

# Signing on Kent's Roads



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## Operational Policies and Guidance

Providing engineering and transportation services for Kent County Council

# Signing on Kent's Roads

Contents	Page
1 Introduction and Background	1-1 to 1-4
2 Environmental Issues	2-1 to 2-10
3 Mounting, Construction and Illumination of Traffic Signs	3-1 to 3-7
4 Warning, Speed Limit and other Regulatory Signs	4-1 to 4-9
5 Direction Signs and Boundary Signs	5-1 to 5-25
6 Tourist Signs	6-1 to 6-9
7 Signing Strategies	7-1 to 7-6
8 Sign Audit	8-1
9 Procurement and Maintenance	9-1 to 9-3
Appendices:-	
4.1 Sizes of Warning Signs and their siting details	A-1
4.2 Sizes of Speed Limit Signs	A-2
5.1 Direction Signs and Boundary Signs- Appropriate x Heights	A-3
5.2 Direction Signs and Boundary Signs Definitions	A-4
5.3 Application to place temporary event signing on the public highway	A-5
5.4 Signs Schedule for temporary events signing	A-6
6.1 Tourist Signing Application Process and Timescales	A-7
7.1 Signing Strategies- Destinations	A-8to A-9
7.2 Signing Strategies- Example Signing Strategy for a Built-up Area	A-10
9.1 Procurement and Maintenance - Maintenance of Traffic Signs- Extract from Highway Maintenance Plan 1999	A-11 to A-12
Bibliography and acknowledgements	

## **Signing on Kent's Roads**

### **Foreward**

Kent County Council invests considerable resources in traffic management and safety measures to ensure that the County's roads are safe for road users and that the most appropriate use is made of the road space available. Signs and road markings form a key part of these measures and are a primary source of road user information.

This guide sets out standards within the legislative framework for the provision of signs and road markings in Kent. It aims to balance road safety, traffic management and environmental issues. Appropriate signing is crucial in helping to achieve several County Council Policies, including the management of heavy goods vehicle traffic, particularly in the countryside, and the protection of our minor road network in rural areas and villages.

Careful design, specification and installation are key to balancing traffic, safety and environmental issues. This design guide is, therefore, commended to all engineering staff in the County Council, District Councils and consultancies involved in highway improvement and maintenance work in Kent.



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**County Transport**  
**Operations Officer**  
**Kent County Council**

12<sup>th</sup> April 2001



# Signing on Kent's Roads

## 1. Introduction

### 1.1 Background

- 1.1.1 Clear and concise signing and road markings are essential elements in the promotion of safe and efficient use of the highway. As a primary means of conveying visual information to the road user, signing can be instrumental in influencing road user behaviour at modest cost. It is often perceived by the public as a desirable solution to road safety problems, and features in many of the highway based requests received from the public.
- 1.1.2 Signing contributes to key road safety and traffic management objectives. These will in turn assist in achieving the strategic objectives of Kent's Local Transport Plan.

### 1.2 Legislation

- 1.2.1 It is a legal requirement to provide appropriate signing. Three key areas of legislation cover the subject:-

- The Traffic Signs Regulations and General Directions (TSRGD) – This Statutory Instrument defines the layouts, legend variants, range of sizes and illumination requirements for all traffic signs and road markings used on the highway.
- The Road Traffic Regulation Act 1984, as amended, sets out the Highway Authority's roles and responsibilities for placing signs on the highway.
- The Highways Act 1981 includes a duty of care for Traffic Authorities in discharging their duties.

- 1.2.2 The requirements of these areas of legislation must be followed, although there is substantial scope built into the TSRGD, in particular, for local variation in size, positioning and mounting of signs. However, the styles of signs cannot be varied. A motorist would expect to encounter the same style of sign for a bend, for instance, throughout Great Britain.
- 1.2.3 Occasionally, it is necessary to specify signs and road markings which are not included in TSRGD. In these instances, special Authorisation must be sought and obtained from the Departments of the Environment, Transport and the Regions. Failure to do this will expose the Highway Authority to potential litigation, where a road traffic accident occurs. Because of the need for consistency, this activity is co-ordinated centrally by the County Council.

### 1.3 Design Standards

- 1.3.1 An extensive range of national signing design and specification standards support the legislation. This has been developed through research and best practice. The design standards cover particular elements such as size, positioning and mounting of signs, and also criteria to determine whether or not a sign is provided, but there is substantial flexibility within the standards to enable the development of specifications and practices appropriate to local conditions.
- 1.3.2 This document sets out local practice and standards for use on the County's roads, and seeks to use the flexibility inherent within the legislation. The Highways Agency is responsible for signing on trunk roads and motorways and has separate requirements.

# **Signing on Kent's Roads**

## **Introduction**

- 1.3.3 Failure to base Kent standards within the national framework would result in confusion for motorists, particularly those not local to the area, with resultant potential for litigation where crashes occur. Kent has a significant amount of non-local traffic, so this approach would be unwise.
- 1.3.4 The range of national standards relating to signing is extensive, and subject to regular change. The provision of a comprehensive listing is therefore not appropriate to this document. However, a core of standards are set out in the Traffic Signs Manual, published by the Stationery Office.

## **1.4 Signing Categories**

- 1.4.1 There are four categories of signing. Road markings are also classed as signs, and the variants of these fall into similar categories:-
- Warning signs
  - Regulatory signs (including speed limit signs)
  - Direction signs
  - Other informatory signs
- 1.4.2 Sections of this document deal with the categories referred to above in more detail, and set out situations where specific local standards will be applied.
- 1.4.3 Warning signs are associated specifically with safety objectives, but there is local discretion in their application. Regulatory signs are required normally to enable the enforcement of restrictions imposed by Traffic Regulation Orders, and the scope for local standards is more limited. It is important to consider signing implications as an integral part of the development of Traffic Regulation Orders to ensure that the proposals do not result in extensive additional signing.
- 1.4.4 Direction signing on A and B class roads is required to fit with national practice to ensure continuity throughout Great Britain. The choice of local destinations is a matter for the Traffic Authority, and the volume and style of direction signing particularly on minor roads is also left to the discretion of the Traffic Authority. These points are covered in more detail in other sections of this document.

## **1.5 Local Standards and Objectives**

- 1.5.1 The local standards set out in this document should be read in conjunction with national standards and legislation. They are designed to ensure specifications are applied with consistency across the County.

## Signing on Kent's Roads

### Introduction

1.5.2 The standards are based on a different balance of objectives for built-up areas compared with rural areas, and for minor roads compared with major roads. Kent's key objectives are:-

- Signing will be applied on 'A' and 'B' class roads with legal, road safety and traffic management as the principal objectives.
- Signing will be applied on minor roads to achieve the **minimum** standards necessary to comply with legal requirements, except at locations which have a poor crash record or are identified locally as hazardous, where higher standards may be appropriate.
- Environmental objectives will be considered in relation to all signing provision
- Particular emphasis will be placed on environmental objectives where signing is required on minor roads in rural areas.
- The use of signing will be avoided whenever practical in conservation areas and environmental enhancement schemes.

1.5.3 Some signing provision is the direct responsibility of District Councils, for example road nameplates and local bylaw notices. However, these can have an equally significant environmental impact as other signs. Therefore, signing of this type will also need to be applied based on the objectives set out above.

Bad practice



*Street name signs, bylaw notices and neighbourhood watch notices can have an equally significant impact on the environment as road signs, particularly in country lanes.*

## Signing on Kent's Roads

### Introduction

- 1.5.4 Poorly designed and specified signing can create confusion for motorists and unnecessary environmental intrusion. The use of skilled designers, attention to detail and consideration of signing issues from scheme development through to implementation will be applied to help to avoid this.

Good practice



*This advance direction sign assists in warning motorists that the approach arm turns through 90° on the entry to the roundabout, and the number of destinations is limited to 6 for clarity.*

Bad practice



*This sign post contains too many signs and with a variety of fixings. Most of these could be either removed or sited elsewhere. The structure is sited in a conservation area in front of an historic building*

## Signing on Kent's Roads

### 2. Environmental Issues

#### 2.1 Background

2.1.1 Most environmental issues apply to all sign provision, regardless of road type or environment.

#### 2.2 Environmental issues common to all sign provision

2.2.1 There are 5 factors which affect how signs impact on the environment:

- Size of signs
- Number of signs
- Position of signs
- Height of signs
- Fixing and construction of signs

#### 2.3 Size of Sign

2.3.1 The size of a sign is based on the approach speed of the majority of traffic, tables of which are set out elsewhere in this document. The standards have enough flexibility to enable a sign to be tailored to suit the particular location.

2.3.2 Signs should be designed using computer techniques to ensure efficient use of space and to ensure signs are not unnecessarily large. In the case of directional signs stack type signs are smaller than map type and should be considered where the road layout is 'simple'. This should be adequate for most locations except for roundabouts, mini-roundabouts or grade separated junctions. Map-type signs can be considered at simple junctions where there are compelling safety reasons.

Good practice



*Stack-type signs should be used where the junction layout is straightforward.*

Bad practice



*Map-type signs are larger than stack-type signs, so should only be used at complex junctions or where there are compelling safety reasons.*



## Signing on Kent's Roads

### Environmental Issues

- 2.3.3 The use of backing boards can be an effective means of improving sign conspicuity. Grey and yellow backing boards are permitted by the Traffic Signs Regulations and General Directions. The need for these can be avoided by careful positioning of signs, for instance in front of a natural background.

Good practice



Bad practice



- 2.3.4 Grey backing boards can be used to tidy a structure containing more than one sign face (e.g. roundabout and reduce speed now), and their use is encouraged for this purpose.

Good practice



Bad practice



- 2.3.5 The use of yellow backing boards creates a highly conspicuous sign, but is likely to be detrimental to the environment. Normally, they will only be used in extreme situations, supported by a robust crash reduction justification, where no other measure is available, and with due regard to the potential hazards at the location under consideration in relation to the remainder of the route. It is anticipated that reasonable local discretion will be exercised in this context. They will not be used in conservation areas.

## Signing on Kent's Roads

### Environmental Issues

Good practice



*Chevron signs with fluorescent yellow backing boards on a slip road with sharp curvature*

Bad practice



*These gateway signs are out of character with a minor rural road*

#### 2.4 **Number of Signs**

- 2.4.1 The level of signing required on 'A' and 'B' class roads may be higher than for other roads, particularly where a poor safety record exists. Reference to this is contained within the various sections of this document.

#### 2.5 **Position of Signs**

- 2.5.1 The position of signs is based on the approach speed of the majority of the traffic, and the position of motorists in relation to the road layout. They should be positioned to enable the message to be read and responded to by the road user. The standards are flexible, to enable the location to be chosen based on a number of other parameters.
- 2.5.2 A background is often helpful in improving effectiveness of signs, particularly at junctions. Use of features including walls, hedges, fences, buildings and railings should be considered.



## Signing on Kent's Roads

### Environmental Issues

#### 2.6 Height of Signs

2.6.1 Signs should not be unduly high. Section 3 gives recommended mounting heights of signs but consideration should be given to the proportion of post length to height of sign to avoid a 'lollipop' effect. Generally, direction signs at junctions should be mounted at low heights, at the rear of the footways, in positions which will allow visibility from a reasonable distance for motorists approaching (see Table A of Local Transport Note 1/94). Locations where parked vehicles may obstruct signs regularly should be avoided.

2.6.2 Small signs such as speed limit repeater signs should be mounted at low mounting height, at the rear of footways where possible. High mounted warning restriction signs should be avoided where possible in villages. In urban areas, they should be mounted on bollards and guardrailing, where convenient, or lamp columns.

Good practice



Bad practice



Good practice



*When adjacent to walls and hedges, the tops of the signs should be lower to avoid the backs of the signs being visible*

## Signing on Kent's Roads

### Environmental Issues

- 2.6.3 When adjacent to walls and hedges, the tops of signs should be below the top of these to avoid the back of the sign being visible. If possible, attach to walls but only with the written consent of the owner. The tops of the signs should be level where they are adjacent to each other and viewed together. This is particularly important at gateway features.

### 2.7 Construction of Signs

- 2.7.1 The back of the sign is in many ways as important as the front in terms of its environmental impact. Siting a sign such that a tree or other natural feature hides the back of the sign can reduce unnecessary environmental impact.
- 2.7.2 Signs should be manufactured using the minimum number of clips and joints whilst still complying with the standards in BS873, or its successors.
- 2.7.3 The use of 'dummy' posts shall be avoided and, if longer posts are required, they shall either be extended with flush fitting proprietary extension pieces of the same finish (galvanised, or plastic coated), or new posts provided of the correct length. This will ensure that the sign structure has a tidy and integrated appearance and is important for structural reasons. Failure to do this has led in the past to whole sections of direction signs becoming detached in high winds, with consequential serious safety implications.



*The cycle sign has been added to the top of an existing structure, creating an uncoordinated appearance. The white sign should have been raised and the blue signs installed beneath them*

X



*An extreme example of the use of dummy posts to extend and add a sign on a gantry. This can have structural and safety implications*

X



*Poor specification of posts and mounting arrangements can have a significant impact on the environment*

X



## Signing on Kent's Roads

### Environmental Issues

- 2.7.4 For signs offset from one post (see 3.3.5), the use of flush bracket arrangements should be considered where this is economically possible. Signs mounted in this manner should include a grey background (para 2.3.4) to avoid unsightly channel supports being visible. In conservation areas, post embellishments can add to the aesthetics of a sign and complement other street furniture. This must be part of a co-ordinated approach to street furniture to ensure that consistency is achieved, and should form an integral part of the design of environmental enhancement schemes.
- 2.7.5 The colours of sign posts and backings can lead to environmental intrusion. The convention is to use grey posts and sign backings as a standard. As an alternative, black has been used in some conservation areas, along with matching clips and lighting units. Other colours may be appropriate, where a co-ordinated approach to street furniture is applied, for instance, in an environmental enhancement scheme, but these may need DETR Authorisation. The backs of signs must not be coloured in similar shades to those used for sign faces (e.g. bright blue or green), because this might confuse motorists when viewed from a distance. The use of non-standard colours should be environmentally sympathetic, and should not be applied for any other reason.

### 2.8 Urban Environmental Issues

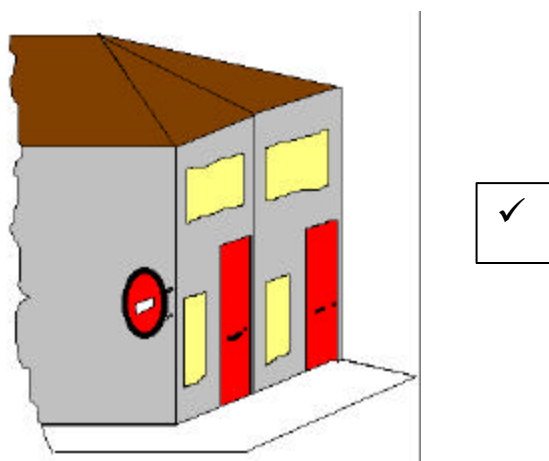
- 2.8.1 Signs installed in urban areas need to be visible against a background but sympathetic in mounting so as not to impede pedestrians. If a sign is required, consider placing it against a building, if suitable. However, great care should be taken to avoid spoiling the view of, for instance, a listed building. The position of signs should be considered in relation to the surrounding townscape and architectural harmony. The best compromise between achieving design standards, legal requirements and environmental sensitivity should always be sought.



## Signing on Kent's Roads

### Environmental Issues

- 2.8.2 To avoid restricting footways, and to reduce the volume of street furniture, signs will be provided on offset brackets to utilise only one post sited at the back of the footway, wherever practical. Alternatively, lamp columns will be used to mount signs. For structural reasons (wind load), the maximum size of sign which may be mounted on a lamp column is 0.3 square metres. In general, this equates to a standard warning or Regulatory sign of 600mm height, maximum. Where lamp columns are used to mount signs, care should also be taken to ensure the minimum clearance to the edge of the carriageway is maintained. If the lighting column is at the front of the footway, this is likely to be at the minimum clearance already.



- 2.8.3 Attaching signs to walls (with the owner's consent) is another means of reducing clutter.
- 2.8.4 Waiting restriction plates are often required in built up areas. These should be attached to walls (with owner's consent) where possible or mounted on other street furniture such as bollards or pedestrian guardrailling. They must be provided on lamp columns within the length of the road subject to restriction (except in some designated controlled parking zones). Where possible, existing lamp columns should be used to mount parking restriction signs near the end of a restricted length, but the lamp column needs to be situated within the restricted length and not more than 15 metres from its end. Careful consideration of this during the design of waiting restrictions will minimise the need for additional sign posts.
- 2.8.5 Signs should never be placed in front of windows. Locations should be chosen so as not to disrupt the householders view. Where possible, signs will be located at the boundary of adjacent properties, with care taken to avoid gateways and accesses.

## Signing on Kent's Roads

### Environmental Issues



*Waiting plates could be attached to buildings (with the owners consent) to prevent extra posts in the footway*



*Proprietary bollards are available to mount small waiting restriction signs. ( Photo courtesy of Signfix Ltd)*

## 2.8.6 **Pedestrian Signs**

2.8.6.1 Regulations permit variation in order that pedestrian direction signs co-ordinated with other street furniture can be used (see para. 2.7.5). Cast metal signs may be used, with special post mountings but these must be part of a co-ordinated approach to street furniture. The signfaces can be colour co-ordinated with posts etc. This approach is effective in Town and City centres. However, principles regarding direction signing strategies should be adhered to (see Section 7).

Good practice



2.8.6.2 Where special pedestrian signing is used, it should be noted that cycle facilities cannot be signed in a similar manner. The use of cycle signs, especially direction signs, in these situations will be environmentally intrusive, and should be minimised. If possible within legal constraints, they should be avoided. Cycle facilities should be specified with great care, to avoid the need for additional signing in these locations (see also para. 5.14.7)

## Signing on Kent's Roads

### Environmental Issues

#### 2.9 Rural Environmental Issues

- 2.9.1 A natural background is often helpful in improving effectiveness of signs, particularly at junctions. Use of features including walls, fences, buildings and railings should be considered. Hedges can also be used, but care should be taken to ensure the signs are not so close that they become overgrown regularly.
- 2.9.2 Careful siting of advance direction or warning signs to make use of backgrounds such as trees will reduce unnecessary visual intrusion both from the front and the back. Placing a sign in a natural dip in the road, providing design and visibility criteria can be achieved, will be less environmentally intrusive than one placed at a crest or on an embankment. The latter may encroach into views from the surrounding countryside, particularly in the case of direction signs, and should be avoided if possible.

Good practice



*Sign mounted in a cutting or dip will reduce visual intrusion from the surroundings*

Bad practice



*Sign mounted on an embankment or crest may be visually intrusive from all directions.*



## Signing on Kent's Roads

### Environmental Issues

- 2.9.3. Posts for rural finger post signs will be square section, powder coated white to give the appearance of a painted wooden post, with reflective arms with capital letters for text (See section 5). Standard PROW signs make use of black posts and clips, and the standard design currently in use is a good compromise between environmental and safety issues in locations adjacent to roads, particularly 'A' and 'B' class roads. However, for off-road situations, wooden signs (or equivalent) will be more sympathetic to the surroundings. As a trial, wooden signs will be used at minor road locations in the Quiet Lanes Project, currently being developed.



*Signs can be mounted on railings (with owner's consent) to reduce clutter and visual intrusion*



*Signs mounted in this manner may be more visually intrusive*

## 2.10 **Road Markings**

- 2.10.1 In conservation areas and environmental improvement schemes, where yellow lines are necessary they should be varied to the narrowest width permissible, to minimise visual intrusion.
- 2.10.2 Waiting restriction lines in conservation areas and environmental enhancement schemes will be toned down by using "primrose yellow" (BS381C no. 310) and 50mm width. In the occasional instance that parking restrictions are required in a village, this specification for lining should be used, also. In all other locations, the 75mm or 100mm width variants should be used. However, careful design may remove the need for Traffic Regulation Orders, and associated yellow lining.

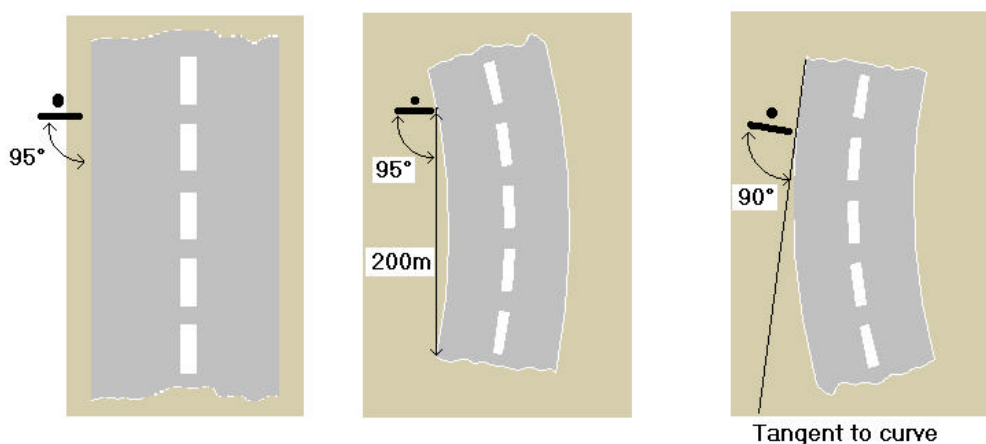
## Signing on Kent's Roads

### 3. Mounting, Construction and Illumination of Traffic Signs

- 3.1 The mounting and construction of a sign has a substantial impact on its performance. Poor mounting and construction have the potential to create unnecessary visual intrusion by untidiness. It is vital that designers give sufficient attention to detail to ensure performance is optimised, environmental intrusion is minimised, and obstruction to footway users is minimised.
- 3.2 Chapter 1 of the Traffic Signs Manual contains advice on the positioning and mounting of traffic signs, and should be read in conjunction with this section

#### 3.3 Position and mounting of signs

- 3.3.1 Many signs rely on retro-reflective sign face material for legibility at night. In order to prevent specular reflection (direct reflection from sunlight or car headlights to the extent that the sign legend is overpowered or motorists are dazzled), signs at the side of straight lengths of road are required to be orientated at 95° to the approaching traffic. Contractor's work should be checked thoroughly to ensure this has occurred. Figure 2-1 shows alternative layouts.



- 3.3.2 Signs should be offset such that the edge of the sign is no less than the following distances from the carriageway:-

• Kerbed or unkerbed road (not high speed).	450 mm
• Kerbed or unkerbed road with steep crossfall (not high speed)	600 mm
• High speed road	1200 mm
• High speed road with hardstrips (distance from edge of metallised surface)	600 mm

## Signing on Kent's Roads

### Mounting, Construction and Illumination of Traffic Signs

3.3.3 Signs should be mounted at the following heights, measured generally from the level of the footway or verge on which they are situated. Where the verge is lower than the carriageway level, and the signs are to be read by drivers travelling along the carriageway, the measurement should be taken from carriageway level:-

• Verges where pedestrians are unlikely.	1200 – 1500 mm
• Verges and footways which pedestrians use.*	2100 mm
• Verges and footways which cyclists use. *	2300 mm
• Chevron signs on rural bends and roundabouts	1050 mm

\* Smaller signs such as speed limit repeaters, waiting restriction plates and cycle track signs may be mounted lower if sited away from areas used by cyclists and pedestrians.

3.3.4 Signs relating to restrictions such as speed limits will need to be placed at the boundary of the restriction, whilst warning signs and advance direction signs need to be placed at distances from the hazard or junction appropriate to the approach speed of traffic, to enable sufficient time for braking to occur in safety. Advice on siting distances is provided in chapters 3 and 4 of the Traffic Signs Manual, Local Transport Note 1/94 and appendix 4.1 of this document.

3.3.5 The number of posts in footways should be minimised, to avoid obstruction to pedestrians. Where possible, signs which are erected in footways or to straddle them should be mounted on one post, at the rear of the footway (**subject to verification that the post and foundation would be strong enough to support the sign – see para. 3.4.2**). Clearance for a buggy or wheelchair to pass between posts should be provided. Lamp columns may be used to mount small signs, not exceeding 0.3 sq. m in area (this generally equates to a maximum of a 600mm warning or regulatory sign). An example of a proprietary method of sign mounting is shown below.



*Photograph courtesy of Signfix Ltd*

## Signing on Kent's Roads

### Mounting, Construction and Illumination of Traffic Signs

- 3.3.6 Where two posts are required to be erected in a footway, the absolute minimum spacing between the posts should be 1.2 metres, and in exceptional circumstances, an absolute minimum of 1.0 metres may be considered. Placing posts in the main area of the footway should be avoided. This may necessitate widening the sign with grey panels to allow posts to be mounted clear of the centre of the footway.



*Sign designed to span footway by using grey areas on both edges of sign*



*Signs should be mounted so that the posts do not extend above the sign. The lighting unit has insufficient outreach to illuminate the sign effectively.*

- 3.3.7 Where sign posts are not likely to be readily visible to pedestrians (for instance, near an elderly persons home), a yellow or white band, 140 to 160 mm wide may be added to the post, the lower edge being 1500 to 1700 mm from ground level. Particular attention to this should be made where dark coloured posts are used (eg. black, dark blue, dark green).
- 3.3.8 Direction signs, chevron signs (diagram 515), and all other signs exceeding 1.0 metre width should be mounted on two posts, to prevent excessive rotation forces and vandalism. In built up areas, where one post is desirable, a square post with offset fittings may be acceptable **(subject to verification that the post and foundation would be strong enough to support the sign)**.
- 3.3.9 Typical mounting arrangements are shown in standard details in the KCC Standard Contract Document for Highway Works. Signs should be mounted so that the posts do not extend above the level of the sign (see KCC standard detail drawings).



## Signing on Kent's Roads

### Mounting, Construction and Illumination of Traffic Signs

#### 3.4 **Construction of Signs**

- 3.4.1 Signs installed on highways in Kent will be designed and constructed in accordance with the appropriate national standard (currently BS873), and the DETR Specification for Highway Works, with amendments detailed in the KCC Standard Contract Document. Key local variations are:-

- Aluminium plank construction will be used for advance direction signs exceeding 2400 mm x 1200 mm or 1200 mm x 2400 mm. For compatibility, plank layout as per KCC standard detail will be used.
- Alternative materials will be used for signs sited in areas subject to severe vandalism or theft, where appropriate. (These are available in the Kent Contract, but are not suitable for large direction signs).
- Locally sourced timber will be used for wooden bollards and wooden public rights of way signs (paras. 5.13.3, 5.13.5, 5.14.8 and 5.14.11).
- Wide based posts for illuminated signs will have minimum base sections of 140mm diameter, to accommodate electrical apparatus, and will be of integral construction.
- Galvanised tubular steel sign posts will normally be used, where diameters of 140 mm or less are required. Where posts are required to be colours other than grey, plastic coated tubular steel posts will be used, normally.
- Anti-rotational, vandal resistant clips will be used to fix signs to posts
- Electrical equipment for traffic signs will be specified in consultation with local Highway Managers, to ensure consistency for maintenance compatibility.

- 3.4.2 Posts and foundations will be designed and specified to ensure adequate strength to support the signs to be mounted on them. Where posts in excess of 140 mm diameter are required, an individual structural design will be required to identify post and foundation sizes.

- 3.4.3 Large signs with posts exceeding 150mm diameter (excluding illuminated signs on posts with 168 mm diameter electrical housings) will have safety fence protection. DETR Highway Construction Details for safety fencing will be used.

- 3.4.4 Standard details of a number of traffic sign constructional elements are available in the KCC Standard Contract.

#### 3.4.5 **Other alternative methods of construction**

- 3.4.5.1 Pre-fabricated plastic chevron signs to diagrams 515.1 and 515.1A are available, and can be effective in reducing sign maintenance costs at locations where vehicles leave the carriageway regularly. Care should be taken to ensure they do not obstruct visibility at roundabouts, and sufficient width should be specified to create a similar area of effective sign to match a normal, post mounted sign.

## Signing on Kent's Roads

### Mounting, Construction and Illumination of Traffic Signs

3.4.5.2 Alternative forms of collapsible post are available for locations where signs are regularly knocked down in road traffic accidents. These should only be considered in extreme situations, and only after all other potential solutions have been exhausted through normal safety engineering processes. Consideration of resiting the sign and improving conspicuity should be an immediate action.



*Pre-fabricated plastic chevron signs can be used where vehicles leave the carriageway regularly*



*Consideration of re-siting signs and improving conspicuity should be an immediate action where vehicles leave the carriageway regularly.*

### 3.5 Illumination of Traffic Signs

3.5.1 Signs are illuminated by various methods, to enable them to be read by road users in the dark. Illumination requirements for traffic signs are specified in the Traffic Signs Regulations and General Directions (TSRGD), and the four alternative forms of illumination are set out below:-

- Direct illumination in combination with retro-reflective signface material.
- Direct illumination only.
- Retro-reflective signface material only.
- No illumination required. ( This applies to parking restriction signs mainly ).

3.5.2 In general, signs which require direct illumination fall into the following categories:-

- Certain warning signs within illuminated areas.
- Most regulatory signs within illuminated areas.
- Some motorway signs.

## Signing on Kent's Roads

### Mounting, Construction and Illumination of Traffic Signs

3.5.3 The Department of the Environment, Transport and the Regions are reviewing currently requirements for illumination of traffic signs with a view to incorporating relaxations in the following categories in a forthcoming update of TSRGD.

- Motorway signs.
- Informatory signs.
- Warning signs on minor roads in built-up areas and in 20 mph zones.
- Some Regulatory signs on minor roads in built-up areas and in 20 mph zones.

3.5.4 Failure to illuminate signs to the correct standards could lead to problems of enforcement/safety/liability (Regulatory signs), and safety/liability (warning signs). There is no point in providing signs which cannot be read by road users. KCC supports the DETR's proposals to reduce the requirements of illumination of traffic signs. This will reduce substantially the initial cost of signs in built-up areas and provide a small saving in maintenance costs.

3.5.5. The following standards of illumination will be applied in Kent, in addition to the requirements in TSRGD:-

- Signs requiring direct illumination will be externally illuminated, and signfaces reflectorised to BS873 class 1 standards, except:-
  - a) Internally illuminated signs may be used in conservation areas for aesthetic reasons.
  - b) Internally illuminated signs may be used where there is insufficient clearance for a lighting unit (for example, signs mounted in a central reservation to face a side road)
- Signs which may be illuminated by retro-reflective material only, will be reflectorised to BS873 class 1 standards.
- Signs which may be illuminated by retro-reflective material only, will be considered for reflectorisation with micro-prismatic material meeting the majority of BS873 class 1 standards in the following situations:-
  - a) Signs erected on the inside of a bend
  - b) Signs erected on the fascias of low bridges
  - c) Signs erected on the offside of the carriageway
  - d) Signs which may benefit from longer range visibility distance (this is likely to be limited to chevron signs on roundabouts on high speed roads, or chevron signs on bends out of character with the remainder of the route – care must be taken to avoid dazzling motorists where signs are mounted at low height, in the driver's eye line, and at east/west facing locations).
  - e) Direction signs.
  - f) Village nameplates (see para 3.5.6 for special manufacturing requirements)
- Signs will be reflectorised with fluorescent micro-prismatic material in the following circumstances:-
  - a) Diagrams 530.2 and 532.2 on bridge fascias (NOT in conservation areas)
  - b) Signs with yellow backing boards which require exceptional daytime visibility
  - c) Fluorescent reflectorised material will not be used in conservation areas or rural areas unless there are compelling safety reasons and Parish/District Councils agree.

## **Signing on Kent's Roads**

### **Mounting, Construction and Illumination of Traffic Signs**

- 3.5.6 Village nameplates referred to in sections 5.11 and 5.12 will be electro-statically printed on to white micro-prismatic material, in order to obtain a satisfactory level of retro-reflectivity.
- 3.5.7 Requirements for illumination of traffic signs and methods of illumination will be reviewed regularly. Standards are expected to change nationally as technology improves and this is expected to reduce the need to illuminate a range of other signs in built-up areas.
- 3.5.8 All retro-reflective signs have a tendency for their reflective performance to be impaired by the formation of dew on the sign face, reducing night time legibility substantially. The County Council will continue to press manufacturers and organisations responsible for national standards for solutions to this problem.
- 3.5.9 Signs mounted at or below 1500 mm mounting height in areas where pedestrians have access will have signfaces coated with protective overlay film to protect legends from being damaged by vandals.



## Signing on Kent's Roads

### 4. Warning, Speed Limit and other Regulatory Signs

#### 4.1 Warning Signs

4.1.1 Warning signs are provided to draw motorist's attention to particular hazards on the road ahead. Extensive guidance and criteria for their use is set out in Chapter 4 of the Traffic Signs Manual, published by The Stationery Office.

4.1.2 On 'A' and 'B' class roads in Kent warning signs may be required in the following instances:-

- To warn of hazards which could require a reduction in speed from the approach speed of the majority of the traffic. (For example, a bend).
- Where forward visibility of the hazard is below the standard required based on the approach speed for the majority of the traffic. (For example, a priority junction, an advance give way sign, a pedestrian crossing).
- To highlight hazards which are out of character with the remainder of the route.
- To highlight locations with a poor crash record.
- To highlight specific potential dangers. (For example, quayside, ford, low bridge, level crossing).
- Where required by legislation or national design guidance.

4.1.3 Warning signs must be applied consistently throughout routes to avoid the potential of transferring crash problems to untreated locations. An example of this is the provision of chevron signs on bends.

4.1.4 On 'C' class and other minor roads in Kent, warning signs will be required less frequently. They may be required in the following instances:-

- To highlight locations with a poor crash record.
- To highlight specific potential dangers. (For example, quayside, low bridge, ford, level crossing).
- Where required by legislation or national design guidance.

4.1.5 Warning signs are often viewed by the public as a panacea to perceived safety problems, and as a result, the County Council receives many requests for additional signs. Often, the problems leading to the requests would be better addressed by other measures. An example is concealed entrances, where the solution is often for the frontagers to trim a hedge or modify a boundary fence. Such requests will need to be considered carefully, because excessive use of warning signs must be avoided. Their overuse is likely to result in reduced effectiveness of those signs which are essential or are used to highlight locations with poor safety records. It is also likely to cause unwelcome visual intrusion. (See also section 8, Sign Audits).

4.1.6 The Road Traffic Regulation Act 1984 empowers Parish Councils to fund warning signs where the Traffic Authority agrees to their provision.

## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs

#### 4.2 Number of Signs

- 4.2.1 The number of signs used to identify a hazard should be kept to a minimum to avoid confusion. Where different types of hazards occur at the same location, a maximum of two warning signs should be incorporated using a backing board or two separate signs mounted on one post. Where a sign is accompanied by a supplementary plate the combination of the sign and plate should be regarded as one sign.
- 4.2.2 The use of backgrounds should be in accordance with paragraphs 2.3.3 to 2.3.5.
- 4.2.3 Warning signs for road humps should be provided on each approach to the road with humps. The signs provided should be Diagram No. 557.1 – Road Humps with supplementary plate to Diagram Nos. 557.2, 557.3 or 557.4 to indicate distance, and in some cases direction. Further guidance on road hump signs is given in DETR Traffic Advisory Leaflets.

#### 4.3 Enhancing the Message (warning signs)

- 4.3.1 In some cases, it may be necessary to further emphasise the message provided by warning signs. This may be desirable for locations with a poor safety record. However, restraint should be exercised to avoid a gradual enhancement of all sites, thus negating any benefit. Care should also be taken to ensure a consistent approach is applied on a route basis to avoid confusing motorists and transferring poor crash records from one site to another.
- 4.3.2 The use of backing boards should be in accordance with paragraphs 2.3.3 to 2.3.5. Often, the use of the correct sizes of warning signs will remove the need for a backing board.
- 4.3.3 The following are examples of the use of enhanced warning signs:-

Measure	Application
<ul style="list-style-type: none"> <li>Duplication of warning sign on off-side of road.</li> <li>Slow carriageway marking.</li> <li>Use of backing boards.</li> </ul>	<p>Where nearside sign may be obscured by large vehicles –</p> <ul style="list-style-type: none"> <li>Junctions and approaches to bends within overtaking sections on single carriageway roads.</li> <li>All situations on dual carriageways (see para 4.3.4 for roundabouts)</li> <li>In combination with any warning sign, as part of a crash reduction measure. The marking may not be used except as a supplement to a warning sign.</li> <li>See paragraphs 2.3.3 to 2.3.5.</li> </ul>

## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs

4.3.4 Warning signs for roundabouts on high speed roads should be in accordance with the following:-

Type of Signs	Approximate distance from roundabout
Diagram No. 510 – Roundabout Diagram 511 – REDUCE SPEED NOW Combined and duplicated on both sides.	450 metres (nearside) 500 metres (offside)
Diagram No. 823 – 300 yds countdown on both sides.	274 metres
Map – Type advance direction sign Diagram No. 824 – 200 yds countdown, on both sides.	183 metres
Diagram No. 825 – 100 yds countdown, on both sides.	92 metres
Block paved chevrons.	On roundabout
2 x Diagram No. 515 erected either side of 1 x Diagram No. 606 mounted in line (see photograph below).	On roundabout

Good practice



*Chevron and turn left signs on roundabouts will be mounted in line at low height, to maximise visibility and to improve aesthetics. NOTE – block paved chevrons require careful maintenance to maintain effectiveness.*

## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs

#### 4.4 Position of warning signs

- 4.4.1 Warning signs should be positioned so as to provide the necessary clear visibility distance as described in Appendix 4.1.

#### 4.5 Speed Limit Signs

- 4.5.1 Speed limit signs are used to indicate to motorists a maximum speed limit enforced either through a Traffic Regulation Order or, in the case of most 30 m.p.h. speed limits, a limit by virtue of the presence of a system of lighting (defined as a minimum of three lights within 183 metres).

- 4.5.2 Failure to sign speed limits correctly will lead to problems of enforcement and the possibility of legal challenges. In addition, careful use of signing can improve the level of self enforcement, and reduce the need for additional road markings and coloured backgrounds to signs.

#### 4.5.3 Speed Limit Terminal Signs

- 4.5.3.1 On 'A' and 'B' class roads, speed limit terminal signs will be combined with settlement boundary signs as described in section 5.11. In combination with other features such as red surfacing, a carriageway roundel or dragon's teeth markings, a gateway can be formed. Not all of these features will be necessary at each location, and care is needed to provide consistency through routes and to minimise unreasonable environmental intrusion. On 'C' class roads and other minor roads, the speed limit boundary will be located normally about 50 metres before the settlement boundary sign. At some locations, and particularly in rural areas, there is scope for the provision of gateway signing mounted in a variety of formats. An example is shown below. Where these result in increased capital or maintenance costs, the additional funding may be sought from other bodies. Local consultation will be necessary where gateways are proposed.



- 4.5.3.2 Terminal signs are required on side road entry/exits as follows:-

- Two signs, one on each side of the minor road before entering the main road, when the speed limit is different on the main road and repeater signs are not in use on the main road.
- Two signs, one on each side of the minor road after leaving a major road with a different limit.
- A speed limit repeater sign on the nearside of the major road within 50 metres of the junction may be substituted for a) where repeater signs are in use.

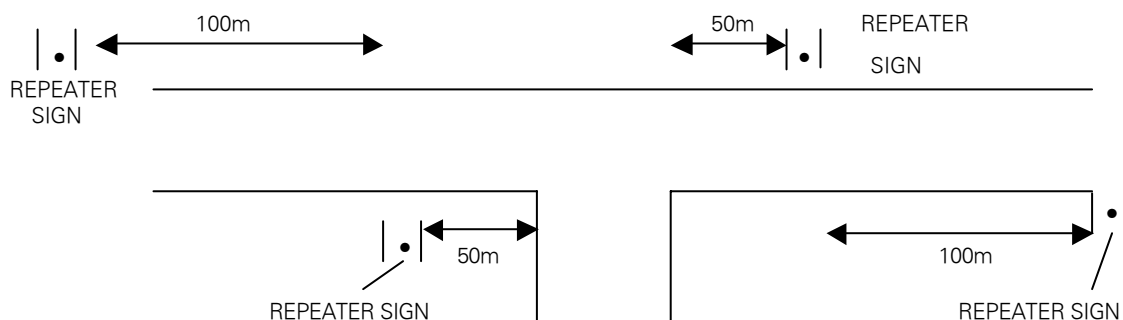
## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs

- 4.5.3.3. When preparing speed limit Orders, consideration of suitable locations for signing is important and should be an integral part of the planning process. The proposed boundaries should avoid locations where signing is impractical or would have impaired visibility. It is permissible to site signs at or within the boundaries of the Order, but not outside of it.
- 4.5.3.4 **Speed limit terminal signs** require illumination where they are installed on a principal road within 50 metres of a lamp forming part of a system of lighting (defined as a minimum of three lamps placed no more than 183 metres apart).
- 4.5.3.5 Recommended sizes for speed limit terminal signs are shown in Appendix 4.2.

#### 4.5.4 Speed limit Repeater Signs

- 4.5.4.1 Speed limit repeater signs are required in all areas subject to a speed limit **except for 30 m.p.h. speed limits in areas with systems of carriageway lighting** (defined as lamps placed 183 metres apart). Incorrect usage of repeater signs in 30 m.p.h. restricted areas is likely to result in difficulties in enforcement and challenge to convictions in the surrounding areas. The usage is specifically excluded in TSRGD.
- 4.5.4.2 Where repeater signs are required, they should be erected back to back at approximately 100m spacings on alternate sides of the road. This will ensure motorists are reminded at regular intervals that a speed limit is in force. De-restriction repeater signs should be erected at 600 metres spacings maximum **and are required where there is a system of carriageway lighting (defined as lamps placed no more than 183 metres apart)**. On dual carriageways, repeater signs are required at similar spacings, but alternately on both sides of each carriageway, and back to back in the central reservation. Either side of a junction there should be a repeater sign on the nearside within 50m of the junction.



- 4.5.4.3 Repeater signs should be mounted on posts of other signs, where convenient, and lamp columns, to reduce the need for installation of new posts. Repeater signs should not be installed at high mounting heights, especially in villages (see also para 2.6.2).
- 4.5.4.4 Backgrounds are not necessary for repeater signs.
- 4.5.4.5 Speed limit repeater signs are not required to be illuminated.
- 4.5.4.6 Recommended sizes of speed limit repeater signs are shown in Appendix 4.2.



## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs

#### 4.5.5 Speed limit Carriageway Roundels

- 4.5.5.1 The use of speed limit carriageway roundels should be limited generally to provision in combination with gateway terminal signing and coloured surfacing. The use of the carriageway marking currently requires the approval of the Secretary of State and each location requires an individual application (see also para. 1.2.3.).
- 4.5.5.2 In extreme cases, the speed limit roundel carriageway marking can be used at alternate repeater sign locations, **but only where the speed limit is 40 or 50 m.p.h.** The marking is classed as a supplementary repeater sign, so its use in areas restricted by the presence of street lighting to 30 m.p.h. is excluded in TSRGD (see also para 4.5.4.1). The use of roundels should only be proposed as a last resort to combat a safety problem, as they can be environmentally intrusive, and there is no evidence which indicates their provision will lead to sustained reduction in traffic speeds.



*In extreme cases, the speed limit roundel can be used at alternate speed limit repeater sign locations, where the speed limit is 40 or 50 mph (DETR approval is also required)*

#### 4.6 Other Regulatory Signs

- 4.6.1 Regulatory signs generally prohibit or direct road users, selected road users or selected vehicle types. Many regulatory signs support Traffic Regulation Orders, although there are a number which do not require Traffic Regulation Orders. Further information is given in Chapter 3 of the Traffic Signs Manual published by the Stationery Office.
- 4.6.2 **The provision of regulatory signs should be considered at the planning stage of any proposed Traffic Regulation Order, or during the development of highway schemes.** Schemes which result in a requirement for complex regulatory signing should be avoided wherever possible. They are more likely to result in motorists being confused, and enforcement may be more difficult. An example of this is pedestrianisation – where there are ranges of different exemptions for different days and time periods, the provision of concise signing which is readily understood by motorists becomes difficult.

## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs



*The inclusion of a range of times of operation and exclusions for different vehicle types results in complex signing and can lead to confusion. This can often lead to enforcement difficulties.*

4.6.3 Give way signs (TSRGD diagram 602) in addition to the appropriate road markings (TSRGD diagrams 1003 and 1023), will be provided at priority junctions of 'A', 'B' and 'C' class roads with 'A', 'B' and 'C' class roads. Road markings only will be provided at all other junctions. At junctions between minor roads with low traffic flows, for instance in rural areas and in housing estates, priority can be indicated by markings to TSRGD diagram 1010. Give way signs can be provided to supplement road markings at junctions between minor roads where their use may alleviate a defined crash record.

4.6.4 Stop signs (TSRGD diagram 601.1) will only be provided where the criteria in Chapter 3 of the Traffic Signs Manual are achieved. All stop sign proposals will require formal application for Secretary of State approval (see also para. 1.2.3.).

#### 4.7 **Signing at Low Bridges**

4.7.1 Clear signing at low bridges is of key importance in seeking to reduce the number of collisions (bridge bashes) involving overheight vehicles. Bridge bashes cause major disruption to rail and road traffic and jeopardise the safety of both rail and road users.

4.7.2 The following principles will be followed in signing low bridges (low means clearance restricted either wholly or partly between the carriageway surface and the structure to 16'6" or less). The area signed must relate to the carriageway only. The signing must not extend across the footway. They should be read in conjunction with TSRGD, Traffic Signs Manual Chapter 4, and other DETR guidance on the subject.

##### **a) General**

- All bridges will be signed with both metric and imperial heights.
- Arch bridges will be signed with warning signs, other bridges with regulatory signs.

##### **b) At the bridge**

- Regulatory signs (for non-arch bridges), or warning signs with supplementary plates for high vehicles (dia 531.2) (for arch bridges) on both sides of the carriageway on the immediate approach to the bridge with yellow backgrounds (micro-prismatic reflective material should be used).
- Combinations of regulatory signs (for non-arch bridges), or warning signs ( for arch bridges ) and chevron signs with fluorescent yellow material will be mounted on the fascia of the bridge over the area of the carriageway where the height indicated is available (micro-prismatic material should be used). The chevron signs on arch bridges will be flush with the soffit of the arch and follow the arch profile, and will be supported by appropriate road markings to delineate the area of carriageway to be used by high vehicles.

## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs

- Signing on arch bridges will relate to the area where the minimum clearance is achieved (3m minimum width), and will be supported by the designated signs to indicate the chord area where the height is available.
- Signs may only be mounted on bridge facias with the agreement of the bridge owner.

#### c) Key junctions on each approach to the bridge

- Advance warning or advance regulatory signs will be provided. Low bridge information will be included within direction signs.

#### d) Low bridges on the principal route network and routes to key industrial areas.

- Indication of appropriate low bridge information within direction signs on a wide basis.
- Indication of route avoiding the low bridge may be considered, where available
- In some cases, overheight vehicle detectors and electronic signs may be appropriate.

4.7.3 The County Council will seek to improve signing at low bridges in partnership with Railtrack.



*Typical layout of signs at a low bridge (para. 4.7.2 a and b refers)*



*Sign layout at key junctions on the approach to a low bridge with Regulatory signs*

## 4.8 Other Road Markings

- 4.8.1 Carriageway centre line markings should not generally be used in urban areas where the carriageway width is less than 6.0 metres, or in rural areas where the carriageway width is less than 5.5 metres, except in exceptional circumstances for road safety reasons, or in connection with vertical traffic calming features.
- 4.8.2 Continuous white edge markings will be used on all unlit A and B class roads which do not have vertical kerbs and which have a carriageway width exceeding 6.0 metres. Additionally, these markings will be used in all situations where edge strips (usually 1.0 metres width) are provided, and in conjunction with vertical traffic calming features (except raised controlled pedestrian crossings), to highlight significant hazards, road narrows, and in other situations for safety reasons.

## **Signing on Kent's Roads**

### **Warning, Speed Limit and other Regulatory Signs**

- 4.8.3 Reflecting road studs will be provided on the centre or lane line of all unlit A and B class roads which have a carriageway width exceeding 5.5 metres and have centre or lane markings. They must also be provided as part of all double white line systems (including in lit areas). Reflecting road studs will be used on high speed roads in conjunction with edge of carriageway markings and may be used on other unlit 'A' and 'B' class roads for safety reasons. Bi-directional studs will not be used in conjunction with hatching in the centre of the carriageway.
- 4.8.4 Detailed guidance on the specification of road markings is set out in Chapter 5 of the Traffic Signs Manual, published by The Stationery Office.

## Signing on Kent's Roads

### 5. Direction Signs and Boundary Signs

#### 5.1 Introduction

5.1.1 There are 7 categories of direction signs, and they are defined in Appendix 5.2

- Advance direction signs
- Direction signs
- Route confirmatory signs
- Fingerposts
- Public rights of way signs
- Cycle signs
- Boundary signs

5.1.2 The background colours of direction signs are colour coded to indicate the type of road where the sign is situated, and in some instances, the category of traffic being directed as follows:-

- Blue background – motorway
- Green background – designated primary route
- White background – non-primary route
- Black background – designated route for goods vehicles
- Blue background – route for cyclists or pedestrians
- Brown background – route to a tourist destination
- Yellow/red background – temporary signing often in connection with road works.

5.1.3 Signing contributes to key road safety and traffic management objectives. These will, in turn, assist in achieving the strategic objectives Kent's Transport Plan.

5.1.4 It is imperative that signing is consistent, in terms of location on the highway, design and legends. Destinations must be continued through each junction until the boundary sign is reached. The relative positions of destinations within signs should also be consistent. These are key factors in achieving the above Policies.

5.1.5 The level of signing is dependent upon the volume and speed of traffic that uses a route. Generally, more signs are required on 'A' and 'B' class roads. Conversely, minor roads demand less signing and some, with little or no strategic importance do not require directional signs at all. Further guidance is given in paragraph 5.6.2.

#### 5.2 Size of signs and lettering heights

5.2.1 Local Transport Note 1/94 quotes recommended xheights for signs dependent upon the 85%ile speed of private cars. The x-height is a technical term used in detailed design and manufacture of traffic signs.



## Signing on Kent's Roads

### Direction Signs and Boundary Signs

- 5.2.2 The 85<sup>th</sup> percentile speed is used to ensure that sign legends are specified at an appropriate height to be visible at appropriate distances, for the majority of traffic. Variance from the guidance is not recommended as this would compromise safety.

Good practice



Correct x-height

Bad practice



*Part of this sign is at the wrong x-height and cannot be read by approaching motorists. The remainder is too large. The corners of the sign should be radiused also.*

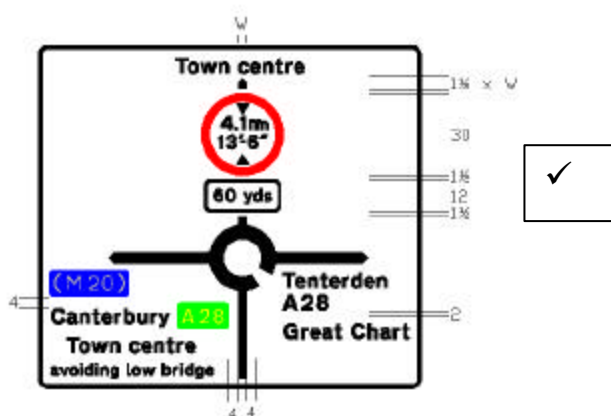
- 5.2.3 In many cases, two x-heights are quoted whereby the figure in brackets is the minimum acceptable. A designer can select any x-height (e.g. 23x, 80x etc.), between the minimum and maximum stated in the design standards, and this is a useful means of designing the sign to fit the site circumstances (e.g. available footway/verge widths).
- 5.2.4 It is clear that there is uncertainty about appropriate x-heights and frequently, the designer opts for the larger sizes. Appendix 5.1 of this report lists the recommended Kent standards based upon the information in LTN 1/94. In some cases, the minimum standard is chosen.
- 5.2.5 The x-height is the height of a capital letter divided by 1.4. The higher the x-height, the larger the lettering. Two text types are used. Transport Medium alphabet is used where black lettering is required, and Transport Heavy alphabet is used where white or yellow lettering are required.

## Signing on Kent's Roads

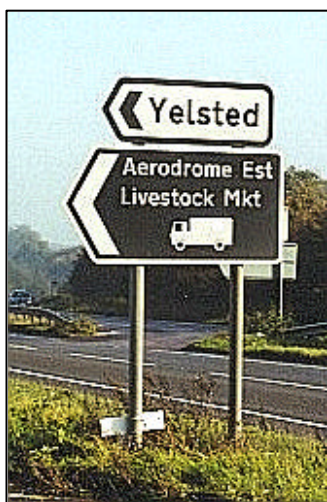
### Direction Signs and Boundary Signs

#### 5.3 Design of Signs

- 5.3.1 Chapter 7 of the Traffic Signs Manual shall be used for the design of all direction signs. This document shows how to correctly space and place legends on signs to minimise the area of sign and create a clear message through good design.



Design layout for a typical map-type advance direction sign



Sign provided based on a fully detailed design drawing

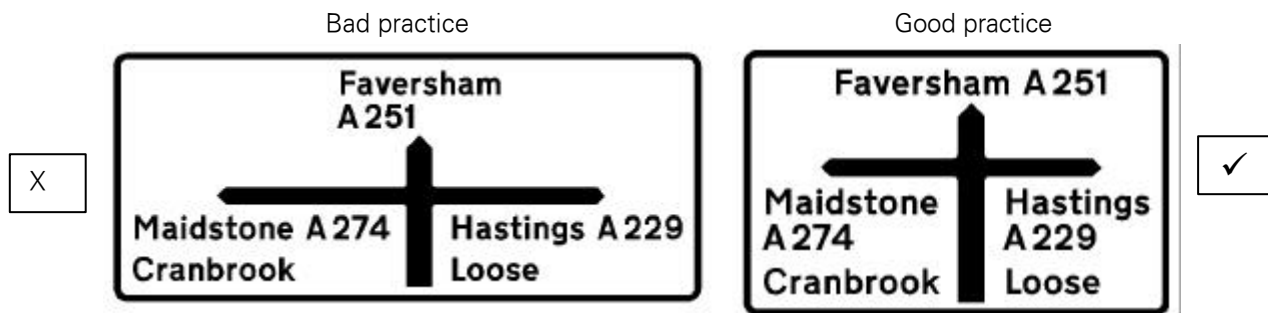


Sign provided without a detailed design. The lettering is far too small for the size of sign

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

5.3.2 Design rules for signs are complex and comprehensive, with great scope for local variation. However, they rely on experience of the designer to achieve effective design and layout. All signs should therefore be designed by competent designers. Full working drawings will be provided manufacturers. Failure to adopt this approach can lead to signs being provided which are unnecessarily large or compromise safety through misleading layout. A manufacturer should not be entrusted with the responsibility to carry out design, unless the design is audited separately.



5.3.3. Direction signs will be designed to the smallest size possible based on the design rules in Chapter 7 of the Traffic Signs Manual and also x heights in appendix 5.1

5.3.4 It is permissible for all information to be contained within one direction sign. However, this can result in too many destinations being used at one sign location.

5.3.5 A place name with its route number is considered to be a 'block' (i.e. a block of related information). There can be several blocks within one sign and Chapter 7 section 3 gives clear guidance on the spacing of these blocks.

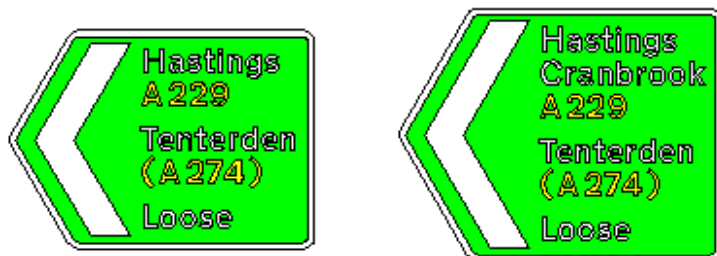
5.3.6 In order to ensure consistency, signs in Kent will be designed with the order of blocks as given below (reading from top of sign to bottom). This principle is followed in the good practice drawing shown above paras 5.3.1 and 5.3.3.

- Motorway (e.g. **(M25)** on a blue patch.)
- Main destination of route in descending order (furthest first) with route number (where appropriate). Typically, this will be the 'super primary', 'primary' then 'secondary' destinations (see chapter 7 - signing strategy).
- Secondary destination on a diverging route with route number in brackets
- Local destinations on route ahead.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

Example



- 5.3.7 As each local destination is passed, this will disappear from the bottom of the sign and be replaced with the next local destination. In all instances therefore, the main destination will continue to be at the top of the sign.

#### 5.4 **Number of signs**

- 5.4.1 Normally there shall be a maximum of one advance directional sign per junction approach. No sign location will contain more than 6 destinations and on high speed roads exceeding 50mph this should be decreased to 4 to ensure that the sign is fully legible for that speed of traffic. The only exception to this is in cases where continuity symbol signs for a route to a tourist destination are required (refer to section 6, Tourist Signing, to follow).



*Satisfactory number of destinations*



*Too many destinations*

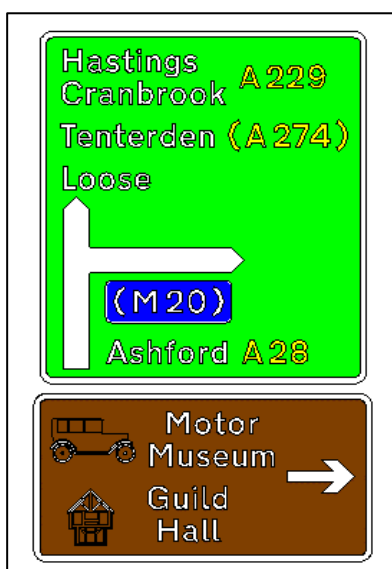
- 5.4.2 In exceptional situations, where more than one sign is required, the destinations shall be arranged in a logical order between adjacent signs. For example, 'local' destinations on one and major or primary on the other.

## Signing on Kent's Roads

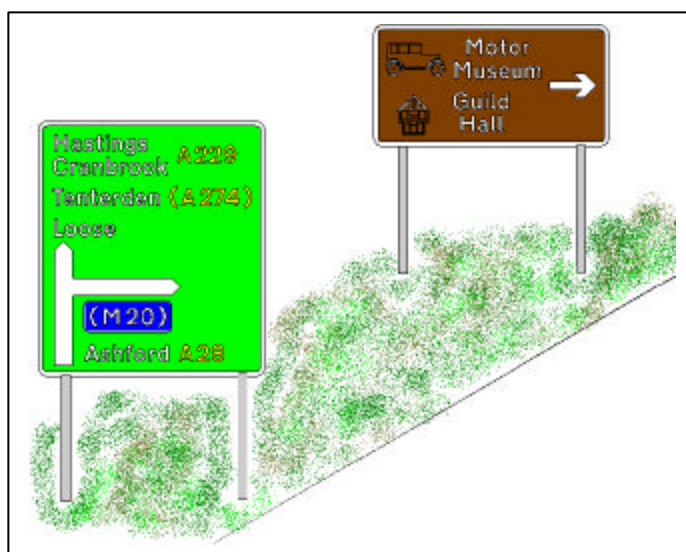
### Direction Signs and Boundary Signs

#### 5.5 Selection of destinations

- 5.5.1 All 'A' and 'B' class routes shall have a route strategy produced which defines the destinations to be displayed. All built-up areas shall have a destination strategy developed and agreed. The selection of destinations is covered in detail in section 7.
- 5.5.2 Signs added below an existing sign count as destinations too. The sign below is therefore 'overloaded' in terms of information to the road user.



In this instance, the tourist assembly should be separated and provided at another location, as shown below. Siting details where two advance direction signs are required are set out in Appendix A of local Transport Note 1/94.





## Signing on Kent's Roads

### Direction Signs and Boundary Signs

#### 5.6 Use of advance direction signs

- 5.6.1 As with all types of signing, determining the quantity of directional signing to be provided must ensure an appropriate balance between road safety, traffic management and the environment, whilst reflecting legal obligations. The signing provided should be kept to an appropriate minimum.
- 5.6.2 Advance direction signs are provided as a supplement to direction signs located at a junction. They may not be used in isolation. The table below sets out guidance as to which junction types may require direction signs and advance direction signs:-

Junction type	Major Road Approach		Minor Road Approach	
	Advance direction sign	Direction Sign	Advance direction sign	Direction Sign
A road / A road	Mandatory	Mandatory	Mandatory	Mandatory
A road / B road	Mandatory	Mandatory	Mandatory	Mandatory
A road / C road	Optional	Optional	Exceptionally	Mandatory
A road / U road	Optional	Optional	Exceptionally	Optional
B road / B road	Mandatory	Mandatory	Mandatory	Mandatory
B road / C road	Optional	Optional	Exceptionally	Mandatory
B road / U road	Optional	Optional	Exceptionally	Optional
C road / C road (urb)	Optional	Optional	Optional	Optional
C road / U road (urb)	Optional	Optional	Exceptionally	Exceptionally
U road / U road (urb)	Not Required	Exceptionally	Not Required	Exceptionally
C road / C road (rur)	Optional	Rural Fingerpost	Exceptionally	Rural Fingerpost
C road / U road (rur)	Optional	Rural Fingerpost (optional)	Not Required	Rural Fingerpost
U road / U road (rur)	Not Required	Rural Fingerpost (optional)	Not Required	Rural Fingerpost (optional)
Note : All grade separated junctions will require both map-type advance direction signs and direction signs on all approaches. Where approaches to roundabouts or mini-roundabouts do not require advance direction signs, roundabout warning signs (diagram no. 510) will be provided.				

- 5.6.3 Where a traffic management or safety issue has been defined, direction and advance direction signs may be considered where 'exceptional' or 'optional' use is indicated in the table. This may include locations where a defined crash problem has been identified which may be improved by the use of advance direction signs. For straightforward junctions, stack type advance direction signs will be used normally to minimise the size of signs (see also para. 2.3.2). Map-type signs will be used where motorists will benefit from an indication of the road layout, for instance a roundabout or mini roundabout. However, care should be taken when making such decisions to ensure that an alternative solution is not more appropriate. In particular, advance direction signs tend to be large and visually intrusive, and a comparable safety benefit can be achieved by the use of junction warning signs, particularly in C and unclassified roads.
- 5.6.4 It will rarely be practical to provide two advance direction signs on an approach to a junction. Exceptionally, this method may be used to overcome the restrictions of sign legends indicated in 5.4.1. Where this occurs, the signs should be located so that the strategic destinations are viewed first, and the local or tourist destinations subsequently.

#### Direction Signs and Boundary Signs

- 5.6.5 Care should be taken to ensure that map type signs are not designed to show excessively complicated layouts.

## Signing on Kent's Roads



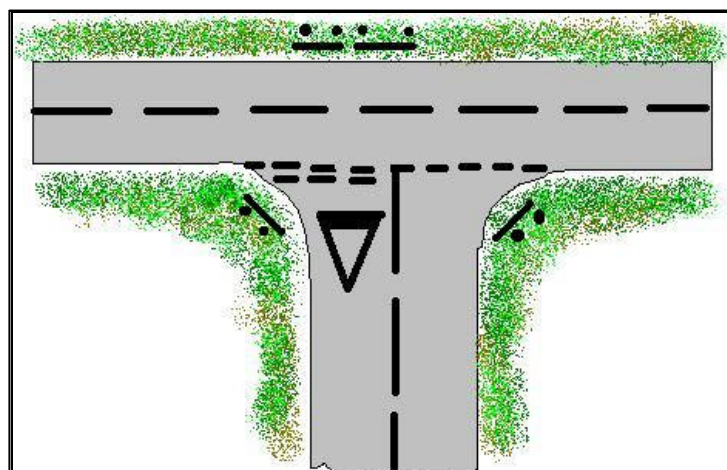
*Advance direction sign at a mini roundabout junction*



*This advance direction sign shows a complicated layout which motorists may have difficulty in understanding (para. 5.6.5).*

### 5.7 **Direction signs at junctions**

- 5.7.1 Direction signs at junctions (flag-type signs) have been one of the main causes of complaint from environmentalists. If advance direction signs are used, flag-type signs **MUST** be provided as they serve as a pointer for the junction, or destination.

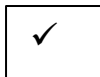


*Recommended layout of flagtype direction signs at a priority junction*

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

- 5.7.2 Mounting heights of signs sited in the mouth of a side road should be 1500mm, ideally, to ensure that most vehicles other than lorries and tractors do not obscure them. In some locations, a lower height, or mounting on guardrail may be appropriate, for aesthetic reasons. The signs should be located to provide good target visibility of the sign for a motorist from at least the safe stopping distance, for the 85% ile of the approach speed, and clear visibility to read the sign over the distance described in Appendix A of Local Transport Note 1/94. The precise location of the direction signs in the mouth of the side road will need to be carefully considered to ensure one sign doesn't obscure the other. Where the junction is situated on the inside of a bend, direction signs may have to be sited back to back opposite the junction to avoid this.



*Direction signs should be mounted in the mouths of side roads to ensure that most vehicles, other than lorries and tractors, do not obscure them*



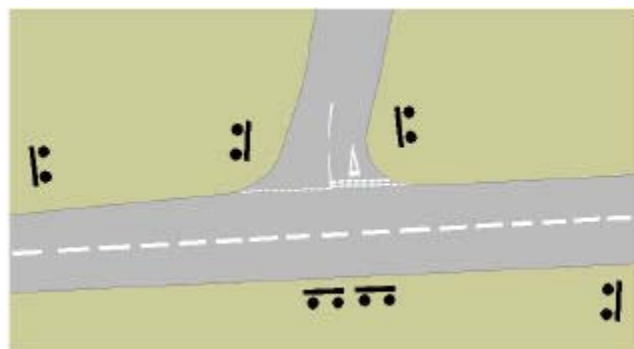
*In some locations, lower mounting height, such as on guard-rails may be appropriate.*

- 5.7.3. Careful siting is important for safety reasons. The signs provide warning of the actual location of the turning for motorists approaching on the major road. They warn other motorists indirectly of the presence of the junction, with the resultant likelihood of vehicles turning. A careful balance with the principles in section 3 (environmental issues) is important to ensure the signs fulfil their road safety and traffic management purposes but do not create unnecessary visual intrusion. This can usually be achieved by a combination of low mounting heights and careful siting to ensure the sign is visible to an approaching motorist at the safe stopping distance from the junction. In some instances, vertical curvature will dictate a higher mounting height, whilst junctions on the inside of a bend will almost always require direction signs to be sited opposite, on the outside of the curve.

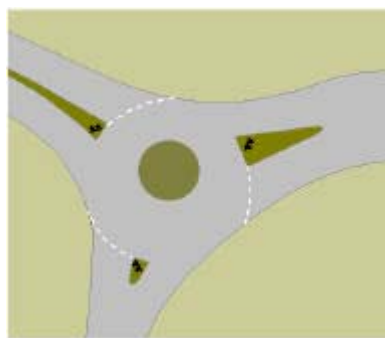
## Signing on Kent's Roads

### Direction Signs and Boundary Signs

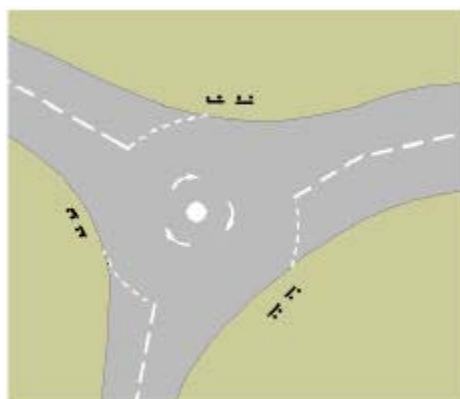
#### 5.8 Preferred layout for different junction types – Classified roads



*Priority junction*



*Conventional roundabout*



*Mini roundabout*

#### 5.9 Directional signs on minor rural roads

- 5.9.1 Minor rural roads are primarily for reaching rural hamlets and do not form part of the strategic network. For this reason, signing should be to a minimum and be in keeping with the rural surroundings.
- 5.9.2 Traditionally, direction signing has been with the use of 'finger posts'. Safety is still of prime importance and modern reflecting materials should be used to ensure the signs are visible at night. With careful siting, these signs can provide a good consistent message to the road user without causing environmentally intrusive clutter
- 5.9.3 The TSRGD permits considerable flexibility, and some counties have created a 'regional' style for finger posts.
- 5.9.4 Since 1994, Kent has adopted a consistent approach to this signing which is in keeping with the surrounding areas. White frames and black posts are now specified for these signs, to further enhance appearance.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

Good practice



Bad practice



- 5.9.5 In Leicestershire, the use of bold white posts improves junction conspicuity and is noticeable some distance before the legend of the sign can be read. This has reduced the need for advance junction warning signs in many instances. Such equipment is 'off the shelf' and hence, is relatively inexpensive. The layout is similar to old fashioned wooden or cast iron fingerposts.

Good practice



Good practice





## **Signing on Kent's Roads**

### **Direction Signs and Boundary Signs**

#### **5.10 Fingerpost Signs**

- 5.10.1 It is proposed to use standard finger arms as shown below. All equipment is a stock item and will be faced with reflective material to provide night time visibility. A trial of this equipment has been in place for some years in Hollingbourne and has proved durable. This style of sign does not have a modern appearance, and resembles an old fashioned wooden fingerpost.

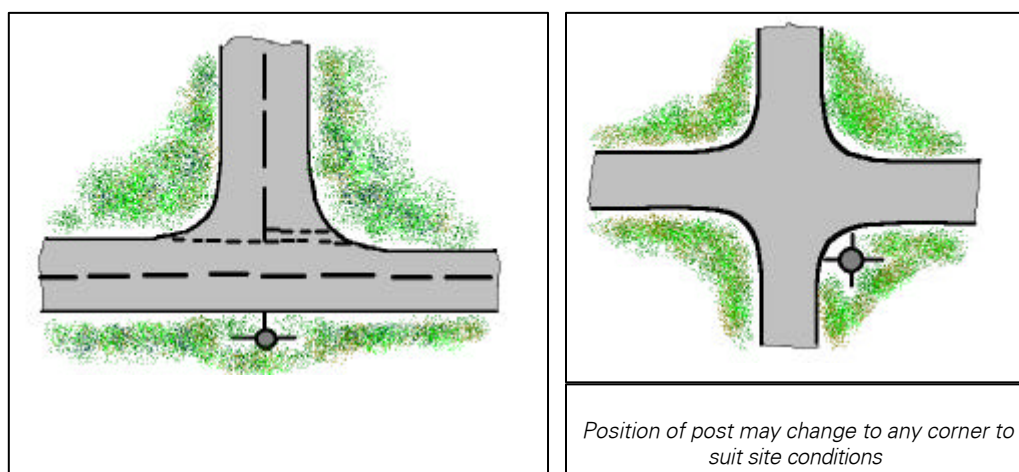


- 5.10.2 This equipment has the advantage that the arms cannot be freely rotated which will reduce on the maintenance costs.
- 5.10.3 Signs shall be designed with 46mm x-height (65 mm capital letters).
- 5.10.4 The depth of the sign will depend upon the number of lines of legend as detailed below:-
- 1 line        120mm
  - 2 lines      200mm
  - 3 lines      300mm
- 5.10.5 An allowance of 27mm will be required to attach the finger arm into the mounting socket.
- 5.10.6 The post used will be 80mm x 80mm square which will be powder coated white for durability. The post will also be used to mount small sized cycle route repeater signs, (see para. 5.14.7).

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

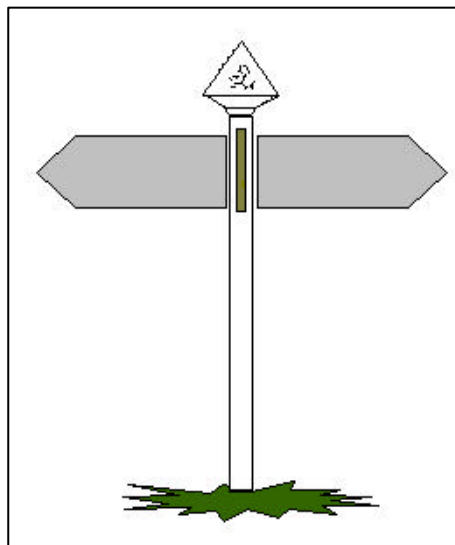
- 5.10.7 Only one assembly is required per junction with one arm per direction. Where tourist or industrial destinations are used, these will need to be shown on a separate sign structure for continuity and aesthetic reasons. If additional legends are required, the existing arm must be replaced, rather than adding another sign below the existing arm.
- 5.10.8 Finger posts will not be used on Classified roads (A or B) (see para. 5.6.2). Historic finger posts on these roads will be replaced with directional signs to modern standards whenever uneconomic repairs or improved safety of the junction are required, but in environmentally sensitive locations, the old type signs will be retained in addition to the provision of modern signs. On minor roads, historic finger arms will be retained for as long as is viable. There is a balance to be drawn with road safety in this, because old-fashioned finger post signs are not reflective, and consequently, cannot be seen in the dark effectively. This may dictate a need to replace them on minor roads, in some instances. Where old-fashioned finger posts are removed, they should be offered to Parish Councils. In other parts of the country, they have acquired old fingerpost signs, and they are frequently erected in school grounds and re-furbished.
- 5.10.9 Siting is very important to ensure satisfactory visibility of the sign. The principles referred to in paragraph 5.7.3 apply. Typical arrangements are as follows:-



- 5.10.10 All signs will have a 3600mm long square post. 900mm of the post will be below ground and 2700mm above ground. This will allow for sufficient room to attach signs both in rural and village areas.
- 5.10.11 Finials (the bit at the top of the post) on remaining wooden or cast iron fingerpost signs in Kent range in style. It is proposed to standardise on one variety for the new style signs, a 'pyramid' shape, which will incorporate the Invicta horse.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs



#### 5.11 **Boundary Signs**

- 5.11.1 Boundary signs should be provided to the minimum size required to accommodate lettering at the x-height appropriate to approach speed
- 5.11.2 The signs serve as a confirmation to a road user that they have reached the destination signed along a route. The boundaries of the County, cities, towns, villages, hamlets or other settlements which are indicated on the 1:50,000 Ordnance Survey maps may be signed. This may extend to signs for areas within towns, where the boundary is clear and the name appears on OS maps. The signs should therefore be erected at each entry into the settlement.
- 5.11.3 City, town, village, hamlet or other settlement boundary signs should be erected at the start of the built-up area. Their intention is not to mark the District or Parish boundary, and use of signs in this manner can be misleading for the following reasons:-
- Motorists following directional signs are travelling to the settlement of that name, not the boundary of the Parish or District, which may be some considerable distance away (e.g. Sevenoaks)
  - The sign serves as a warning to motorists of the change in character of the road from rural to built-up, with the likelihood of increased frontage and pedestrian activity.
- 5.11.4 The signs should be mounted low, normally at 1000mm clearance from ground level. This will need to be varied where signs are mounted above footways or cycleways (see section 2).
- 5.11.5 Parish councils will be encouraged to 'adopt' these signs (thus providing cleaning and simple maintenance). This could include encouragement to plant around the signs (provided their visibility is not impaired) to lessen their impact on the environment. This would not only create a community aspect to the signs but would give greater emphasis to the rural nature of the area.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

#### Design of signs



5.12.55 The standard combined layout illustrated above, employing a 'mantle clock' shape for the speed limit sign (670) may only be used in combination with the Town/Village boundary sign to diagram 2402.1. The Traffic Signs Regulations and General Directions 2002 requires the sign to be rectangular in shape, have a white background, and contain only the place name, combined optionally with 'Welcome to' and/or a road safety related phrase of a maximum of five words. This combination of signs may be used in Kent to denote the commencement of a speed limit at locations on any classified A or B roads which have sufficient space to accommodate the signs. The signs can be placed on both sides of the carriageway, if desired (see 5.12.3 below). This sign should not be confused with 2403.1 (see 5.12.4 below), which permits different coloured backgrounds and brown tourist location panels, but may not be combined with other signs, including speed limit signs.

5 The use of a coloured background for the speed limit roundel in the sign layout employing a mantle clock shape will be **grey**. An alternative background colour of **yellow** may be used for the speed limit roundel, however in this case the backing board must be rectangular and not mantle clock or any other shape.

5 The locations where a combined boundary / speed limit roundel sign may be used are as follows: -

Road Type	Location	
	Nearside	Offside
Principal road	Yes	Optional. Where not used, use speed limit only (see section 4)
Principal road in conservation area or AONB	Yes	No boundary sign. Use speed limit only (see section 4)
Non-principle roads (A and B class)	Yes	No boundary sign. Use speed limit only
All other roads *	Boundary sign with no speed limit (see below)	No sign

\*see also para. 4.5.3.1.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

- 5.12.55 The boundary sign, when not combined with a speed limit sign, will meet the standards shown in the diagram below. Parish, town or district councils will be involved in the choice of colours, lettering style and additional phrase. (See par 4.5.3.1 for location of signs in this case)
- 5.12.55 These signs should not be confused with ornamental village name signs, which are provided sometimes by the local community. These notices are often situated on the village green, and are of the type sometimes used outside inns. These signs would not be appropriate as boundary signs for traffic because they are not designed to be read by motorists approaching, and they are not reflectorised, so cannot be read in the dark. Their most appropriate location is near the centre of a village, on land adjoining the highway (agreement of the local District Council planning department and the local Highway Manager will be required).



#### NAME:

Name of hamlet, village, town etc

#### SYMBOLS:

3 symbols optional for tourist attractions / facilities which meet the tourist criteria, and have direction signs to them, providing that the width of the symbols do not exceed the length of the name.  
(see section 6 – Tourist signs)

#### PHRASE:

3 to 5 word phrase such as  
'please drive carefully'  
'watch your speed'  
'Britain in Bloom award winner'  
'Twinned with anywhere'

#### BACKGRD COLOURS:

Ivory	with
Beige	with
Light grey	with
White	with

#### TEXT/BORDER COLOURS:

Putty
Burgundy
Vivid Blue
Black

#### TEXT STYLE:

Optima  
Transport Heavy

#### LOGO:

Invicta logo on a red background motif used on all signs

#### REFLECTIVE MATERIAL:

Refer to paras 3.5.5 and 3.5.6

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

#### 5.13 Signing for public rights of way

##### 5.13.1 Background

- 5.13.2 A standard has been adopted in Kent for Public rights of way (PROW) based on a small aluminium sign mounted on a black post. These are erected both adjacent to the road and in the open countryside. They have been designed to alert motorists to the potential for pedestrians to cross the road, especially in rural locations.

Good practice



*Standard Kent footpath sign, as para. 5.13.2 on black post, carefully sited to minimise visual intrusion whilst maintaining clarity for safety reasons*

Bad practice



*Sign mounted on grey post in a prominent position. Part of the text is superfluous, and colours are also unnecessarily intrusive*

- 5.13.3 In certain situations, and providing that the Parish Council funds the increased price, wooden signs can be provided.

##### 5.13.4 Proposed standards

- 5.13.5 Wooden signs will be used with brazed symbols denoting footways or bridleways, where the location of the signs is not adjacent to the road. Existing style reflective signs will continue to be used in locations adjacent to roads because they are required for safety reasons. They provide a clear indication to users of the presence and direction of the PROW, and also warn motorists of the potential for pedestrians to be encountered crossing the road.
- 5.13.6 In environmental enhancement schemes and conservation areas, standard PROW signs will not be used, and special signs will be co-ordinated with the street furniture design.



## Signing on Kent's Roads

### Direction Signs and Boundary Signs

Good practice



*Standard Kent wooden fingerpost sign (as para. 5.13.3) in a rural situation*

Good practice



*Timber sign for a bridleway creating minimal intrusion.*

- 5.13.7 The new signs may be in recycled plastic material giving the appearance of wood. These will therefore be both in keeping with the surrounding area and virtually maintenance free. Where possible, timber signs will use locally sourced timber. Any reflective signs removed from the countryside should be retained in stores and used as spares for signs which require replacement at a later date. This will help reduce maintenance costs.
- 5.13.8 In addition, pilot use of the new wooden signs will be used as a trial for roadside locations in the Tonbridge and Malling Quiet Lanes project, which involves the use of low key signing and other pilot traffic management features to de-urbanise a network of rural lanes.
- 5.13.9 The signs are small in size, 300mm long x 150mm deep. The posts are 3m long overall.
- 5.13.10 The number of signs will be kept to a minimum. They shall only be placed at the start and end of a route or where the route crosses another route or its classification changes. The signs will be orientated to show the direction of the route.
- 5.13.11 The signs will be on a 3.0m long post. 750mm of this post will be below ground and the remainder above ground.
- 5.13.12 The post shall be 80mm x 80mm square section. The top of the post shall be bevelled to repel water similar to that required for a real wooden post.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

#### 5.14 Cycle route signs

##### 5.14.1 General

- 5.14.2 Cycle routes can be either on public highway or off highway. Routes on the highway in built-up areas will be signed normally with double sided white and blue directional signs mounted as fingerposts, and can contain the cycle route number as appropriate. At key locations, destinations and mileages are included.

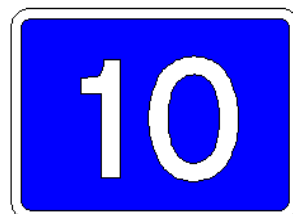


- 5.14.3 It is recognised that with the introduction of a comprehensive network of local and national cycle routes, there is a desire to sign every junction to advise cyclists where to go. However, this has the potential for a vast increase in the volume of signing. As the routes are frequently in rural areas, these signs have proved sometimes to be environmentally intrusive. DETR has developed new standards in conjunction with Sustrans and this problem has been addressed. The new sign formats will be included in a forthcoming update by DETR of TSRGD.

- 5.14.4 The colours of the route numbers are:-

Red: National cycle route

Blue: Local cycle route

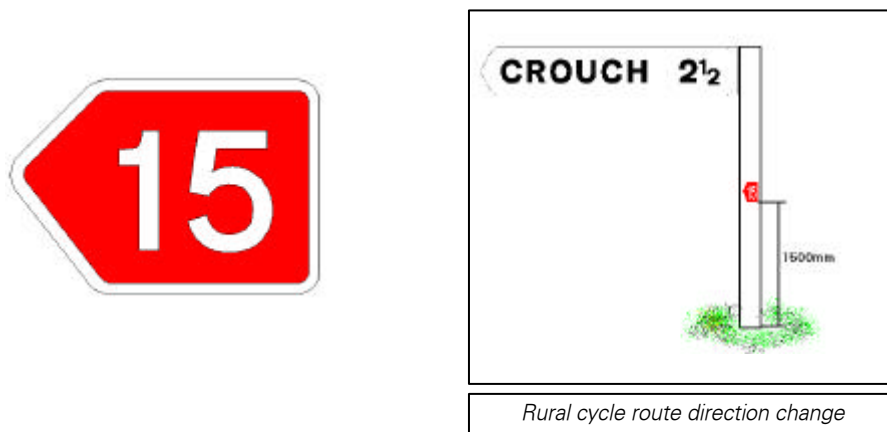


- 5.14.5 The signs shall be as small as possible, with route information at 30mm x-height.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

- 5.14.7 Small patches, 55mm high, will be used to indicate changes of direction in cycle routes in rural areas, and in some conservation areas. The patches indicate the route number and colour code of the route. These signs will be fixed to the post of proposed standard fingerpost signs (see 5.10). This will reduce sign clutter significantly on the cycle route network on minor rural roads, avoiding large numbers of additional fingerpost signs specifically for cyclists. The position of these patches should be 1500mm above the carriageway.



- 5.14.8 If there is no sign post at the change of direction, a small bollard, wooden post or equivalent should be installed opposite the junction to mount this sign. This may also be effective in conservation areas, although the post will need to be coloured to match other street furniture.
- 5.14.9 Signs will only be provided where there is a change in direction of the route. On off-road sections, the repeater sign (number only) can be placed along the route on, for example, existing gates if required, although only with the permission of the owner of the equipment.
- 5.14.10 At the start of off-highway cycle routes, a new sign has been developed, as detailed below.



## Signing on Kent's Roads

### Direction Signs and Boundary Signs

- 5.14.11 These signs should be mounted on 200 x 200mm wooden posts, or equivalent, with bevel top as detailed. If side routes join the off highway cycle route, reminder route numbers can be added along the route either on existing gates or on new 100 x 100mm wood substitute bollards. Care must be taken not to over-provide these signs, as they could become environmentally intrusive.
- 5.14.12 Where a junction in the route occurs, the non-cycle route paths can be denoted by a small plate added to a 100 x 100mm bollard or fence post where appropriate, to indicate that the cycle route does not continue in that direction. **(This sign is for off road use. It will not be used at road junctions).**



- 5.14.13 Signs to dia 950 (cycle warning signs) should be provided on major road approaches to locations where signed cycle routes join or cross the major route. (See also section 4 – Warning, Regulatory and speed limit signs).

### 5.15 **Temporary Event Signing**

- 5.15.1 Temporary signs can be provided for events which attract sufficient quantities of visitors to cause traffic management problems in the vicinity of the venue. These events may range in size from local fetes through to major sporting events and shows. These signs may be provided by external contractors ( often by the AA or RAC ), but they are required to make application to the Highway Manager for the area in which the event is to be staged. Signing of this type is required to comply with the following standards in Kent:-

- Temporary event signs will only be agreed where an appreciable traffic management benefit would result.
- Temporary event signs will only be considered from the point where visitors may become confused over directions to the destination. This will normally be from the point at which the route to the event (or parking) deviates from the route to the town, village or location shown on permanent direction signs.
- For exceptionally large events, which are expected to generate large volumes of traffic, additional signing may be needed. Such events may require considerable planning of traffic management with other agencies ( e.g. police ) so extended periods to agree the signing may be necessary.
- Events which are not open to the public may not be signed, normally.
- Legends shown on signs must be concise, limited to the name of the event ( e.g. pop festival; county show ) and must not include advertising logos, names of promoters or product names. Dates are not permitted within the sign legend, only days, abbreviated to three letters ( e.g. sat/sun; mon-fri ). AA or RAC logos are permitted in the corner of the sign face.

## **Signing on Kent's Roads**

### **Direction Signs and Boundary Signs**

5.15.2 The application procedure, and requirements for organisations carrying out the work are as follows:-

- The focus for application will be the local Highway Manager in whose area the event is to be staged. In some instances, signing may be required in adjoining areas, and in these cases, the local Highway Manager in whose area the event is to be staged will act as co-ordinator for approvals. In the case of major events, which may generate very large volumes of traffic, a team may be assembled to co-ordinate traffic management, and is likely to include other agencies ( e.g. Police ). In these instances the temporary signing requirements will be determined by the plans prepared by the team. Examples of such events are the County Show, the Open Golf Championship, and the Tour de France.
- Requests for agreement of temporary event signs on trunk roads and motorways will need to be forwarded to the Highways Agency's regional office, or its agents.
- Applications must be made by representatives of the organisation which will erect the signs, on the appropriate form, which is available from Highway Managers. A copy is shown in appendices 5.3 and 5.4. ( The applicant may attach their own proforma providing it includes all of the information required ).
- Signs and fixings must be erected or removed within 72 hrs. of the event taking place. Any remaining outside this period will be removed by the Traffic Authority and the costs incurred will be re-charged to the applicant. For very large events, the timescale will be agreed by the team co-ordinating traffic management.
- Care should be taken to ensure the design and installation of temporary event signs does not impair visibility for road users or obstruct use of any carriageway, footway or cycleway by road users. The Traffic Authority reserves the right to remove any sign or fixing which it considers a danger to road users without notice, and to recover the costs incurred from the applicant.
- It is expected that most temporary event signs will be erected on supports to existing street furniture. Where separate posts are required, notification will be required under the New Roads and Street Works Act 1991, and this may extend the timescales for approvals. Signs may not be erected on belisha beacon posts, traffic signal posts, stop signs, in the vicinity of level crossings, on posts owned by utility companies or public transport operators.
- Applications for temporary event signs, other than for large events, must be received at least four weeks before the event is planned to take place. Applications received which give inadequate notice will be rejected, unless a prior arrangement has been agreed with the local Highway Manager. In the case of major events, six months notice will be required, normally, to enable co-ordination and development of traffic management plans with other agencies, such as the police.
- In the case of applications for 5 temporary event signs or less, applicants may assume approval and commence installation after receipt of an acknowledgement from the local Highway Manager that the application has been received. In all other cases, a formal approval must be received before work can commence.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

#### 5.16 Temporary Signs to Housing developments

- 5.16.1 Signs to housing developments are permitted for both the construction and marketing phases of housing developments. These signs are semi-permanent in nature and are covered by different Regulations from the temporary event signs referred to in section 5.15 above. Consequently, all of the national and County Council specifications for permanent signs apply and in particular, the processes referred to in section 5.15 do not apply to applications for these signs. AA or RAC logos may not be displayed on the faces of these signs.



*Signs to a housing development for normal traffic and specifically for goods vehicle construction traffic*

- 5.16.2 Signs are only permitted where there are 30 or more bedrooms and must be removed immediately once 80% of the properties have been sold.
- 5.16.3 Signs will not be agreed unless there is a defined traffic management need. The extent of signing which may be permitted is covered in Section 7, signing strategies. Signs should contain only the name of the development, and the house logo. They may not include the name of the developer or building contractor.
- 5.16.4 All housing development sign applications will be subject to agreement by affected Parish and/or town councils. **The focus for applications for housing development signs will be the local Highway Manager.**
- 5.16.5 Exceptionally, signs for construction traffic may be permitted but only with the approval of the Parish Councils where residents are affected by construction traffic. The signs would remain during the construction work and be removed immediately afterwards.
- 5.16.6 **The cost of all housing development signs will be borne entirely by the developer and designed and manufactured to Kent Specifications, and an application fee may be charged to assess these.** In contrast with temporary event signs, housing development signs often need to be in place for many months. Therefore, contractors will need to meet normal KCC standards if they wish to provide and install housing development signs. Full design drawings, fixing details and location plans will need to be submitted for approval ( these will need to be to the same standard as required for a section 278 agreement proposal ).
- 5.16.7 In practice, availability of these signs has resulted in an increase in the number of illegal signs which are designed to look like official signs. Such signs are frequently poorly made, badly erected and sign sites which do not qualify for official signs. They are also often attached to existing street furniture, often with a detrimental effect on road safety and safe passage of pedestrians. The Traffic Authority has the power to remove these signs (see para. 9.2.3) as illegal signs.



## Signing on Kent's Roads

### Direction Signs and Boundary Signs

Good practice



Bad practice



#### 5.17 Neighbourhood Watch Notices

5.17.1 These notices benefit from deemed consent under the Town and Country Planning (Control of Advertisements) Regulations 1992, and may be displayed if they meet the following criteria:-

- They must not exceed 0.2 sq. metres in area.
- They must not exceed 3.6 metres above ground level.
- The local Highway Manager's permission must be obtained.
- The local Planning Authority must be given 14 days notice and informed of the proposed location of the notice, and it must have Police and Highway Manager Authorisation. In some areas, special control of advertisements apply and in these cases the local Planning Authority may not wish to grant permission for environmental reasons.

5.17.2 Normally, the Highway Manager will approve the signs, providing they comply with the preceding standards, their proposed siting does not obstruct the highway for any class of road user (e.g. pedestrians), does not obstruct visibility nor creates a distraction for motorists owing to the use of vivid colours.

## Signing on Kent's Roads

### Direction Signs and Boundary Signs

5. 7.13 Attention is drawn to paragraph 1.5.3 and Section 2 ( Environmental Issues ) in respect of siting these notices. Clearly, scheme organisers may wish for the notices to be placed in the most conspicuous locations possible, to draw attention to the initiative, but it is essential that a balance is achieved. There is little point in expending effort and finance in minimising visual intrusion from road signing if notices are not placed with similar care.



*An example of a neighbourhood watch notice. In this instance, the notice is mounted on a telegraph post, for which agreement from the owner of the post would be required.*

## **Signing on Kent's Roads**

### **6. Tourist Signing**

#### **6.1 Background**

- 6.1.1 This chapter sets out procedures and standards to be adopted for dealing with individual applications for tourist signing received from tourist attraction and facility operators in Kent, and for use in determining the extent and nature of signing schemes promoted for the management of tourist traffic.
- 6.1.2 The need for Local Policies is defined in Circular Roads 3/95, "Traffic Signs for Tourist Attractions and Facilities in England", which requires Local Highway Authorities to develop procedures and standards appropriate to local needs, taking account of tourist development objectives, within a broad national framework.
- 6.1.3 The range of attractions and facilities which might qualify for signs is extremely broad, and the Policy is designed to ensure that proposals and requests are dealt with in a consistent manner across the County, and that signing provided balances tourist development, road safety, traffic management and environmental objectives, as far as possible. The potential number of qualifying destinations in built up areas is large, so development of a co-ordinated tourist signing strategy is required for these ( see also Section 7 – Sign Strategies ), whereas an ad hoc application process is operated for non built-up areas.
- 6.1.4 Qualifying for signs does not confer an automatic entitlement for them to be provided. The Policy provides a framework for applications to be assessed on a consistent basis across the County, in consultation with tourism officers and local Highway Units.
- 6.1.5 The national standards are more stringent for London and the area within the M25, and consequently, tourist facilities such as hotels, guesthouses and restaurants do not qualify for tourist signing in these areas.

#### **6.2. Tourism Standards**

- 6.2.1 Individual tourist attractions and facilities which qualify for signs will be considered for signing on the basis of one activity. This will normally be the core activity marketed. For instance, a historic house with tearooms and a garden of special importance will be signed as a garden or as a historic house only. Tourist Officers will advise where there is doubt or dispute over which is the core activity.
- English Heritage and National Trust owned properties are exempt from the tourism standards set out below nationally.
- 6.2.2 Road users who follow tourist signs expect a reasonable standard of facilities to be provided at the destination, and might expect, for example, a reasonable chance of the destination being open when they arrive there. To qualify for signs, destinations will satisfy the following criteria:-
- Tourist attractions will have a minimum opening period of 150 days per annum, and four hours per day, or thereabouts.
  - Be permanently established.
  - Be available for use by the public during opening hours without the need for pre-booking or membership.

## Signing on Kent's Roads

### Tourist Signing

- Attract visitors to the area. Destinations which cater principally for visitors from the local area (i.e within about a 20 mile radius) will not qualify.
- Publicise the attraction/facility through the tourist industry ( this does not apply to amenity and information destinations referred to in 6.2.3). Acceptable publicity is:-
  1. Information available in tourist information centres.
  2. Information included in tourist guides ( e.g. District Council guides ).
- Comply with all appropriate statutory requirements. (e.g. Planning and Environmental Health consents).
- Priority for signing will be given to destinations which are accessible by disabled people.

6.2.3 Additionally, the following standards will be applied to ensure that the range of different types of destinations meet minimum quality thresholds:-

**Tourist attractions and sport/leisure facilities:-** These include destinations such as theme parks, zoos, historic houses, and leisure complexes, and are required to meet the standards set out in the English Tourism Council's ( ETC ) Visitors Charter.

**Hotels and Bed and Breakfast facilities:-** Inspected accommodation will qualify only (i.e. ETC, AA or RAC accreditation). ( This will require a reasonable amount of accommodation to be made available for non pre-booked customers).

**Youth hostels:-** YHA premises will qualify.

**Caravan and camping sites:-** must have pitches available for casual, overnight use. Static sites may qualify where they are available without pre-booking, but the use of the caravan symbol will not be permitted owing to the possibility of confusion with sites for touring caravans. Inspected sites ( i.e. AA, ETC ) will qualify only.

**Restaurants/Pubs:-** Meals should be available throughout opening hours, without the need to pre-book. (This will require a reasonable amount of tables to be maintained for non pre-booked customers). Children must be catered for, **inside** the premises. Those facilities with independent quality listing will have a higher priority for signing.

**Cinemas/Theatres:-** No additional standards.

**Retail premises:-** Superstores, garden centres and other large retail complexes will not qualify for tourist signing, but may receive normal direction signing in some circumstances ( see also appendix 7.1 – Local destination types ). Exceptionally, groups of shops in areas where large numbers of tourists are in the area ( for example, a seafront ), which offer services of particular interest to tourists may qualify. Village stores may qualify for signing on a local basis ( for example, pedestrian signs ). Village shops may be included in bypassed village tourist signing ( see also para 6.3.3 ) when the shop is not on the main through route.

**Amenities and information:-** Tourist information facilities, picnic sites, viewpoints and other natural landmarks can be signed with tourist signs, but will be subject to the traffic management and road safety standards set out in section 6.3.

## Signing on Kent's Roads

### Tourist Signing

#### 6.3. Traffic Management and Road Safety Standards

6.3.1 Highway Authorities have a duty to ensure safe and effective traffic management. This is of particular significance to tourists, because they are unlikely to be familiar with the area. The following standards will apply, for destinations to qualify for signing:-

- 6.3.1.1           **Parking**           -
- On site parking will be available to accommodate the numbers and types of vehicles which might be expected (e.g. coaches).
  - Alternatively, where there are public parking facilities nearby, and the owner agrees, vehicular signing to the car park and pedestrian signing from the car park to the destination may be considered. The distance from the car park to the attraction must not exceed ½ mile, or thereabouts, and should be accessible by disabled people.
  - Exceptionally, signing may be considered where there is no convenient off-street parking. Where on-street parking is either prohibited or would create road safety or congestion problems, vehicular signing will not be provided. Pedestrian signing may be considered.
- 6.3.1.2           **Sign capacity**   -
- In addition to the sign load standards set out in paragraph 6.4.1 ( 6 destinations in total, including tourist destinations, per sign location on roads with speed limits below 50 m.p.h., 4 destinations in total per sign location on roads where the speed limit exceeds 50 m.p.h.) the following standards will apply:-
- No more than 6 worded destinations per sign location ( 4 on roads with speed limits over 50 m.p.h. ) including tourist destinations are permitted, except that additional symbol only tourist signs, as referred to in paragraph 6.4.1, may be provided as long as the total of tourist destinations ( worded and symbol only ) does not exceed 6 ( roads below 50 m.p.h. speed limit ) and 4 ( roads over 50 m.p.h. speed limit ).
  - Where sign overload is approached, tourist destinations will have less priority normally than other primary and secondary destinations.
  - Where there are requests for more tourist destinations than can be safely accommodated, those chosen will be based normally on the highest visitor numbers (attractions) or grading (facilities). If this gives no clear priority, the destinations closest to the junction will be chosen. Attractions will have priority normally over facilities. Existing attraction signing will remain, and will have a higher priority normally than requests for new tourist signing. Recommendations from Tourist Officers will be sought in these cases.

## **Signing on Kent's Roads**

### **Tourist Signing**

- 6.3.1.3      **Advertising signs -**      No highway signs will be permitted for destinations which have off-highway advertising signs, other than those situated at the destination itself.
- 6.3.1.4      **Sign siting      -**      Signs will be sited in accordance with design standards specified in 6.4.1. The provision of signs may be refused where siting difficulties occur.
- 6.3.1.5      **Sensitive areas-**      The provision of tourist signing in conservation areas, areas of outstanding natural beauty and villages will require particular care. The design standards referred to in 6.4 will be applied. In some cases, vehicular signing will not be appropriate. Section 6.3.3 deals with signing in villages.

#### **6.3.2      Built-up Areas**

- 6.3.2.1 In built-up areas, it is unlikely that vehicular direction signs to individual tourist facilities ( e.g. hotels and restaurants ) will be provided. Vehicular signing to tourist information centres or car parks and the use of generic legends (e.g. Town Centre hotels, Seafront hotels) with subsequent pedestrian signing on an individual or grouped basis is preferred. The provision of tourist information points in car parks is also recommended
- 6.3.2.2 District Tourism Officers are required to identify eligible attractions and facilities in built-up areas to enable comprehensive schemes to be prepared, and these should reflect local tourism development plans. Town Councils and trade associations should be consulted on the priorities of destinations for these schemes.
- 6.3.2.3 Where there is restricted access for private cars or policies encourage the use of public transport, tourist signing should be provided to and from public transport facilities. Such facilities might include, for example, park and ride facilities and bus stations. These should be accessible by disabled people. In some cases, this type of signing may not be appropriate for practical reasons, an example being hotels, where vehicular access may be necessary to allow luggage to be carried.
- 6.3.2.4 Tourism signing must not conflict with other national and local transport or tourism policies, and there may be opportunities to integrate it into other policies and strategies. For instance, it is recommended that tourist signing is considered in relation to Town Centre Management initiatives.

#### **6.3.3      Bypassed Villages and towns**

- 6.3.3.1 Where possible, signing for attractions and facilities located in bypassed villages and towns will be combined in the form of bypassed community signs. To qualify for these signs, at least one attraction or facility complying with the requirements of section 6.2 should be situated in the village/town.
- 6.3.3.2 The signs will include the village or town name, a phrase with a maximum of three or four words, such as seaside resort, Anglo-Saxon walled town, and symbols appropriate to the attractions and facilities. The phrase "Historic" with the village/town name only will be avoided.



## Signing on Kent's Roads

### Tourist Signing

6.3.3.3 Signs may be provided below community nameplates to indicate symbols appropriate to tourist attractions and facilities present in the village/town, which comply with the requirements of section 6.2, and have direction signs. No more than six symbols may be shown ( see also section 5.12 ).



Tourist sign panels may be provided within community nameplates in some instances.

6.3.3.4 Continuity signs for bypassed communities will show symbols only. Traffic will normally be routed to parking areas, with pedestrian signs from the car park to the attraction, and back.

6.3.3.5 District/Borough, Town and Parish Councils will be consulted on bypassed village/town signing.

Examples of bypassed village and town signs



### 6.3.4 **Extent of Signing**

6.3.4.1 Signing may extend from the main access roads to the area in which the destination is situated, and this is often the nearest A or B class road to the attraction or facility. These roads are defined in hierarchies published in the County Council's Structure Plan, and Local Transport Plan.

## Signing on Kent's Roads

### Tourist Signing

6.3.4.2 Normally signing for tourist attractions will extend no further than between two and five miles from the destination. These distances may be reduced in built up areas and villages.

6.3.4.3 Normally signing for tourist facilities will extend no further than two miles from the destination. In built up areas and villages, the distance may be reduced.



An example of the initial sign in a route to a tourist facility. Subsequent signs would show symbols only ( para 6.4.1. )

6.3.4.4 The route(s) along which traffic is directed must be the most suitable link(s) between the destination and the main access road to the area. Routes with significant safety problems may be excluded.

6.3.4.5 Attractions and facilities which comply with the requirements of Sections 6.2 and 6.3, and also comply with the current Highways Agency criteria for signing from all purpose trunk roads will be considered for signing from the nearest of those roads, within the distances shown in 6.3.4.2 and 6.3.4.3 above. The Highways Agency will be responsible for approving the signs on the trunk road. Tourist facilities do not, generally, qualify for signing from grade-separated junctions on trunk roads.

6.3.4.6 Attractions which comply with the requirements of Section 6.2 and 6.3, and also comply with the current Highways Agency criteria for signing from motorways (except M25) will be considered for signing from the nearest motorway junction within 20 miles. The Highways Agency applies far more stringent criteria for signing from M25 than for signing from other motorways. Tourist facilities do not, generally, qualify for motorway signing.



Large tourist attractions (currently those with annual visitor numbers exceeding 150,000) may qualify for signing from the nearest motorway junction within reasonable proximity.

## Signing on Kent's Roads

### Tourist Signing

6.3.4.7 Forward direction signing will not normally be permitted except where the signing forms part of continuity signing.

6.3.4.8 Signing will not be permitted for tourist facilities which front 'A' class roads, with the exception of signing at the entrance to the facility, where signing could be justified for road safety reasons.

#### 6.4. Specifications and Design Standards

6.4.1 Tourist signs are traffic signs, and will be provided in accordance with the design standards and other specifications set out in Signing on Kent's Roads. The following design standards are specific to tourist signing:-

- Signs at the start of routes and at major junctions within routes will contain both worded legends and symbols. Subsequent signs within routes will show symbols only, except locations where more than one of the destinations have identical symbols, and are signed in different directions.
- Symbols appropriate to the core activity will be chosen from a selection approved at national level. In the unlikely event that an appropriate symbol is not available, application will be made to DETR for the approval of a new design.
- Where special pedestrian signing is in use (for instance, cast iron signs in town centre conservation areas), tourist destinations will be shown on matching signs, rather than brown and white signs.
- In some conservation areas, the scope for tourist signing will be limited by, for instance, the practicalities of siting the signs, to the extent that it may not be possible to provide signs in some locations.



The first signs in a tourist sign route will include wording and an appropriate symbol.



Subsequent signs will show symbols only.

## **Signing on Kent's Roads**

### **Tourist Signing**

#### **6.5. Tourist Routes**

- 6.5.1 Several alternative routes which are of interest to tourists, and which link areas of tourist interest, are signed with brown and white signs with legends such as "country tour", "scenic route" or "coastal route", and an appropriate symbol. Where additional routes are considered, consultation with Parish, Town and District Councils along the route will be necessary, and the route should not be signed if significant road safety or environmental problems would occur. The possibility of coaches following these routes should also be considered, along with the potential for visual intrusion caused by the additional signing required.
- 6.5.2 Routes signed in this manner can be considered as a main access road for tourists, as referred to in paragraph 6.4.1. Attractions and facilities which comply with the requirements set out in sections 6.2 and 6.3 may be considered for signing from the route.

#### **6.6. Financial Arrangements and Application Process**

- 6.6.1 Tourist signing provision will be at no cost to the Local Traffic Authority. The processes are managed externally by the County Council's consultant, which collects fees directly from applicants, thus ensuring consistency of assessment and provision across the county, and no cost to the County Council.
- 6.6.2 It is essential that the process of receiving and evaluating applications occurs quickly, in order that applicants may receive either a positive response with a quotation of the cost of providing the scheme, or detailed reasons for the proposal being declined, within a reasonable time period. The target turn around time for this activity will be six to seven weeks. This enables appropriate consultation to be carried out.
- 6.6.3 Processing of applications and schemes will be staged as shown in appendix 6.1.
- 6.6.4 The Local Traffic Authority ( KCC ), through its consultant, will be the focus for all applications. Exceptionally, applicants may arrange activities h) and i) shown in appendix 6.1, using consultants and contractors approved by the County Council, but the County Council, through its consultant, will require to check proposals and carry out activity k), the charges for which will be recovered from the operator. Consultants and contractors used will be required to comply with all statutory and County Council requirements.
- 6.6.5 A copy of each application for tourist signs will be forwarded to KCC's Head of Economic Development. Applications will be checked against the additional tourism quality criteria set out in section 5.2 by reference to lists provided and updated regularly by KCC's Head of Economic Development, and by reference to information and literature provided by the applicant (e.g. publicity leaflets). Lists will be compiled in consultation with the Regional Tourist Board. Where attractions/facilities applying for signs are not listed, advice will be sought from KCC's Head of Economic Development, who will consult District Council tourism officers in determining the outcome. Exceptionally, the Regional Tourist Board will be consulted.
- 6.6.6 The following will be consulted in respect of each application received:-
- Local KCC Member.
  - Parish or Town Council
  - Local Highway Manager ( copied to KCC Area Transportation Manager ).



## Signing on Kent's Roads

### Tourist Signing

- 6.6.7 Standard legal agreements will be used for all tourism sign provision, and attraction/facility operators will be required to sign these, regardless of the source of finance. The promoting Authority will be required to sign agreements relating to tourist routes and where appropriate, comprehensive schemes.
- 6.6.8 Operators will be required to fund future maintenance of the signs as and when it is required, and this element will be covered in the legal agreement when the signing is initially provided. Should an operator be unwilling to do this, the signing scheme may be removed, to prevent any liability falling on the Local Traffic Authority as a result of dangerous signing.
- 6.6.8 Comprehensive signing schemes will be submitted to the KCC Area Manager for technical approval of detailed designs.
- 6.7. **Monitoring**
- 6.7.1 The additional quality standards referred to in Section 6.2 will be monitored by County and District Tourism Officers to ensure that an appropriate balance between assisting businesses and the quality of destinations signed is maintained. Feedback will be provided to the Transport Management Unit of KCC periodically by the Head of Economic Development, and will include information on disputes between operators of attractions/facilities and Authorities dealing with applications, where disputes relate to quality issues.
- 6.7.2 Processing of applications will be monitored by KCC's consultant and the number of applications issued against those completed and returned will be recorded by date, along with the date of approval/refusal, reasons for refusal and date of subsequent sign installation in respect of successful applications.
- 6.7.3 The Procedures will be reviewed periodically or in response to further changes in national legislation. The charges indicated in Appendix 6.1 will be reviewed periodically.



## Signing on Kent's Roads

### 7. Signing Strategies

#### 7.1 Purpose

7.1.1 Signing strategies are used to plan and record the extent over which individual destinations will be indicated on direction signs through the road network, and to ensure that traffic is encouraged to use the highest standard of route available, both to and from the destination.

7.1.2 They are required to ensure that direction signing meets the following standards:-

- Consistency with national and regional strategies.
- Destinations are shown consistently at appropriate locations through the network from the extremities of the signed route through to the destination.
- The route from a destination to the major route network is shown consistently.
- The volume of destinations shown at individual locations does not exceed defined signload standards (para. 5.4.1 refers).
- The effect of adding new destinations is considered strategically in relation to the standards defined above.
- Traffic is encouraged to use the highest standard of route available, and is discouraged from using alternative routes of a lower standard for through trips.
- Enables direction signing for new road schemes to be considered in relation to the adjoining network, and permits signing strategy to be developed in conjunction with overall transport strategy.

#### 7.2 Route and destination hierarchies

7.2.1 The route network is split into defined categories as follows:-

- |                               |  |
|-------------------------------|--|
| • Primary route network (PRN) | • Defined nationally and regionally. Includes the national motorway and trunk road network, as well as some locally maintained primary routes. |
| • Secondary routes            | • Defined locally.<br>• Comprises the non primary 'A' road network in Kent.  |
| • Other routes                | • Defined locally.<br>• 'B', 'C' class and lower category roads in Kent.   |



## Signing on Kent's Roads

### Signing Strategies

7.2.2 Destinations are split into defined categories, and for major destinations, these mirror the route classifications indicated in para. 7.2.1. Destinations are classified as follows:-

- Primary destinations (PD)
  - Defined and listed nationally by DETR.
  - Destinations of regional significance.
  - Significant destinations near intersections of primary routes and some ports.
  - Motorway junctions. (indicated as the motorway route number, in brackets, on a blue patch).
- Secondary destinations (SD)
  - Defined and listed at County level.
  - Significant destinations near intersections of routes with primary or other secondary routes, or generators of significant levels of goods vehicle traffic.
- Local destinations (LD)
  - Defined and listed at County level.
  - Villages, hamlets, other settlements and defined districts within towns, which are indicated on 1:50000 scale Ordnance Survey maps.
  - Public Buildings and other non-tourism destinations which are significant generators of non pre-planned visits. (See Appendix 7.1)
- Tourist destinations (TD)
  - Defined and listed at County level, in conjunction with national guidance.
  - Covered in 'KCC Procedures and Standards for approval of tourist signing in Kent', and Section 6 of this document.
- Goods Vehicle destinations (GVD)
  - Individual locations which are not primary or secondary destinations, but which are significant generators of goods vehicle traffic. Separate signing will only be used where the goods vehicle route is different from the route signed for normal traffic.

7.2.3 Primary and secondary destinations relevant to Kent are listed in Appendix 7.1.

## **Signing on Kent's Roads**

### **Signing Strategies**

#### **7.3 Choice of Destinations**

7.3.1 On the Primary Route Network (PRN) destinations will be indicated on direction signs in the following priority as forward destinations and exit destinations at junctions:-

- 1) The next primary destination.
- 2) The next secondary destination (where appropriate).
- 3) The next goods vehicle destination within 5 miles.
- 4) The next local destinations (maximum 2 per direction) within 5 miles
- 5) The next qualifying tourist destinations (see KCC Procedures and standards for approval of tourist signing in Kent).

7.3.2 On secondary routes, destinations will be indicated on direction signs in the following priority as forward destinations and exit destinations at junctions:-

- 1) The next primary destination (where appropriate this will not be shown along the secondary route where there is an alternative route of a higher standard. Traffic will be directed to the nearest junction of the alternative higher standard route).
- 2) The next secondary destination.
- 3) The next goods vehicle destination within 5 miles.
- 4) The next local destinations (maximum 2 per direction) within 5 miles.
- 5) The next qualifying tourist destinations (same as 7.3.1, 6).

7.3.3 Destinations on other routes will be indicated in the following priorities on direction signs:-

1. The next local destinations within 5 miles (maximum 2 per direction, avoiding encouragement of use of routes which form links between primary or secondary routes).
2. The next qualifying tourist destinations (same as 7.3.1, 6).
3. It is unlikely that primary or secondary destinations will be indicated at junctions on other routes, except at junctions of these roads with primary and secondary routes.
4. Where signing is provided to individual destinations within a named area (for instance, a hospital), signing will not extend beyond the location where the route to the named area and the route to the specific destination diverge. In large built-up areas, these destinations may extend to the nearest junctions on the major route network within the built-up area.

#### **7.4 Maintenance and Review**

##### **7.4.1 Inter-urban routes**

7.4.1.1 A countywide destination strategy has been developed over the past few years in response to major changes to the primary route network. This strategy should be formalised.

## Signing on Kent's Roads

### Signing Strategies

7.4.1.2 The strategy should be reviewed, in consultation with adjoining Authorities the Highways Agency and District Councils, no less than every three years, to take account of major developments, (such as Bluewater or Channel Tunnel), or changes to national or regional transport strategies.

7.4.1.3 Requests for additional destinations to be included will be considered in relation to the overall destination strategy. Tourist and goods vehicle destinations will be considered on an ad-hoc basis, but other requests may be dealt with as part of the three yearly review.

#### 7.4.2 Built-up areas

7.4.2.1 The complexity of signing within built-up areas dictates that destination strategies are required for each. It is rarely possible to consider requests for signing for additional destinations within built-up areas without the need for an overall review of the existing strategy. This is essential for the following reasons:-

- Maintain signing within maximum overall signload standards.
- Reduce potential for sign structures to have an unco-ordinated and shoddy appearance as a result of successive modification.
- Maintain priorities for strategic destinations.
- Ensure consistency and continuity.



*Signing strategies can reduce tendency for sign structures to have an uncoordinated appearance through successive add-ons*

## Signing on Kent's Roads

### Signing Strategies

7.4.2.2 Destination strategies have been prepared or are in preparation for the following built-up areas in Kent:-

- Dartford
- Gravesend
- Sevenoaks
- Tonbridge
- Tunbridge Wells
- Maidstone
- Ashford
- Folkestone
- Sittingbourne
- Faversham
- Sheerness
- Canterbury
- Whitstable
- Herne Bay
- Dover
- Deal
- Sandwich
- Thanet (Margate, Ramsgate and Broadstairs)
- Medway Towns (now the responsibility of Medway Council).

7.4.2.3 These strategies should be reviewed every three to five years to take account of major developments, changes to national and regional transport strategies, and to reflect Local Transport Plan issues. The strategies should be reviewed in close consultation with the appropriate local District Council.

7.4.2.4 Requests for additional destinations to be included should normally be dealt with as part of the cyclic review process, rather than on an ad-hoc basis (including tourist destinations).

7.4.2.5 An example of a destination strategy for a built-up area is shown in Appendix 7.2.

#### 7.4.3. **Local destinations on non-primary or secondary routes**

7.4.3.1 The preparation of destination strategies for areas off the primary and secondary route network, particularly in rural areas, is desirable, for the following reasons:-

- Breaks in continuity and other anomalies could be addressed.
- Provide a basis for future maintenance.
- Discourage through traffic from some routes by deleting unsuitable destinations.
- Allow replacement of unsuitable existing signs by new, more aesthetically pleasing variants (section 5.10. refers).
- Ensures sign repair or replacement results in maintenance of direction continuity.

## Signing on Kent's Roads

### Signing Strategies

#### 7.4.4 Goods Vehicle Signing

- 7.4.4.1 Direction signing is a key tool in managing the movements of heavy goods vehicle traffic. Specific attention will be paid to providing concise signing between the principle road network and areas which are major generators of goods vehicle traffic, and of an equal importance, on the return route to the principle network.
- 7.4.4.2 When the route to the industrial area is different from the route to the town or other general area where it is situated, black background goods vehicle direction signing will be considered.
- 7.4.4.3 Black background direction signing will normally be based on a collective destination from the principle network (e.g., 'Sittingbourne industry'). Where practical, signing to significant individual industrial areas within the collective destination will be provided where the route to them diverges from the route to the collective destination. Care should be taken to maintain signing within signload standards (refer to para. 5.4.1 ).
- 7.4.4.4 Where possible, routes for goods vehicle traffic should avoid low bridges. Where this is not possible, clear signing of the low bridge will be included within the direction signs, and the signing at the location of the low bridge should be a high priority for the provision of enhanced warning signs (refer to para. 4.7.2b ).



*Signing can be provided to a 'collective' goods vehicle destination where the route is different from that for other traffic*



*Where practical, signing to individual destinations can be provided where the routes diverge*



*Where goods vehicle routes cannot avoid low bridges, the low bridge information should be included in the direction signs*

## Signing on Kent's Roads

### 8. Sign Audit

- 8.1 The consistent application of good practice in signing provision will assist in achieving the balance between legal obligations, traffic management, road safety and environmental objectives referred to in this document.
- 8.2 Work carried out by the Civic Trust and English Historic Towns Forum has indicated that auditing of existing sign and road marking provision can result in the potential removal of redundant street furniture, and scope for rationalising or softening the effect of a significant amount of signing in town centres. Further sample audits by Kent County Council have indicated potential for removal of 30% of signing in villages by rationalising, bringing up to current standards or removal of redundant equipment. The average cost of implementing a sign rationalisation scheme in a village is £4000. It should be noted that removal of individual signs in isolation is rarely practical without interfering with the continuity or consistency of the signing of a route or area. However rationalisation is often practical, and removal of redundant posts or temporary signs which are no longer required can be dealt with in this manner, if not picked up through the normal maintenance regime.
- 8.3 In order to achieve greater consistency, development of a programme of sign audits is desirable as follows:-

- Signing provision in a sample of new small improvement/CRM schemes from the annual programme will be audited
- Existing signing within areas subject to reconditioning schemes will be audited, and changes proposed, where appropriate.
- Existing signing and road markings will be audited as a part of Traffic Regulation Order reviews in built-up areas.
- Existing signing in villages will be audited in conjunction with Parish Councils, where requested.

- 8.4 Sign audits should involve engineers experienced in signing work to ensure decisions for change are taken with specialist consideration of key safety or legal implications. Close liaison with Planning Officers will be essential where conservation areas are involved.



*This sign structure is badly specified, environmentally intrusive and is not legible from some directions*

X



✓

*Signs can be rationalised and mounted carefully to reduce clutter*



## Signing on Kent's Roads

### 9. Procurement and Maintenance

- 9.1.1 In order to achieve the standards set out in this document, it is essential that high standards of manufacture and installation are maintained. As a result, the following principles will be followed when procuring signing work:-

- Signs must be manufactured by contractors which are quality assured for sign manufacture. (This requirement is also included in the DETR specification for Highway Works).
- Signs must be installed by contractors approved by the County Council. Contractors with quality assurance will be preferred for this work.

- 9.1.2 It is important that contractors are provided with sufficient information to enable them to manufacture and install signs to the exact requirements of the client. Inadequate information can result in a number of problems, including unnecessary expenditure through contractors providing equipment which is larger than necessary, poor siting, or signs mounted at incorrect heights.

- 9.1.3 The minimum information to be provided to the contractor for each sign is:-

- Location plan
- Sign diagram number and dimensions.
- Detailed and dimensioned design of sign face (direction and informative signs only).
- Post sizes and types.
- Post spacing.
- Clearances.
- Foundation details.
- Illumination/reflectorisation details.

- 9.1.4 All signs will be manufactured and installed in accordance with the DETR Specification for Highway Works, and the local variation clauses included in the KCC Standard Contract. The contract contains a range of standard details of signs.



*To comply with DETR specifications, an identification sticker must be displayed on the back of the sign, indicating compliance with the British Standard (BS873). Included is an indication of the material classification and date of manufacture.*

## Signing on Kent's Roads

### Procurement and Maintenance

- 9.1.5 Signing work will be checked carefully following installation to ensure compliance with design and specifications, to the satisfaction of the local Highway Manager.



X

*This sign has not been manufactured in accordance with DETR specifications. All external corners should be radiused for safety reasons, and through riveting is not permitted.*



✓

*This sign has been manufactured correctly with external corners radiused.*

- 9.1.6 New signs will be allocated reference numbers by local Highway Managers and recorded in the highway inventory system. Illuminated signs will be recorded additionally in the street lighting management system.



✓

*Galvanised posts should have bitumastic paint applied on both the inside and part of the external surface to prevent premature corrosion.*

## Signing on Kent's Roads

### Procurement and Maintenance

#### 9.2 **Maintenance**

9.2.1 Maintenance standards for signs are contained in the Highway Maintenance Plan. As a primary source of driver information, it is important that signs are maintained to appropriate standards. Signs rely on illuminated or reflective performance to be functional in the dark, so particular attention to this is required. Class 1 (BS873) reflective material has a durability of around 10 years, following which reflective performance deteriorates significantly. This dictates an inspection and replacement cycle for reflectorised sign faces.

9.2.2 The elements of the Maintenance Plan relating to signs are set out in appendix 9.1.

#### 9.2.3 **Illegal signs**

9.2.3.1 Signs installed illegally on the highway constitute an obstruction. Consequently, they cause safety problems, and can cause problems of liability.

9.2.3.2 Section 149 of the Highways Act, 1980 allows notices to be served on persons depositing items on the highway, requiring them to remove them. Under Section 149 (2), the Traffic Authority has the power to remove such items where they constitute a danger. An illegal traffic sign not designed, specified and installed to appropriate standards could be considered a danger to road users. They will be likely to distract drivers who may try to read the message indicated, or fall from their mountings on to pedestrians, so illegal signs should be removed.

9.2.3.3 Highway Managers will ensure that illegal signs are removed when identified or as quickly as possible after identification.



*Signs not designed and specified to appropriate standards can be a hazard by distracting motorists attention. Illegal signs will be removed as soon as possible after identification.*

# Signing on Kent's Roads

## Appendix 4.1

### SIZES OF WARNING SIGNS AND THEIR SITING DETAILS

85 percentile approach speed of private cars mph	Examples of typical roads on which the speeds of private cars shown in column 1 apply	Height of triangle of warning signs mm	Distance of signs from hazard (see notes 3,4 and 7) m	Recommended clear visibility distance of signs m
Up to 20	Narrow rural and very narrow urban roads carrying less than 1500 vpd and less than 350 commercial vpd	600	45	60
21-30	Urban and other rural roads of a local character	600	45	60
31-40	Urban and rural roads carrying 2-lane roads	750 (600)	45-100	60
41-50	Urban dual carriageways and high standard all purpose roads with few junctions	1200 (750)	110 – 180	75
51-60	Dual carriageway roads and single carriageway roads of 3 lanes or over	1200 (900)	180-245	75
Over 60	High standard all purpose dual carriageway roads	1200 (1500)	245 – 305	105
70	Motorways subject to the national speed limit	1500	305	105

#### Notes:

1. The smaller alternative signs shown in column 3 should be used only where special amenity considerations or physical restrictions apply.
2. The larger alternative sign sizes should be used where required by site conditions or where the accident record calls for greater emphasis.
3. These distances may be increased on steep down hill gradients (e.g. an increase of 50% may be made for a 10% descent if 85 percentile speeds are towards the top end of the speed range).
4. These distances do not always apply to the "roundabout" ahead sign (diagram 510), "dual carriageway ends ahead" sign (diagram 520) or the "two way traffic" sign (diagram 521). For guidance on the use of these signs on high speed dual carriageways, see para 2.12 for diagram 510, and para 5.3 for diagrams 520 and 521.
5. When the height warning signs, diagrams 530 and 531.1 are placed on a bridge over the carriageway, the plate used should be one size larger than the normal size for the speed of the road.
6. The size of the arch bridge sign, diagram 531.1, is one size greater than other warning signs so that the legend maintains comparable legibility.
7. It may be more appropriate to site the aircraft warning sign (diagram 558) at a greater distance from the flight path than indicated above, as otherwise the aircraft might be apparent before the sign was seen. The appropriate distance would depend upon site conditions.

## Signing on Kent's Roads

### Warning, Speed Limit and other Regulatory Signs

#### Appendix 4.2

##### SIZES OF SPEED LIMIT SIGNS

TYPE OF APPROACH ROAD	SPEED LIMIT ON APPROACH ROAD (higher limit) size of terminal signs (mm)			
	<u>40mph</u>	<u>50mph</u>	<u>60mph</u>	<u>70mph</u>
Single carriageway or one-way road	600	600	750 (600)	-
Dual carriageway up to 1km in length	600	750	750	900
Dual carriageway greater than 1km in length	750 (600)	900 (750)	900	1,200 (900)
Motorways	-	1,200	1,200	1,200
Road works on motorways	-	1,200	1,500	1,500

NOTE: Where derestriction or higher speed limit signs are mounted back to back with lower speed limit signs, the overall appearance of the assembly will be improved if the larger of the suggested sizes is used for both. The alternative sizes shown in brackets may be used where the 85th percentile speed on the approach road is at least 10mph less than the legal speed limit.

TYPE OF ROAD AND SPEED LIMIT	SIZE(mm) of repeater signs
All roads 30mph and 40mph	300
Single carriageway 50mph and National Speed Limit*	450
Dual carriageway or motorway 50mph	450
Dual carriageway 60mph and National Speed Limit*, or motorway 60mph	600
Road works on motorway 40mph	600
Road works on motorways 50mph	750
	*National Speed Limit Signs

**Signing on Kent's Roads**  
Direction Signs and Boundary Signs

**Appropriate x heights.**

<b>Likely 85%ile speed range</b>	<b>TYPICAL ROADS</b>	<b>AD SIGNS x-ht</b>	<b>FLAG SIGNS * x-ht</b>	<b>FINGER POSTS x-ht</b>	<b>ROUTE CONFIRMATORY SIGNS x-ht</b>
N/A	C or Lower class minor roads with no speed limit	Not used	Not used	65 capitals	Not used
20 – 30	C class or lower class minor urban roads – 30 m.p.h. speed limits	75	60	Not used	Not used
20 – 30	Urban roads – single carriageway	100	75	Not used	Not used
30 – 40	Urban roads classified A or B – single carriageway	125	75	Not used	100 if used
40 – 50	Urban all purpose roads – dual carriageway Rural roads classified A or B – single carriageway	150	100	Not used	125
50 – 60	Rural roads classified A or B – dual carriageway de-restricted	175	125	Not used	125
60 – 70	High standard all purpose roads – de-restricted – dual carriageway	200	150	Not used	150
70 +	High standard all purpose roads – de-restricted – dual carriageway grade separated	250	250	Not used	250

- NB: Where flags are located at junctions opposite side roads, maximum size is 75 x-ht for roads up to 2 lanes wide, 100 x-ht for roads more than 2 lanes wide



**DEFINITIONS (DIRECTION SIGNS)**

Flag signs	Chevron ended rectangular signs located at junctions
Map-type direction signs	Depicting a pictorial representation of the junction ahead and showing routes from that junction
Stack-type direction signs	A list of places reached at the junction ahead, where their directions are denoted by the use of arrows at varying angles of 22½°
Lane-type direction signs	A sign in advance of a junction indicating which lane for which direction
Gantry sign	Signs mounted directly over the carriageway
Advance direction sign (ADS)	Any directional sign placed in advance of the junction to which it applies
'Local' advance direction sign (LAD)	Where two AD's are used for a junction and containing different destinations, the one closest to the junction is the LAD and usually contains local place names
Finger post	Directional sign on 'C' class roads and below
Pedestrian signs	Signs wholly for the used of pedestrians in urban areas
Tourist signs	Brown background signs reserved for attractions which comply with the Highway Authority criteria for tourist attractions and facilities
Temporary signs	Yellow or red background signs placed on the highway for the execution of temporary works or to give details of permanent changes to the road network
Information signs	Contain no directional element but provide route information to a driver
Public Rights of Way (PROW)	Signs for all users of byways, bridleways and footpaths
Boundary signs	Signs confirming entry into the County or an urban / village environment

KH APPLICATION/PERMIT No.

APPLICATION REF:

**APPLICATION FOR PERMISSION TO PLACE  
TEMPORARY DIRECTION SIGNING ON THE  
PUBLIC HIGHWAY**



To the Highway Manager:.....Highway Unit

Name of Applicant:

Organisation:

Address .....  
(Block Letters Please) .....

Post Code: .....

Telephone:

Fax:

**EMERGENCY 24 HOUR CONTACT NAME:****TEL:**

I wish to apply for permission to place temporary direction signing on the public highway in accordance with the conditions overleaf and the attached Schedule (Form P.406.4/2).

Event/Function:

Venue Address: .....  
.....

Organiser:

Period of Event:

From:

To:

Total Days:

Signs to be **Erected ON:**and **Removed ON:**

**FOR LARGE EVENTS WITH  
EXPECTED VISITORS MORE  
MORE THAN 10,000 PER DAY**

Estimated number of visitors per day:

Vehicles:

People:

Expected times of majority arrivals

From:

To:

Expected times of majority departures

From:

To:

I am the responsible person who is authorised to take all precautions to ensure full compliance with the conditions printed over leaf. I enclose proof of public liability insurance as required. I agree to indemnify Kent County Council against all losses and claims for injuries or damage to any person or property whatsoever which may arise out of or in consequence of the signing except where such liability rests with the County Council.

Signed .....(Applicant)

Date .....

Lead HMU .....Date Application Received .....

Other HMUs affected:

ASH	CANT	DART	DOVER	EAST	GILL	GRAV	MAID	MID	NORTH
ROCH	SEV	SHEP	SOUTH	SWALE	THANET	T&M	T WELLS	WEST	MTRU

**APPROVAL TO PLACE TEMPORARY DIRECTION SIGNING ON THE PUBLIC HIGHWAY**

\* APPROVAL IS GIVEN in accordance with Section 6, Regulation 41 of the Traffic Signs Regulations and General Directions 1994 for the placement of temporary signing for the above event subject to the general conditions of the Department of Transport Advice Note and the requirements of Kent Highways.

\* Application REFUSED

Proof of public liability insurance checked: YES/NO\*

Signs APPROVED (Sign Nos from attached Schedule)

Special Conditions and Comments for future reference

Signed (for Highway Manager) ..... PRINT NAME

Date ..... Tel: .....

\* Delete as Necessary

Distribution of Copies: WHITE to Applicant/YELLOW to File/PINK to Inspector

KH APPLICATION/PERMIT No	APPLICANT REF:
--------------------------	----------------

EVENT: .....	DATE OF EVENT: .....
--------------	----------------------

## TEMPORARY TRAFFIC SIGNS FOR SPECIAL EVENTS



### SIGN SCHEDULE

(TO BE USED WITH FORM P.406.4/1 TO APPLY FOR TEMPORARY TRAFFIC SIGNING)

#### SPECIFICATION OF MINIMUM SIGN REQUIREMENTS

Speed Limit of Road	Typical Roads	Advance Direction Signs				Direction Signs (at junctions)		
		KH REF	Min.Size of Capital Letter	Approx. Distance from Junction	Min.Clear visibility distance to sign	KH REF	Min.Size of Capital Letter	Min. Clear visibility distance to sign
30 mph	Urban road or village	A	105mm	45m	60m	G	70mm	45m
40 mph	Urban road or rural restricted	B	140mm	60m/75m	H	H	105mm	60m
50 mph	High speed urban road	C	175mm	60-150m	105m	I	140mm	75m
60 mph	Rural A and B roads	D	210mm	125-225m	135m	J	210mm	105m
60 mph	Other rural unclassified road	E	140mm	60m	75m	K	105mm	60m
70 mph	Unrestricted dual carriageway (NOT MOTORWAYS)	F	280mm	225-325m	180m	L	280mm	135m

SIGN. No	KH REF	SIGN SIZE	Method of Fixing	LEGEND (Sketch)	SITE
SIGN	KH	SIGN SIZE	Method of	LEGEND	SITE

Use continuation pages as necessary

## Signing on Kent's Roads

### Appendix 6.1 – Tourist Signing Application Process and Timescales

<b><u>Stage</u></b>	<b><u>Activity</u></b>	<b><u>Estimated timescale</u></b>	<b><u>Charge</u></b>
<b>1.</b>	a) Receive application containing appropriate detail, and application fee. b) Check against tourism criteria including consultation with County/District Tourism Officers, where appropriate. c) Check against traffic management and safety standards. d) Identify special design features (e.g. for conservation areas). e) Consult with local Member, Parish Council and local Highway Unit. f) Either:- Identify outline scheme, prepare quotation and forward agreement for signature by applicant - or - Respond to applicant indicating detailed reasons why signing cannot be provided.	<b>Total for Stage 1 - 6 to 7 weeks</b>	<b>Total for Stage 1 £125 + VAT Fixed fee per destination</b>
<b>2.</b>	g) Receive signed agreement and full payment for design. h) Design of signing scheme and preparation of Contract documents in accordance with County Council standards.	<b>3 weeks</b>	<b>Depends on types of roads and individual locations where signs are required. *</b>
<b>3.</b>	i) Supply and installation of signs in accordance with standards and specifications administered by the County Council . j) Supervision and agreement of work on site to ensure appropriate standards are met.	<b>6 weeks</b>	<b>Depends on types of roads and individual locations where signs are requested. *</b>
<b>4.</b>	k) Future maintenance of signs and posts, to cover cleaning, replacement and repair of fixings, replacement of signs following accident damage, theft, general deterioration and removal of signs if the attraction/facility ceases to meet the appropriate standards.		<b>As required, based on general safety inspection data, or specifically commissioned inspections.</b>

\* Costs will be apportioned between operators where more than one destination is shown on a sign.

**Named destinations or destination groups by category.**

**Primary Destinations (as defined nationally)**

Ashford	Sevenoaks	Bexleyheath +
Canterbury	Sheerness	Bromley
Channel Tunnel	Tunbridge Wells	Croydon
Dartford Crossing	Heathrow Airport +	Lewisham +
Dover	London	
Folkestone	Hastings	
Maidstone	East Grinstead	
Margate	Lewes	
Ramsgate	Stansted Airport +	

+ Signed on or within M25 only (within Kent)

**Secondary Destinations**

Aylesford	Gravesend	Rye
Biggin Hill	Hawkhurst	Sandwich
Borough Green	Herne Bay	Sellindge
Charing	Hurst Green	Sittingbourne
Chatham	Hythe	Snodland
Cranbrook	Lamberhurst	Strood
Crowborough	Lenham	Sturry
Dartford	Limpsfield	Swanley
Deal	Lydd	Tenterden
Edenbridge	Meopham	Wadhurst
Farningham	Northiam	Westerham
Faversham	New Hythe	West Malling
Gillingham	Orpington	Whitstable
Godstone	Paddock Wood	Wrotham
Goudhurst	Redhill	Wrotham Heath
Grain	Rochester	

**Local destination types**

Towns *	)	<i>Indicated on 1:50000 Ordnance</i>	Citizens Advice Bureau
Villages *	)	<i>Survey maps, and boundary signs</i>	Colleges and Universities
Hamlets	)	<i>in place to confirm arrival at</i>	Courts
Districts within towns )		<i>destination</i>	Council Offices
Town centre			Library
Superstores			Toilets
Large retail developments and trading estates **			Car Parks ( <i>including location, where appropriate; e.g., 'Chequers Centre'</i> )
Police Station			Bus Station
Village Hall			Rail Station
Post Office			Other public buildings
Health Centre			
Hospitals (Those with A & E facilities may require signing on a wider basis than non A & E hospitals, but this signing should not need to extend beyond the edge of the built-up area where they are situated).			

\* Those which are not designated primary or secondary.

\*\* Centres with more than 4000 car parking spaces will be treated as secondary destinations.

Destinations which are visited almost exclusively on a pre-planned basis, for example doctors surgeries and schools, will not require direction signs. Where requests are received for signing in these circumstances applicants should be advised to ensure that their publicity literature includes a concise location plan, thus avoiding the need for signs.

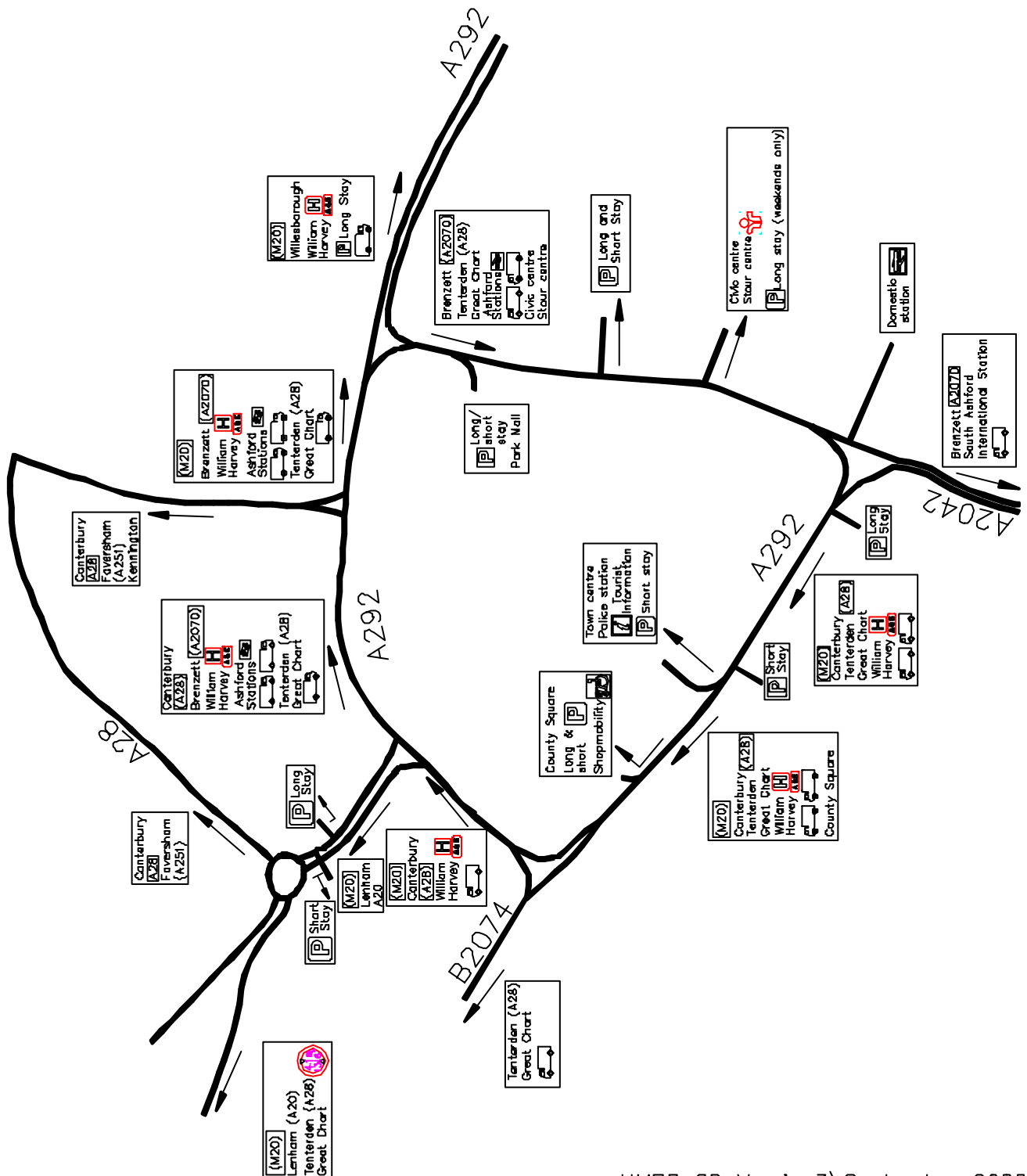
Where pedestrian signs are used in built-up areas, more flexibility is available, but signing to individual retail outlets should still be avoided.



*More flexibility is available in the choice of destinations for pedestrian signing in built-up areas. Although signing to individual retail outlets should be avoided, generic information as shown on this sign is acceptable*



### Example of a Signing Strategy for a built-up area



**Maintenance of Traffic Signs**

**Extract from 'The Highway Maintenance Plan 1999'**

Traffic signs are a primary source of driver information, and their types, specifications and requirements for illumination by lighting or reflectorisation are detailed in the Traffic Signs Regulations and General Directions, a Statutory Instrument. Signs are required to be visible at all times and their reflective or illuminated performance is as essential as daytime visibility for legal purposes where they indicate mandatory or Regulatory requirements. Where they warn of hazards or provide directional information, poor night time performance is detrimental to road safety.

Damage and faults relating to traffic signs will be prioritised, following identification, in accordance with the table that follows, for the purpose of allocating finances for remedial work to be carried out.

**Table 14: CATEGORIES OF TRAFFIC SIGN DAMAGE**

<b>Sign Type</b>	<b>Description</b>	<b>Response Time</b>
Illuminated	Electrically or otherwise unsafe apparatus.	Immediate temporary repair within 2 hours. Permanent repairs will be carried out in accordance with the appropriate response time.
	Unlit illuminated type Regulatory, mandatory, warning sign, belisha and school flashing units.	Repair within 2 days of notification.
	Unserviceable Regulatory, mandatory or warning sign.	Repair within 7 days of notification.
	Obstruction to Regulatory, mandatory signs or belisha beacons (eg. foliage).	Removed as and when identified.
Non-Illuminated	Damage which causes a dangerous obstruction to traffic/pedestrians	Immediate temporary repair within 2 hours. Permanent repairs will be carried out in accordance with the appropriate response time.
	Unserviceable Regulatory, mandatory or warning sign with poor reflective performance.	Repair within 7 days of identification.
	Reflectorised type Regulatory, mandatory or warning sign with poor reflective performance.	Repair within 7 days of identification.
	Obstruction to all non-illuminated signs.	Removed as and when identified.

### Extract from 'The Highway Maintenance Plan 1999'

General maintenance of traffic signs will include the following activities:

- Identification/rectification of outages.
- Bulk lamp change.
- Inspection/rectification of electrical components.
- Electrical safety tests and inspections.
- Check for continued need for illumination based on Regulations, prior to special maintenance.

### SIGN FACES

- Cleaning
- Identification of signs with peeling reflective material, loss of legend or vandalism.
- Identification of signs with ineffective reflectorisation.

### POSTS/FASTENING

- Identify/rectify deterioration of painted/galvanised surfaces and plastic coatings.
- Identify/rectify security of posts/fittings and sign faces.
- Inspect for structural integrity of large signs (area of signface over 10 square metres).

### RENEWAL

Sign renewal programmes will be identified based on the following factors:-

- Signs identified with ineffective reflectorisation.
- Signs no longer required to be illuminated.
- Sign face legends which no longer comply with the Traffic Signs Regulations and General Directions.
- Sign face legends which no longer comply with local or national Policies.
- Missing signs requiring replacement.

Damage and faults to illuminated road signs will be identified through night time scouting. Additionally, signs will be visually inspected to identify ineffective reflectorisation.

Sign faces will be checked for compliance with Regulations and national/local Policies before replacement.

# Signing on Kent's Roads

## Bibliography

Traffic Signs Regulations and General Directions 1994	<i>DETR / The Stationery Office</i>
The Traffic Signs Manual Chapter 1	<i>DETR / The Stationery Office</i>
The Traffic Signs Manual Chapter 3	<i>DETR / The Stationery Office</i>
The Traffic Signs Manual Chapter 4	<i>DETR / The Stationery Office</i>
The Traffic Signs Manual Chapter 5	<i>DETR / The Stationery Office</i>
The Traffic Signs Manual Chapter 7	<i>DETR / The Stationery Office</i>
Manual of Contract Documents for Highway Works BS873	<i>DETR / The Stationery Office</i> <i>The Stationery Office</i>
Local Transport Notes	<i>DETR / The Stationery Office</i>
Design Manual for Roads and Bridges	<i>DETR / The Stationery Office</i>
KCC Standard Contract Documents	<i>KCC</i>
Traffic Measures in Historic Towns	<i>Civic Trust and English Historic Towns Forum</i>

## Acknowledgements

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