous, they must be informed.

- **Conservation Areas** – automatic protection is afforded to any tree over 75mm in diameter (1.5m above the ground) located within a conservation area. Six weeks prior notification to the Local Planning Authority has to be given for felling or pruning. There are limited exemptions for certain (but not all) statutory undertakers, who can carry out work for safety purposes.

- **The Hedgerow Regulations 1997** – some hedgerows are now protected under this legislation and consent for their removal would be required from the Local Planning Authority even if the work was permitted development under the General Permitted Development Order.

(c) Where existing trees and shrubs are to be retained great care should be taken to afford them adequate protection (including protecting them from any potential damage that might be inflicted when the work is being undertaken). Kerbing and the laying of hard impervious surfaces can cause root damage or alter the water supply to the tree or shrub. Much damage can also be caused by digging trenches for foundations or services. Existing soil levels around the tree or shrub should be maintained. Reference should be made to the relevant British Standards (BS 5837 Trees in relation to Construction, and BS 3998 Tree Work). Work should also adhere to the guidelines issued by the National Joint Utilities Group for the “Planning installation and maintenance of utility services in proximity to trees” (NJUG10).



(Sudbury)

(d) Established highway verges and indigenous hedgerows, are important not only from a visual point of view but also as an ecological resource. With proper management and vegetative cover they provide a valuable wildlife habitat. The County Council has, in conjunction with the Suffolk Wildlife Trust, designated a number of verges as “Protected Roadside Nature Reserve” and these appear on the County Wildlife Sites Register. For each of these sites there exists an agreed programme of maintenance.

(e) From an aesthetic point of view, kerbing highway verges in the countryside and in villages, especially commons and village greens, should be avoided wherever possible.

Protecting existing landscape features -



A protected roadside verge at Great Blakenham



Erosion of village greens can be a major problem (Orford)



Using posts or kerbs (preferably granite) is sometimes the only solution

At Dunwich the green outside the church has been protected just by banking the edge



before....



and after

2.3.2 Design of New Landscape Schemes

- (a) Decide whether or not any form of planting is necessary or appropriate.
- (b) In some instances the introduction of new planting can significantly enhance the character and appearance of spaces in conservation areas. However, if planting schemes are to be undertaken they should be carefully considered and properly designed as part of the overall concept for the space. The tendency to consider that an appropriate landscaping scheme can be achieved by planting a few trees or shrubs in an arbitrary fashion is inevitably a mistake. Planted areas should be given the same careful consideration as surface finishes or street furniture.
- (c) Trees and planting can sometimes be used to improve the character and appearance of a space:
 - in an architectural way, for example, framing views, screening, or to provide a focal point in a space;
 - to change the character of a space by softening the overall impact of hard surfaces, to provide a more natural contrast, or to visually 'break up' the straight lines and hard edges of structures and buildings;
 - to recreate or reinforce traditional landscape features and habitats, e.g. hedge planting and the creation of roadside verges.
- (d) A planting scheme should be appropriate to the character of the space whether it be formal or informal. Regimented formal flower beds in raised brick planters for instance are inappropriate for an irregular, unplanned space surrounded by traditional vernacular buildings. Similarly, new tree planting will often appear quite out of place in narrow Medieval streets and spaces which have a hard urban quality.

2.3.3 Technical Aspects of Landscaping

- (a) The type, species and eventual size of trees and shrubs need to be carefully considered. A balance should be struck between creating an immediate impact and what the scheme will look like in the longer term. The impact of seasonal changes should also be considered. Indigenous species are preferable and should wherever possible be from a local source.



(Ipswich)



(Bury St Edmunds)

- (b) Certain other important criteria should be given adequate consideration in order to achieve a successful design, these include:-

- highway visibility and safety
- maintenance implications, including costs and responsibility

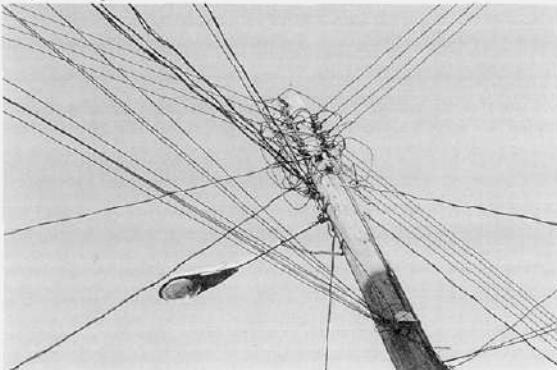
- soil types
- levels
- drainage (too much or too little water)
- location of services
- providing temporary protection or watering systems in order to allow plants/trees to become established
- certain plants can sometimes be used to help prevent vandalism, for example species with thorns
- the implications of autumn leaf fall
- trees can provide shade. On hot days this can be beneficial but take care that they do not cause problems by overshadowing adjacent buildings and spaces
- plants should be appropriate to the environment. Some trees will not survive if surrounded by hard surfaces; with others their growth may be too vigorous. The effects of spreading salt during winter months should be taken into account
- some species can create a nuisance by, for example, dropping sticky substances or fruits onto paving, cars and seats. Sometimes bird droppings can also be particularly problematic
- tree roots can cause damage to hard surfaces, services and foundations
- trees can have an adverse effect on clay soils due to water extraction
- no peat based products should be used in any planting schemes

2.4 Lighting

2.4.1 Importance of Lighting

- (a) Decide on whether or not lighting is necessary or appropriate. New or additional road and footway lighting can have a major impact upon the character and appearance of a conservation area. In many towns and villages, especially those with a "rural" character, high levels of night-time illumination are visually and environmentally undesirable, as is the impact of numerous lights and lighting columns. This, however, has to be balanced against the advantages in terms of highway safety and personal security. Consideration should be given to specific lighting problems rather than undertaking full road lighting schemes.
- (b) Before embarking on a scheme which involves altering existing lights or the provision of new lights, advice should be sought from the County Council's lighting engineer.
- (c) In some areas especially those which have a more urban character, sensitive lighting with appropriately designed and located equipment can be beneficial to the character and appearance of a conservation area. The colour and intensity of light can be controlled to produce the desired effect. Features can be highlighted, important and attractive buildings can be lit and key routes can be accentuated.
- (d) With any scheme which affects existing street lighting or involves new or additional lights, adequate consideration must be given to the appearance of the overall environment after dark which is of equal importance to its appearance in day time. The use of light fittings designed to direct light only to where it is required and so reduce "light pollution" should always be considered. Modern lighting equipment is generally more economical to run and environmentally acceptable.

Lighting -



Very often lights are affected by enhancement schemes which involve undergrounding overhead wires.



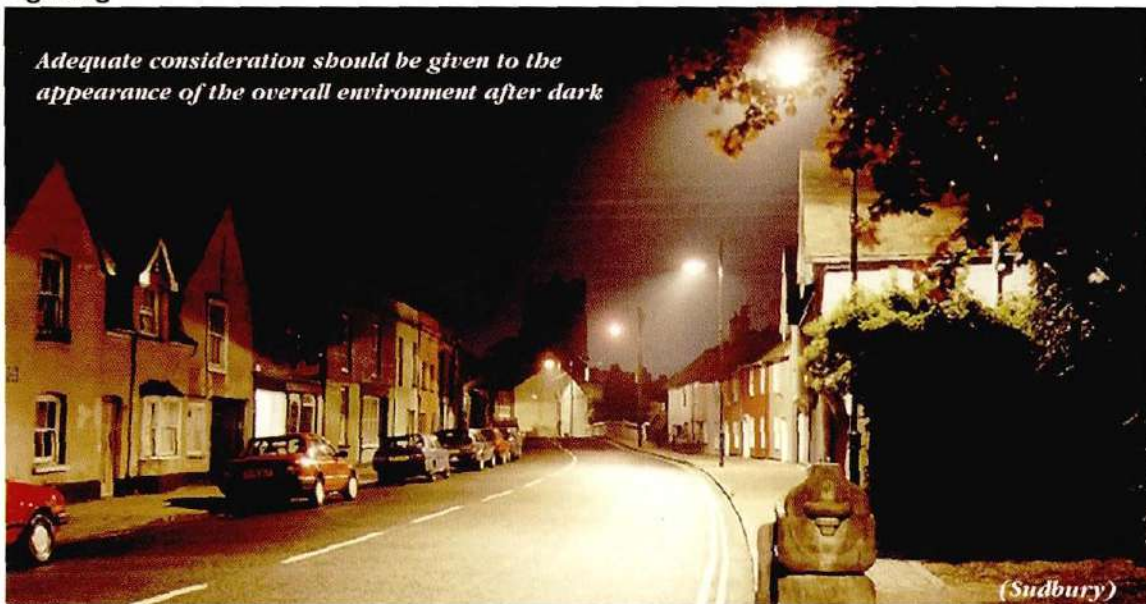
Flush lights within the paving highlight the Obelisk in Chequer Square, Bury St Edmunds



New lighting in Aldeburgh High Street was chosen to complement the existing Victorian style lanterns in the town.

Lighting -

Adequate consideration should be given to the appearance of the overall environment after dark



In general, simple designs which have a traditional character are far more likely to be suitable



Often it is preferable to fix appropriately designed lights to building frontages

Bulk head lights can sometimes be less obtrusive than projecting lights on brackets



2.4.2 Location of Lighting Equipment

- (a) The location of lights will initially be determined by the desired lighting level. The actual position will be determined as a result of considering the design spacing and height in conjunction with other factors, some of which are covered below.
- (b) Column mounted street lights can form a significant feature in the street scene, so their location should be carefully considered. In some instances, appropriately designed and positioned columns and lanterns can act as attractive focal points. Conversely, those which are chosen and located with little or no regard to the effect they will have on their surroundings can be intrusive.
- (c) Lighting columns can be used in conjunction with (or sometimes in place of) bollards and can be used to support signs, including illuminated signs, thereby helping to reduce clutter in the street scene. Care should be taken, however, to ensure that the lighting column will not be susceptible to damage by vehicles.
- (d) In many areas there will be a lack of space for lighting columns. Furthermore, there are numerous locations where column mounted lanterns, no matter how well designed, will appear out of place. If lighting is required and deemed necessary then appropriately designed fittings should be mounted on building frontages. This would need the consent of owners and occupiers.



(Bury St Edmunds)

2.4.3 Choosing Lighting Equipment

- (a) There are many different types of lights available. The choice of lights should take into account the disadvantages of having too many different types of light installed throughout the County with the resultant cost and maintenance implications.
- (b) Visually, it is also undesirable to have too many different types of light in any one area. Along with other street furniture, similarly designed lanterns, columns and brackets can provide a visual link throughout a locality and possibly act as a theme throughout a conservation area.
- (c) The range of lights available that are likely to prove appropriate in Suffolk's conservation areas is surprisingly limited. In general heavy, elaborate, over decorative styles, will often be inappropriate. Simple designs which have a traditional character are far more likely to be suitable although in some cases a more modern design may turn out to be preferable to a typical "heritage" style lamp. The Environment Division of the Environment and Transport Department of the County Council can advise on these.



Lighting -

Above - A modern street lamp in the Tuddenham St Martin Conservation Area

Left - Highly decorated lamps and columns are only likely to be appropriate in the larger towns of the county

2.5 Signs and Road Markings

Signs and markings can increase clutter and the need for signs should be considered carefully in designing a scheme. Wherever possible signs should be kept to a minimum.

2.5.1 Location of Signs

- (a) Signs should be located safely and have regard to their setting. Preferably they should be placed on buildings, boundary walls, railings, existing street furniture or existing posts.
- (b) Where signs are fixed to posts then:
 - The number of posts should be kept to a minimum.
 - Signs should not be located against the skyline.
 - Signs should have least possible impact on the conservation area.
- (c) It is necessary to obtain consent to site signs on private property and street furniture. This may take time and should be built into any programme of work. Affixing a sign to a listed building requires listed building consent if it affects the character of the building.

2.5.2 The Design of Signs

- (a) The minimum size of sign should be used that is practicable, legal, safe and enforceable.
- (b) The need for the amount of information given must be balanced with the impact it has on the environment.
- (c) Signs for pedestrians should be separated from road signs.
- (d) Wherever possible information should be included on a composite sign unless it would result in a size or layout that would have an adverse impact on the environment.
- (e) Traffic signs should have black posts, fittings and rear of signs. Where a sign has a backing plate grey is preferable to yellow.

- (f) Signs should only be illuminated if there is a statutory requirement. In special circumstances the Department of Transport can grant exemption.
- (g) External illumination is usually preferable to internal except where there is a statutory requirement.
- (h) Generally, cantilevered arms should be avoided.

2.5.3 Lines

Wherever possible lines and road markings in conservation areas should be avoided. Where absolutely necessary, conservation grade lines for waiting restrictions should be used (i.e. narrow, primrose colour), except where very small sections of yellow lines are to be added to existing standard yellow lines.

Signs -



A proliferation of signs mar this view of Framlingham church



Even small signs on short posts can appear intrusive

Signs -



Wherever possible signs should be placed on walls, railings, bollards or other street furniture

Specially made traffic signs in the Historic Core Zone in Bury St Edmunds



A more pleasing result is achieved here by putting the information on two signs



Where yellow lines are absolutely necessary conservation grade lines should be used