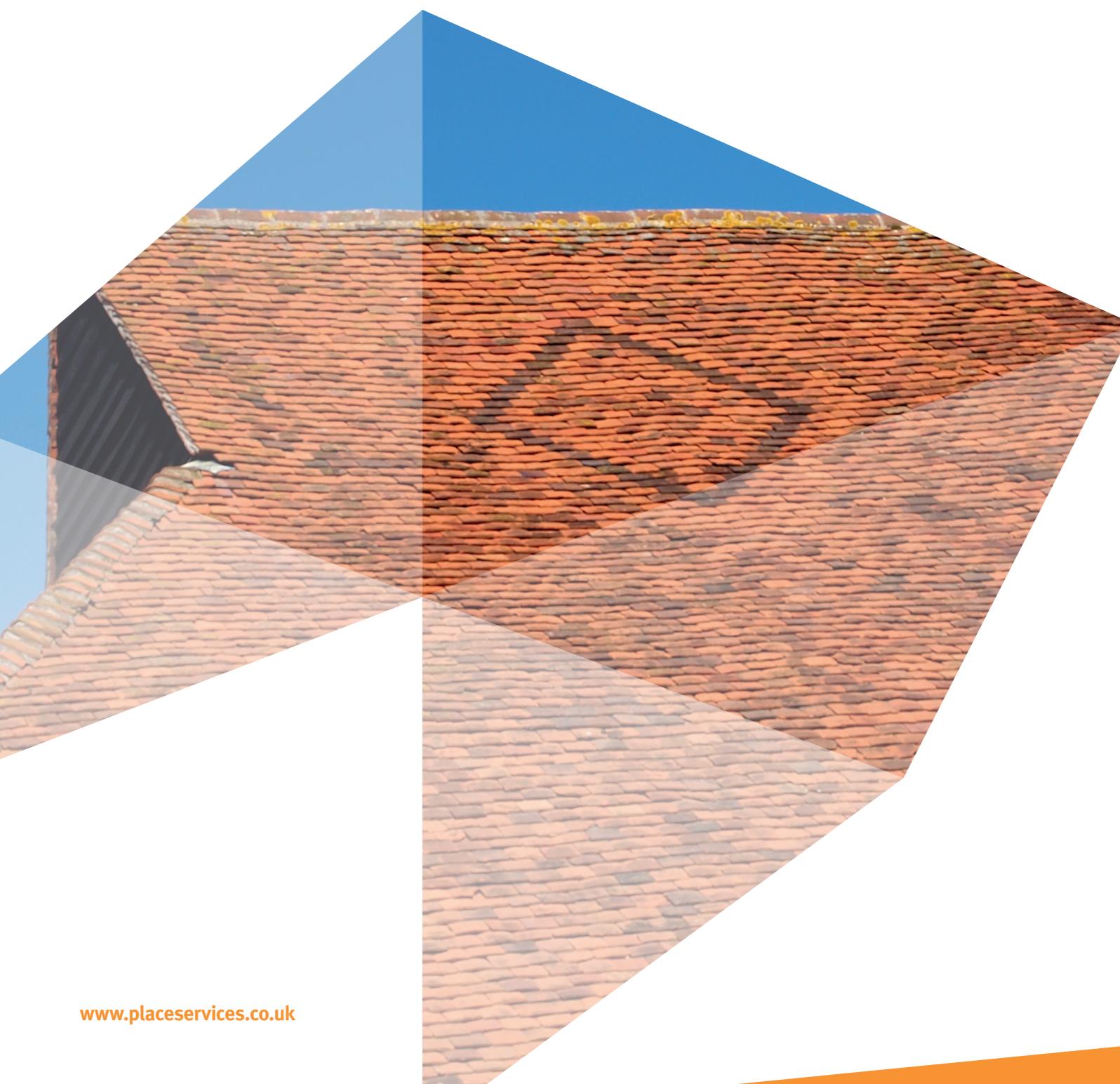


Collective Intelligence
Sustainable Solutions



Design guidance for
infill in historic areas

Infill in historic areas



INFILL

in historic areas



CONSERVATION IN ESSEX No.8



Essex County Council
Planning

CONSERVATION AREAS

THIS LEAFLET is intended to encourage high standards of new building design and layout in Conservation Areas. The 1967 Civic Amenities Act required local authorities to 'determine which parts of their area... are areas of special architectural or historic interest the character or appearance of which it is desirable to preserve or



enhance and shall designate such areas.' Subsequent Town and Country Planning Acts have refined and strengthened this legislation. Conservation Areas are therefore a means of providing for the conservation of a particular neighbourhood or area, as opposed to the protection of individual buildings which is achieved by giving them listed status under the same Acts.



Most Conservation Areas are historic town or village centres. Most sites that become available for development are therefore by definition infill, whether they be gaps within the existing settlement layout or building plots which become suitable for redevelopment.

CHARACTER

Infill is not a mere gap-filling exercise; it is an opportunity to make a positive and creative contribution to the existing built environment.

In doing so, it is vital to assess the character of the Conservation Area. It is the responsibility of the Local Authority to ensure that the character of the Conservation Area is preserved and enhanced. The Local Plan should make reference to the special features of the Conservation Area. Local authorities are encouraged to produce Conservation Area appraisals, and where these exist the character of the Conservation Area is identified and described. Where Conservation Area Partnership grant-aiding schemes have been implemented, appraisals of the Conservation Area will have been incorporated into them.

The existing character of the Conservation Area is crucial to considering development proposals and the starting point for all discussions. Its character will be the product of those features that prompted its original designation. These will include aesthetic, historical, social and economic factors which may be of local, regional or national type and importance. The combination of these will be unique to each settlement, giving it the special and particular character which prompted society's recognition and subsequent designation.

Inevitably Conservation Areas will have both good and bad features. It is, however, the former that make a positive contribution to their character. Proposals that reflect the unsatisfactory aspects of an area or introduce a new and different character are clearly inappropriate.



the DESIGN BRIEF

Where land use issues are straightforward and functional requirements are predictable, Design Briefs which identify all restraints and opportunities relating to the site are particularly valuable in dealing with infill situations. It is vital that the brief should establish an unambiguous framework, avoid needless restrictions and address all the visual implications. By means of Design Briefs, a Local Authority can establish criteria in advance by which individual proposals can be assessed. When approved by elected members as Supplementary Planning Guidance, a great deal of uncertainty can be removed. This can limit the potential for misunderstanding, reduce the time spent in negotiation and make the planning process more efficient. The starting point for the design brief should be an appraisal of the Conservation Area.

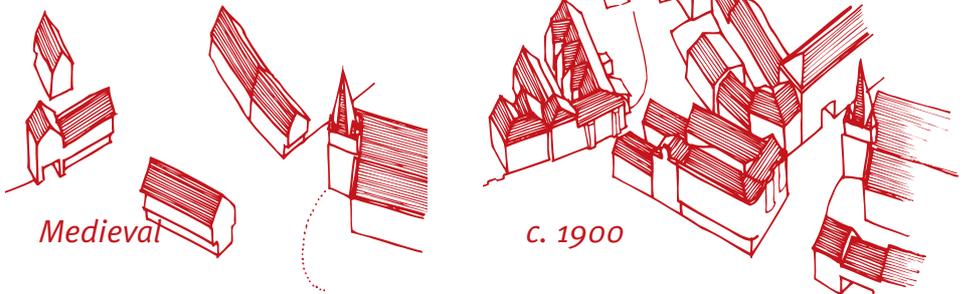


New showroom, Brentwood, sug-

LAND USE

Old settlements have always undergone a continuous process of change, and suitable responses to change continue to be necessary. Recent trends such as the industrialisation of agriculture and out-of-town shopping have had drastic effects, reducing the village to a dormitory suburb and leaving the market town in search of a new role. It is against the background of such trends that the future of infill sites has to be resolved.

Maldon - changes to the market place,



Medieval

c. 1900

Although zoning of commercial uses existed in medieval towns, many old towns and villages were essentially 'mixed-use' areas, with residential, commercial, agricultural and industrial uses in close proximity, several of them sometimes occupying a single site. The character of many Conservation Areas is partly a product of this rich mix, which is at risk of dilution through strict land-use zoning.

Conservation Areas should not become empty museums or lose their diversity of character. Fortunately the importance of sustainability and the value of mixed use environments is once again being recognised. However, there are certain uses which by reason of their requirement for unsuitable structures will be better located elsewhere. Attempts to accommodate them have in the past usually proved unsuccessful. Although there is a need to balance economic advantage against environmental damage, it is the attractive character of the Conservation Area which should take primacy.

The classical proportioning system applied to



TOWNSCAPE

Clavering, village



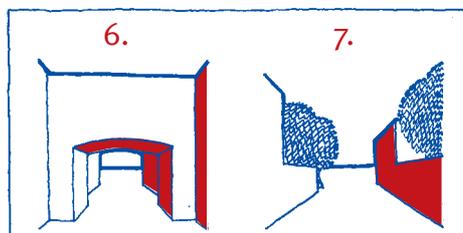
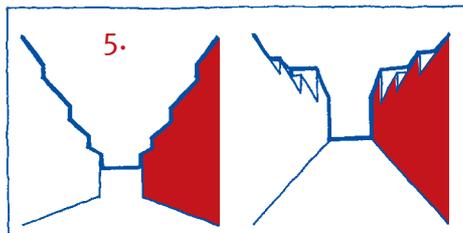
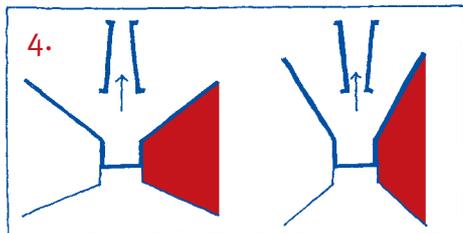
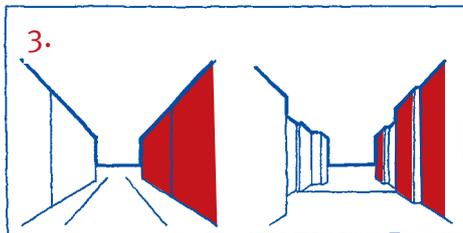
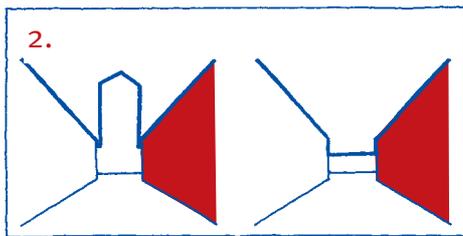
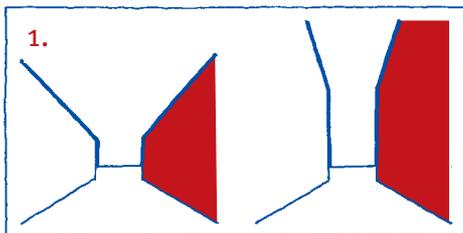
The Essex County Council view of conservation has always stressed the importance of townscape. The townscape approach, first explored by Gordon Cullen, emphasises the value of public space, which is regarded as an element, which can be manipulated to produce stimulation and delight. The shaping of space ought to be a positive part of the design process, not merely the consequence of other actions.

Spaces should express the activities they will contain and be designed to encourage appropriate behaviour. The way they are handled should be appropriate to the needs and perceptions of pedestrians, who have time to explore their surroundings. The abundance of visual stimuli in a historic environment makes this a pleasurable experience. Where these stimuli are lacking, walking becomes mere drudgery. New buildings should therefore avoid large unbroken surfaces, long dull lines of recession and over-long repetitive sequences. Long unbroken vistas discourage exploration as does any

predictable situation. What is needed are buildings loaded with incident, and rich in textural variety and surface modulation.

The process of building design should encourage reciprocal relationships between planes, forms and space in a controlled and creative manner. In a sense, public spaces can be regarded as 'external rooms', furnished and defined in appropriate ways. A suitable degree of enclosure and consequent sense of protection, something commonly found in historic towns, is essential.

The following aspects of townscape should be taken into consideration when assessing an infill site:



1. The street is a linear corridor which encourages directional movement. In general, the taller the surrounding buildings and the narrower the street, the stronger the directional emphasis and the greater the encouragement for the eye to move quickly through it. As the intention is to suggest a leisurely pace of movement, other factors need to be introduced.
2. A tall building at the end of a linear corridor will severely diminish its directional emphasis; if tall enough, it can subdue it entirely. A low building will reduce the linearity to a limited degree, when compared with an open-ended street.
3. Narrow frontage widths and set-backs in the frontage will diminish the directional emphasis, as will variety in the street surfacing material.
4. Narrowing or expanding the frontages will reduce directional emphasis, giving false perspective effects. The result will be reversed when viewed from the opposite end.

Attractive townscapes are a widespread phenomenon

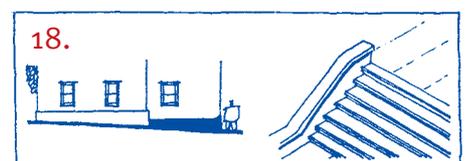
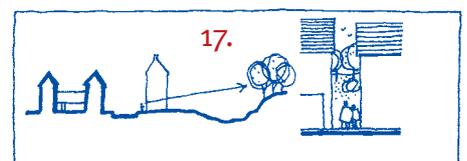
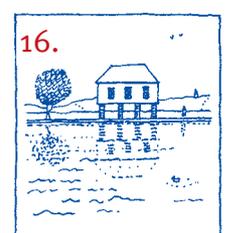
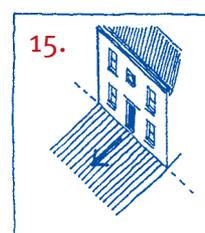
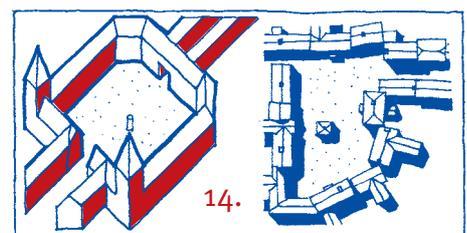
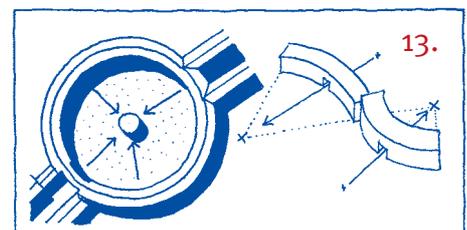
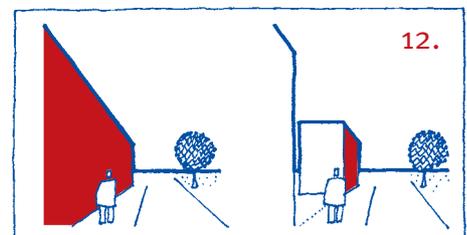
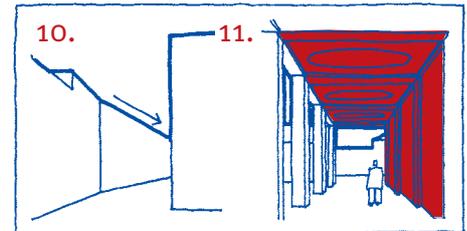
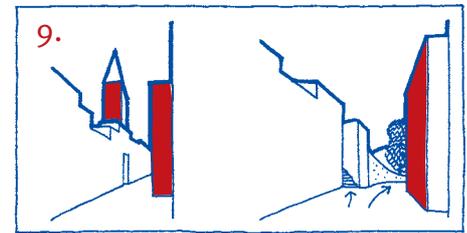
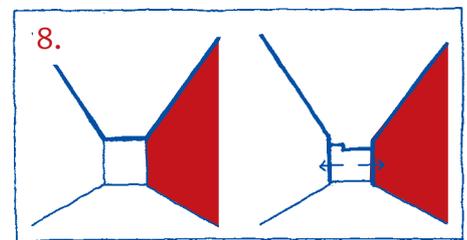


Southern Spain



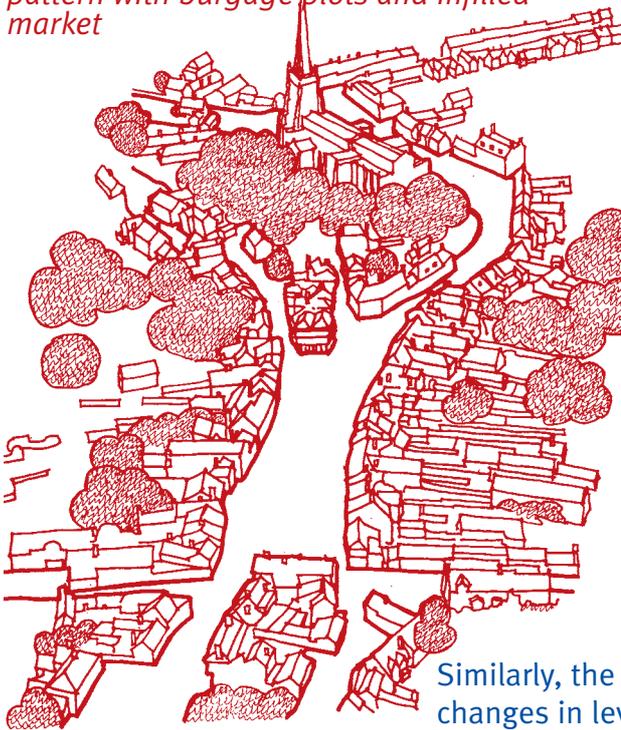
Saffron Walden

5. Downhill slopes have limited directional effect if the building remains constant in height. This is, to a degree, offset by the relative ease of walking downhill. Uphill slopes are singularly powerful in their dynamic directional force.
6. Arches will subdivide a street into three spaces: in front, beneath and beyond.
7. Trees and hedges can enclose space in a similar manner to buildings and have the advantage of changing appearance with the seasons.
8. The cul-de-sac frustrates any desire to explore. The T-junction, however, with overlapping facades, offers two alternative routes to investigate.
9. A tall structure or building, glimpsed beyond the wall of the street, invites curiosity. Y-junctions are most attractive in townscape terms when they offer contrasting options.
10. Angled sky-diagonals signal a change in direction.
11. Arcades offer a separate spatial area with both physical and psychological protection. If the bays are well articulated, each will suggest a static space suitable for pausing or lingering.
12. In a one-sided street, a continuous wall of buildings offers psychological protection. Breaks in this frontage introduce a degree of perceived vulnerability.
13. In contrast to the linear street, the circus is a powerful static space, its centre bringing all routes to a halt. Circular spaces, as with circular rooms, can be disorientating and additional landmark features are useful. Curved facades, similarly, suggest movement towards their focal centres, a point exploited by Baroque architects such as Bernini and Borromini.
14. The static nature of the square is somewhat compromised by the linear emphasis of its diagonals. This can be countered by the addition of corner towers, or canting the corners as in the Place Vendome in Paris. A central feature, conspicuous enough to have real impact, will increase the static character. An irregular square is really composed of a number of minor sub-spaces.
15. Building facades should command the adjoining public space and it is the doorways and other openings that are particularly crucial. Symmetry tends to project the strongest image.
16. Areas of water are a valuable ingredient in any settlement. To provide attractive reflections, structures need to stand on the very water's edge.
17. Peep views out of an urban street to a green landscape are attractive and tend to emphasise, by contrast, the man-made qualities of the environment.
18. Hill slopes are to be welcomed and celebrated. Slopes should be emphasised by the judicious placement of plinths or other horizontal features. Whilst the needs of the disabled should be scrupulously satisfied, flights of steps enhance status. The 'banding' of materials on ramps can give a similar effect.



RESPECTING THE CHARACTER OF HISTORIC SETTLEMENTS

Thaxted - a clear and legible settlement pattern with burgage plots and infilled market

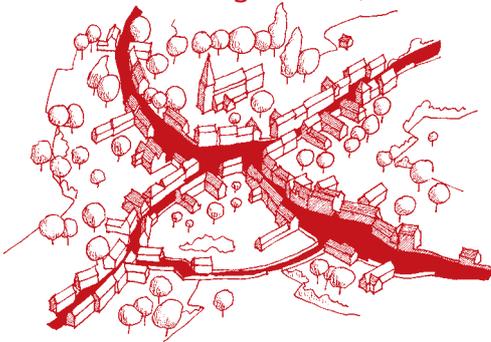


Old towns and villages have taken many centuries to achieve their present form. The general intention of conservation is not to avoid change, but to channel it in appropriate directions. In the past, settlements have evolved in simple and straightforward ways, reflecting the basic requirements of their day. Clearly there are advantages in ensuring that infill developments are as clear and as legible as their historic predecessors. Function should be explained by all possible expedients, to provide a comprehensible overall image. This is one part of the townscape message which should not be seen as a purely aesthetic issue.

Any infill site is likely to have a history of earlier use. The investigation of archaeological sites and standing buildings, combined with topographical studies, is piecing together urban history. Such knowledge can inform and influence the development in subtle ways.

Similarly, the geography and natural features of any site, such as changes in level, should be respected and exploited to maximum effect.

Village centre, c.1800



It should be noted that certain open spaces may have become an essential part of the character of the historic settlement. In such cases, development will be inappropriate and therefore resisted.

The majority of Essex towns and villages developed in a linear fashion along routes which have followed higher better drained land, meandering to follow

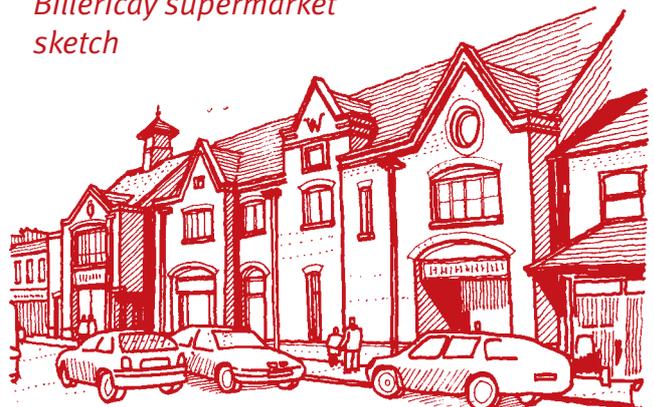
Village centre, present day - the pattern weakened

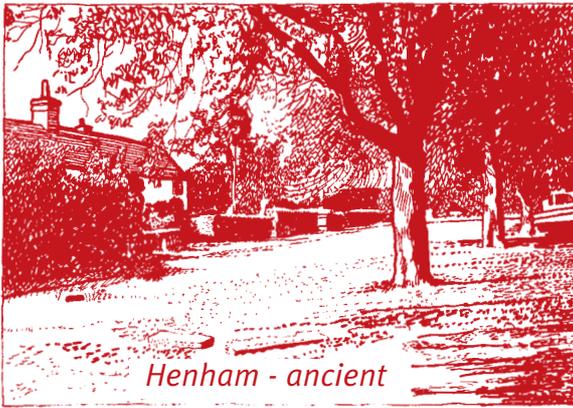


contours and avoid natural or artificial obstacles. At junctions there is often a radial pattern to the road layout, with gardens and open land between the linear ribs.

To limit expansion and avoid the unproductive use of resources, planning authorities have often allowed the infilling of these backland areas. This risks damaging the historic character and obscuring the old development pattern by ignoring the natural structure of the settlement. Cul-de-sac developments are particularly damaging in such contexts. It is one of the functions of Conservation Area appraisals to identify where development might usefully take place and to provide guidance and to provide appropriate criteria for it. Old towns either grew organically or through a series of planned layouts. These tended to be made up of burgage plots of standard dimensions in any individual settlement, but varied from one settlement to another. A complex process of subdivision and rearrangement of landholdings has left most historic towns composed of long narrow plots with frontages of limited width.

Billericay supermarket sketch





Inserting large buildings by amalgamating the old plots is, therefore, likely to damage the unity of a street since the building will assume undue visual significance, out of proportion to their real importance.

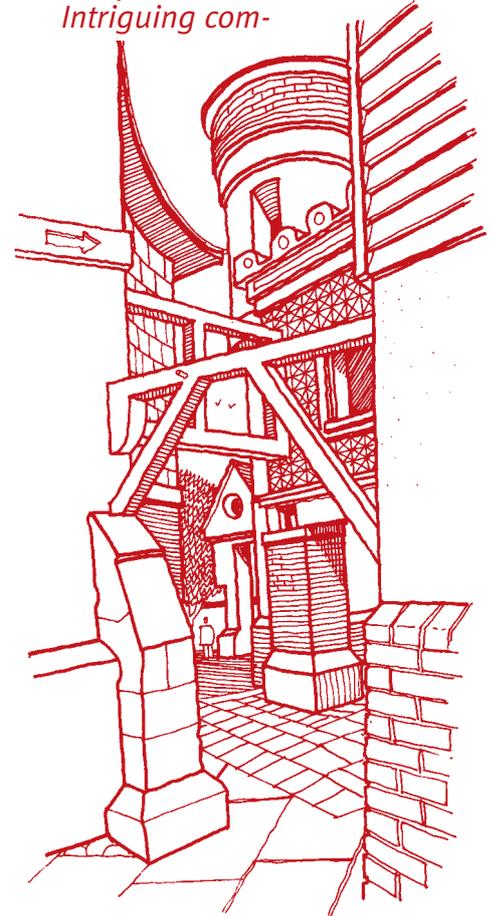
Such a building may be disguised as a number of separate buildings, an exercise which is rarely successful and therefore not to be recommended. Where however a development incorporates recognisably distinct component functions, or a series of separate occupants (e.g. groups of houses or shops), such an approach is easier to justify.

It must always be preferable to avoid the over-wide frontage in sensitive historic locations. Where this becomes an issue, some other strategy needs to be adopted. Appropriate frontage widths can be suggested. The different functions of the building or buildings can be exploited to achieve variety. Such a composition will tend to be picturesque rather than formal, and to have multiple points of focus.

The covered shopping mall is a relatively recent innovation in urban situations. It brings its own particular problems in the context of historic settlements. It rarely succeeds in being properly integrated. Instead spatial separation usually results, and whilst there are practical advantages in protection from the elements, the enclosed areas are neither inside nor outside and ambiguity reigns. If the objective is to achieve a degree of shelter, then the portico or arcade, integrated into buildings and street pattern may be more appropriate solutions.

Dispersed, rather than nucleated, settlement is characteristic of the historic landscape of Essex. Villages often consist of a series of loosely knit hamlets. Henham, with its ancient linked greens, is a good example. Such greens could form a focus or model for new development, though a strategy of this sort would have to be handled with great sensitivity and care to preserve the particular visual characteristics of these historic examples.

Intriguing com-



UNITY VERSUS VARIETY



Old town, unity and

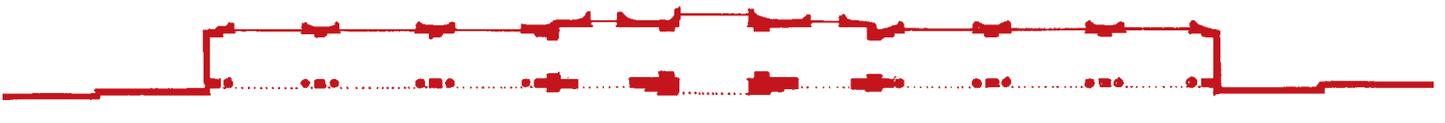
Historic settlements are widely admired and can form a useful yardstick by which more recent development can be judged. Their popularity encourages tourism, and promotes a sense of local identity and pride. The appeal of such settlements is more than a matter of age. It lies in their total image, in their being more than the sum of their parts, and in a balance between unity and variety. Variety is crucial as it brings visual stimulation, though carried to excess it will be perceived as a discordant jumble of separate parts. Unity brings a coherent sense of identity, although carried to excess, it will run the risk of being dull and monotonous. Mimicking of the surrounding buildings can lead to undue conformity, but today with the introduction of new building materials and techniques there is a greater risk of excessive variety.

Building materials can be particularly important in achieving this balance. Where there are predominant cladding materials (such as stone in the Cotswolds) these can confer an exceptional degree of unity and as a result accommodate a diversity of building design.

Continuity in a visual and social sense are one of the important objectives of conservation. The old and the new should fit together seamlessly as part of an evolving composition. This requires a degree of compatibility between the constituent parts and the whole.



Suggested scheme for supermarket, in a narrow street, 1980. Recognisable as one large building but

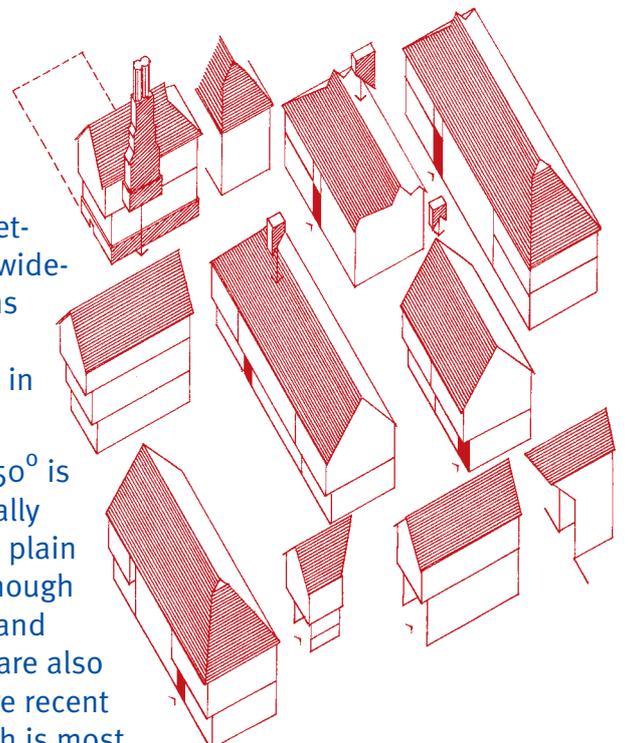


DESIGN IN THE ESSEX CONTEXT

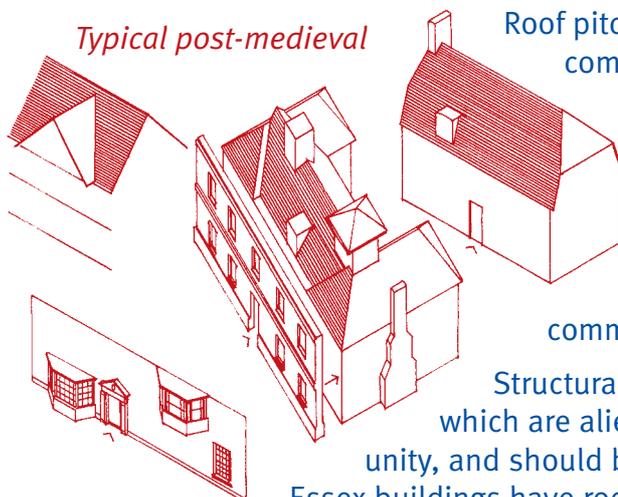
Essential to good design are quality of concept, materials detail and appropriateness in terms of harmonising with local architectural characteristics and the nature of the individual site. New buildings need to be appropriate in scale, intricacy and bulk if they are fit into the existing grain of the settlement.

Essex is a timber-framed county and so render, plain or pargetted, is the dominant walling finish. Weatherboarding is also widespread, white painted on dwellings and tarred black on barns and outbuildings. Brick was introduced in the 15th century, and pleasing reds and creamy gaults or whites are important in the palette of traditional building materials.

Typical Essex medieval build-



Typical post-medieval



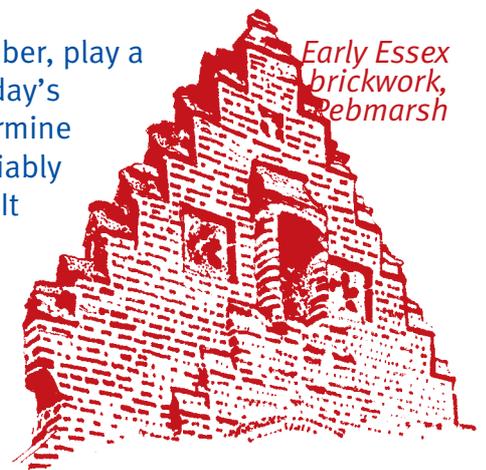
Roof pitches are steep: 50° is common. Traditionally they are clad in plain clay tiles, although natural slate and clay pantiles are also found on more recent buildings. Thatch is most common in the villages of the north and north-west.

Structural innovations have made it possible to achieve wide spans which are alien to traditional buildings. They can be destructive of visual unity, and should be used only where they will not have this effect. Most old Essex buildings have roofs the spans of which were determined by the maximum length of available timber, usually about 6m. Double pile buildings are occasionally found, but T, L or H plans are far more common. The larger span roofs of the 19th century are generally hipped, clad in slate and have a low pitch of about 35°.

In historic areas, so-called 'natural' materials, together with painted timber, play a significant part in defining character. The harder, shinier products of today's technology should generally be avoided in that they will seriously undermine unity. The retention of old facades to front new developments has justifiably been condemned as false and displaying a pathetic lack of confidence. It is also an expensive approach often fraught with technical difficulties. In general, if a facade is worthy of retention the building behind it is probably also worth keeping.

The appropriate choice of external floorscaping materials is important, particularly in urban areas, where they tend to be more evident. The relative lack of a real tradition of hard surfacing can be problematic in Essex, and imported traditions can look quite alien. Changes of material can be utilised to enhance spatial effects but functional needs must not be overlooked.

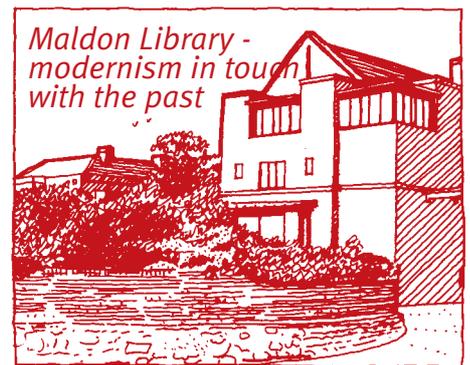
New-build schemes involving retail, with residential or office accommodation over, present a particular proportioning problem. The need is obviously to fuse the uses into one harmonious facade without an abrupt change of scale.



Early Essex brickwork, Rebmarsch

ARCHITECTURAL STYLE

Style is the subject which arouses most debate. The replication of past styles would seem a soft option, yet it is one that is rarely attempted. It has its hazards. There are difficulties in matching modern functional requirements to earlier architectural languages. Imitation may be the highest form of flattery, but it can also reflect a lack of ambition and imagination. More worrying still are illiterate details and solecisms which will undermine the best of intentions. However, architecture is a language and a form of communication, and like all languages continues to evolve. For language to be effective, it needs to be understood, and buildings in public places will have a diverse audience.

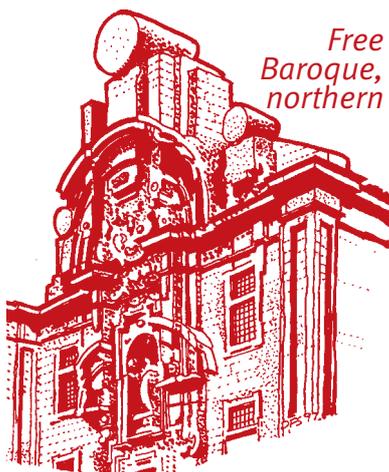


Maldon Library - modernism in touch with the past

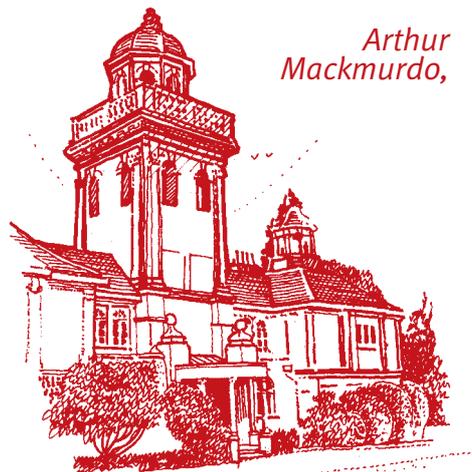


Robust 20th century

Compared with imitation of the past, creative eclecticism, or drawing on differing aspects of it in a new way, is more constructive. Given the need for unity, drawing from the past in a discriminating way can create a new synthesis. Thus historic prototypes can be chosen for practical and aesthetic advantage rather than for any sentimental appeal. Some measure of formal borrowing of traditional architectural components is likely to be necessary to achieve unity, though this will be a question of degree, dependent on the particular circumstances of the commission and the site.



Free Baroque, northern



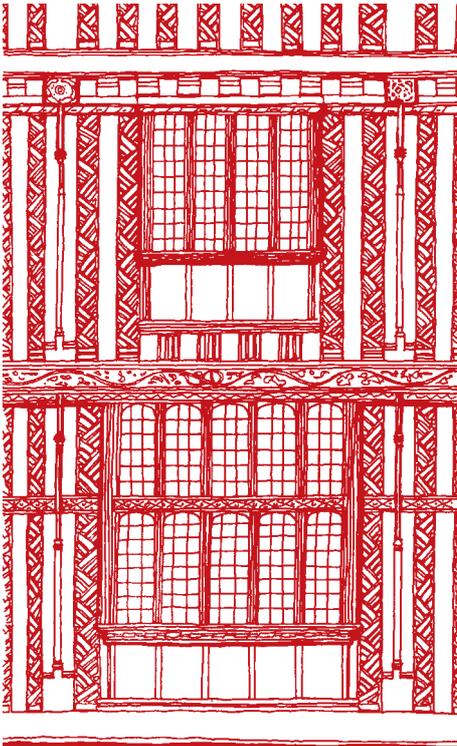
Arthur Mackmurdo,

The townscape approach will frequently call for a modest low-key design. The danger with the so-called 'foil' approach is that too marked a degree of abstraction will suggest too much self-importance, at variance with the real significance of the building.



Romanesque spire - solidity and

Paycocke's, Coggeshall - English delight in pattern making



Whilst some 'borrowing' will be necessary, nevertheless, such buildings should also be evident products of the late 20th century.

This is undoubtedly a challenge. Traditional buildings have qualities of weight, solidity and permanence. Part of their appeal lies in these enduring qualities which speak of certainty in an unceasingly uncertain world. Unfortunately these very qualities are at variance with much current architectural theory, of which abstraction, indeterminacy and insubstantiality are more often the guiding principles.



Capriccio - space and multiple vantage

In designing buildings to fit these criteria, there are numerous stylistic investigations of the past that might stimulate appropriate thought:

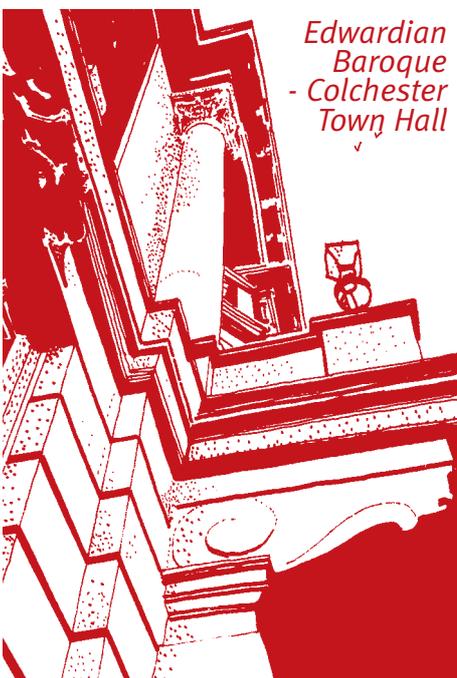


The picturesque - Colchester

- Neo-Classicism, which has shown itself capable of endless variation and re-invention. Although typically the language of formality, it also has the potential for abstraction. It offers the possibility of creating contemporary buildings for historic situations, but it is necessary to take into account local character.

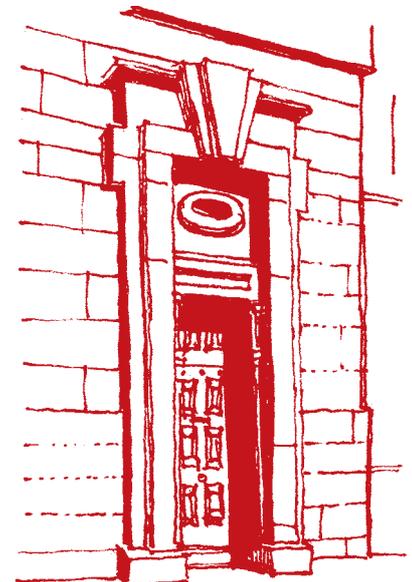
- The Baroque, and particularly its English Edwardian manifestation, which allowed a flexible approach to the Classical vocabulary.

- Neo-vernacular, a common response which had its origins in the 1960s and encompasses many variations on traditional themes. In its least satisfactory form it displays ill-executed historic features grafted on to 20th-century buildings. The threshold between vernacular and polite can be difficult to define, but there can be no doubt that old settlements display common ranges of components



Edwardian Baroque - Colchester Town Hall

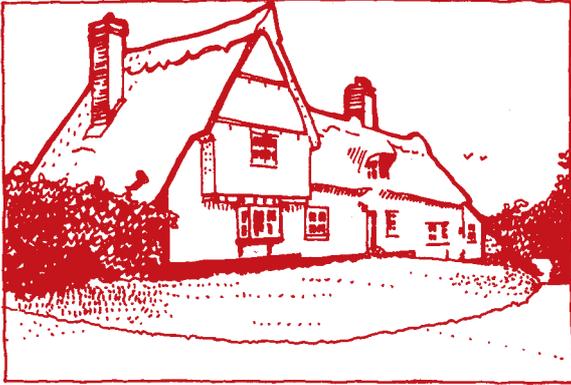
Abstracted classicism - Sir



Abstracted classicism, Nicolas

recognised as vernacular features which are important in providing unity. Vernacular detail of this kind is best suited to domestic buildings where modesty is the key requirement.

■ The Picturesque, an essentially English concept. Building components and volumes can be consciously manipulated to make irregularly balanced compositions, which can be achieved without recourse to rigid rules. The Picturesque involves the level of informality beloved of many modernists whilst avoiding less welcome indeterminacy.



Recent vernacular extension as vil-

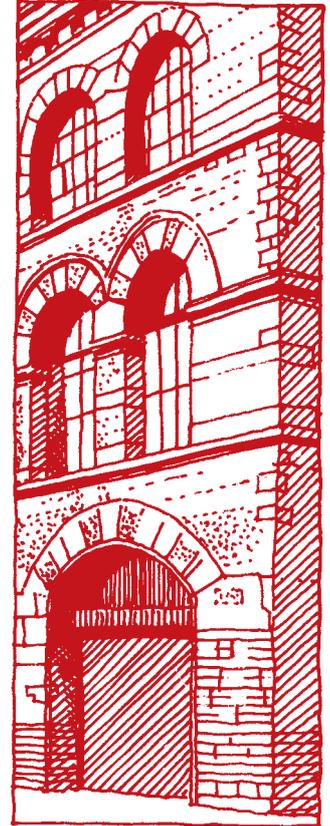


Neo-classicism - Sir William



20th century eclectic/

■ Post-modernism was born out of a rejection of narrow functionalism, though it is faltering in the face of a reinvigorated Modernism. Contextualism is one of its more conspicuous virtues. However, it is contended that it is unhelpful to over-emphasise the issue of style. Style itself is a matter of little con-



19th century Historicum

FACTORS IN BUILDING DESIGN

Good buildings should exhibit evidence of craftsmanship in their construction. Their design should reflect order, such that there is a sense of inevitability to each and every part of the composition, which should be made up of harmoniously formed three-dimensional solids which relate positively to each other and their surroundings. The use of a system of proportions will unite all elements of a design. Buildings need to be expressive of function, not only in a utilitarian sense, but also of their social and symbolic role in the community and their position in a hierarchical system. The materials used should reflect the traditions of the county, but the objective should be to achieve delicate graduations of texture from coarse to smooth. Colour should be employed to achieve overall harmony, to avoid undue emphasis, to underline mood and to help explain function.



New village hous-

ROOFS

THE DESIGN OF ROOFS seems worth special emphasis in that they will have a major effect on longer views. Deep plan depths, when accompanied by pitched roofs, result in ungainly and unduly prominent gables which are difficult to incorporate into the existing townscape and destructive of unity.

It has long been realised that the use of pitched roofs, necessary in an historic environment, will have a disciplinary effect on plan form. What is less often realised is that pitched roof usage has its own special volumetric language which needs careful handling. Pitched roofs have a powerful directional effect, which needs to be countered by other devices. Usually this was achieved with chimney stacks, parapetted eaves or other roof line features. Observation reveals that the buildings that people find most memorable are those with busy skylines and an abundance of incidents at the point where the building meets the ground.

CONCLUSIONS

This booklet is intended less as a 'How-to-do-it' manual than as a theoretical framework within which an appropriate approach can be realised. Examples of admirable infill schemes, even at a national level, are rare, and seldom have a validity outside the context of their particular site. This is unsurprising in view of the need for individual solutions which respond to local conditions and restraints. Illustrating existing solutions is more likely to narrow the debate than to widen the scope of possibilities. The foregoing text and illustrations are offered in the hope that they will encourage debate and help in achieving good quality work and design.



Finchingfield - a high degree of Unity and Variety.

*FRONT COVER Illustration -
Two view of Wivenhoe from an 18th*

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