

Part Three

HIGHWAY WORKS

3.1 Roads and Footways

3.1.1. New Roads, Realignment and Other Improvements

As part of its duty to maintain or improve the public highway, the County Council must on occasions build new stretches of road, or realign or widen existing ones.

- The creation of a new road, where it is not abutting an existing one, needs planning permission and environmental issues are considered through that process
- Some major schemes may require a statutory environmental impact assessment
- An informal environmental appraisal will be carried out for some other schemes (currently those over £50,000, over 400m, over half a hectare or affecting any environmental designation)

In many instances, however, it is the cumulative effect of minor works which has an adverse impact on the County's environment, for example, inappropriate use of kerbing on rural roads can be unacceptable on financial as well as environmental grounds and, in these circumstances, alternative solutions should be sought. Similarly, alterations to the highway which result in a proliferation of signs and road lining should also be avoided. If realignment results in a section of road becoming redundant then it should be stopped up, broken out and reinstated to its former natural state. (See 3.8: Redundant Highway Land).

New Roads -



Rickinghall-Botesdale Bypass

3.1.2. Footways

The provision of footways in the countryside is sometimes necessary to solve a local safety problem or encourage people not to use the car. This can have the effect however, of urbanising the rural environment and should be provided after balancing local needs with the environmental impact.

- If a footway is necessary and the verge width permits, then consider routeing it away from the road, leaving a grassed area between the footway and road, provided that suitable routine maintenance can be arranged
- If personal safety and land ownership issues can be resolved, a footway on the side of a hedge away from the highway, is less intrusive and may be an option. The hedge will have to be maintained at an acceptable height to ensure surveillance and visibility and this may have a cost implication.
- Surface dressing or resurfacing a footway with appropriate aggregates such as crushed gravel can improve its appearance
- Where kerbs are provided in sensitive areas, consider using granite, riven concrete or exposed aggregate kerbs
- Where a footway is constructed at road level, consider demarcating it using flush kerbs or setts, with or without gravel surface dressing, rather than white lines or coloured surfacing
- The use of timber edging to retain a footway may be preferable to other materials for both aesthetic and environmental reasons but this may have maintenance implications

Footways -



Above and right: the grass strip retains the rural character in these two examples



3.1.3. Accesses

Development in rural areas is carefully controlled by Structure Plan and local plan policies. An access onto the highway requires planning permission except in certain cases where it is onto an unclassified road. New accesses may be allowed where they satisfy safety requirements and meet local plan environmental policies. Any work within the highway requires consent from the Highway Authority.

There are standard designs for different types of access which are acceptable in some locations. Standard solutions can, however, be intrusive in sensitive rural areas, and alternative designs may be more appropriate. Accesses to new development abutting a village, for example, can create a suburban character which can be detrimental to the important interface between rural and built-up areas.

Safety is of paramount importance when creating a new access but care should also be taken to ensure that it blends well into the existing street scene. As such, both the Highway Authority and the Suffolk planning authorities have resolved to apply a balanced approach to width, visibility splays and the application of other standards in rural areas.



A new surface dressed footway at Marlesford



A timber footway neatly solves a local safety problem at Holbrook

Some simple measures can help ameliorate the impact of new accesses:

- Every endeavour should be made to retain trees and hedgerows if this does not compromise road safety. This may be achieved, for example, by management of the hedge or repositioning the location of the access to secure visibility.
- An established hedge can be moved as a last resort if circumstances are suitable. Where an access does necessitate the removal of trees or a hedgerow, replacement planting of suitable species should be carried out behind the visibility splays allowing enough room for normal growth.
- Wherever possible, the use of raised kerbing should be avoided, especially where the access is directly onto an unkerbed road. Invariably a soft edge is visually preferable but if overrun is likely to be a problem and kerbing is unavoidable, then consider using granite, riven concrete or exposed aggregate rather than conventional kerbs.
- Grassed verges and banks should be reprofiled to match the existing character. The need to construct brick retaining walls or other similar structures should be avoided where possible.
- Footways provided in association with new development should be located with regard to use, safety and visual impact. A footway across the angle of a visibility splay at the junction with a country lane, for example, often appears as an alien feature, so if circumstances allow, alternative solutions should be sought.
- If a ditch or watercourse must be crossed, then a bridge is preferable to piping. Any new structure to be adopted will require approval from the County Roads & Bridges Manager.
- The surface treatment of accesses needs to be considered carefully. The surface must be appropriate for its level of use and also its context. In some cases it is best to

match the existing road surface to give a simple, seamless solution. Agricultural accesses which have a hard surface are traditionally concrete and this is often more appropriate than blacktop. Accesses should visually relate to any private part of the access as well as the public highway. A gravel aggregate finish may be an appropriate solution but concrete block paving is not traditional and, in most cases, inappropriate in the countryside.



A new access with temporary post and rail fence alongside a replacement hedge

3.1.4. Kerbing

Kerbing can be inappropriate in rural areas and, wherever possible, it should be avoided. Where overrunning of verges by vehicles is a problem, for example on the inside of bends or where needed for drainage purposes, then selective kerbing may be the only solution. Regrowth of vegetation will help soften the impact.

- In sensitive areas consider using granite, riven concrete or exposed aggregate kerbs
- Kerbs can be laid on a batter so that the soil can be mounded over the top. Only the face of the kerb will then be visible.
- Kerbing should not normally be used on village greens or commons. If overrunning is a problem it may be possible to regrade the edge of the green to give a steeper slope. If necessary, protect the edge with oak bollards at the corners. Temporary wooden posts can be used along the edge whilst vegetation regenerates and then removed once this is established.

Kerbing -



Granite kerbs protecting a vulnerable corner



Riven concrete kerbs



Exposed aggregate concrete kerbs



Kerbs laid on a batter so that soil can be mounded over the top (where overrunning is a problem the kerb can be laid at a steeper angle)



Posts protecting the edge of a village green are an alternative to kerbs

3.1.5. Surfacing

The County Council's duty to maintain the highway network is set down in the Network Management Plan. The category of road determines its level and type of maintenance.

Principal Roads are maintained to a high standard requiring uniformity of shape and good skid resistance. Hot rolled asphalt with embedded rock chips is the usual surface material. Minor roads are rarely resurfaced but are repaired by patching and surface dressing. Whatever the grade of the road, surfaces must be safe and appropriate to their level of use.

- When choosing materials consider environmental and sustainability issues. Options in priority order should be:
 - reuse or recycle materials in situ
 - reuse or recycle materials from another local source
 - reuse or recycle materials from a non-local source
 - use of virgin materials from a local source
 - use of virgin materials from a non-local source
- When minor roads are surface dressed, or other roads resurfaced, the colour of the chippings should be chosen carefully. Over short distances, the chippings should match with the rest of the road to give a continuous appearance. Where longer lengths are to be surfaced, especially in sensitive areas, then it may be preferable to use a warmer colour, rather than grey. It should be noted, however, that choice of chipping colour may have technical, environmental and cost implications.
- In some very sensitive areas such as conservation areas or in parts of the AONBs, special road surfaces may be preferable. For example, the use of crushed gravel in the wearing course or as a surface dressing with a black or clear binder may be a possibility. These may only be used where they are acceptable on safety grounds and where funds permit.

- Footway, cycleway and layby surfacing should be appropriate to its location. In some circumstances, surface dressing with crushed gravel may be the preferred solution. Alternatively, the careful choice of stone chippings in the wearing course of blacktop can improve the eventual appearance. For example, the use of gravel, limestone or pink granite will give a warmer, lighter, effect.
- Pigmented surfaces should not be used for cycleways or footways in sensitive areas
- Visually, slurry seal may not be appropriate in sensitive areas
- Concrete block paving, especially if laid in a herringbone pattern, is rarely appropriate as it is not sympathetic to the traditional character of Suffolk villages and countryside
- On footways, the use of standard concrete paving slabs, especially the smaller square type may also be inappropriate in rural locations

Further advice on the use of surface dressing can be found in The Surface Dressing Manual: A Good Practice Guide for Surface Dressing in Enhancement Work.



This light coloured surface at Kersey complements the rural character

Surface finishes -



Surface dressing with clear binder



Gravel based wearing course with pre-coated stones rolled in



Different coloured aggregates can be used on footways and carriageways



This double dressing at The Square in Dennington has worn well

3.2. Bridges

3.2.1. Permitted development and the need for consent

Most of Suffolk's highway bridges are the responsibility of the Highway Authority and much work in terms of building new bridges and demolishing, repairing or altering existing bridges is permitted development under part 13 of the Town and Country Planning (General Permitted Development) Order 1995.

The only exceptions are:

- construction of new bridges which are not within or abutting the highway
- construction of new bridges where an environmental impact assessment is deemed necessary

In addition, even where planning permission may not be required, it may be necessary to obtain consent in the following cases:

- bridges which are Scheduled Ancient Monuments
- bridges which are listed structures

- where it is proposed to completely demolish a bridge in a conservation area

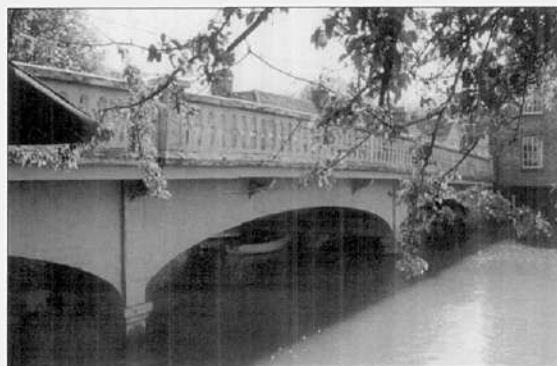
The Development Section of the County Environment and Transport Department will advise on the need for consents necessary under planning legislation.

Notwithstanding whether or not permission is required, many of Suffolk's bridges are attractive, historic structures often in beautiful settings and any necessary work should be carried out sensitively and with due regard to the environment.

3.2.2. Bridges and Archaeology

Bridges tend to be on historic crossing points. Even though the existing bridge may not be old, the banks and river bed may contain evidence of earlier structures. If significant repairs or demolition and rebuilding are to take place, archaeological advice should be sought.

Bridges -



Planning permission was needed to replace the bridge at Sudbury as an environmental impact assessment was required



The replacement for this bridge at Jude's Ferry needed planning permission as it did not abut the existing highway



This Grade II listed bridge at Bealings is also a Scheduled Ancient Monument



Archaeological excavations at Ballingdon Bridge discovered remnants of previous bridges

3.2.3. Repairs, Maintenance and Alterations

Where changes are necessary they should be carefully considered so as not to undermine the original design. Wherever possible attractive or historic features should be retained and any work carried out in similar materials and style. Check first if the site is protected by any environmental designations.

Care should be taken to ensure wildlife is not disturbed and, where there is evidence of protected species, repairs should not be carried out during their breeding season. If major reconstruction is proposed consider making provision for wildlife. Advice should be sought from the Countryside Section of the County Environment and Transport Department.

3.2.4. Demolition of Bridges

If a bridge is to be demolished the following points should be considered:

- whether or not conservation area or listed building consent is needed
- evidence of bats or other wildlife
- removal of any vegetation
- sustainability issues relating to removal and possible recycling of materials
- if it is not intended to replace the bridge in the same location, and the bridge is to be demolished, the site should be returned to its natural state

Bridges -



The site of the demolished Jude's Ferry bridge was returned to its natural state



Plaques provided by the Dedham Vale Project add local distinctiveness to bridges in the Stour Valley



Careful repair of Toppesfield Bridge in Hadleigh, a Grade II listed structure and Scheduled Ancient Monument*

3.2.5. New Bridges

Design and Construction

New bridges should be designed and constructed to be both practical and aesthetically pleasing. In some instances a standard design solution will be appropriate, however, wherever the location, choice of materials and attention to detail are always important. In more sensitive situations, such as those within conservation areas, areas of outstanding natural beauty or special landscape areas, a more individual design approach may be needed.

In all cases, the following issues should be considered:

- Both traditional or contemporary bridges can be appropriate, depending on the circumstances. Solutions which are a poor pastiche of an historic style should be avoided.
- Contemporary designs, which may be aesthetically pleasing in themselves, can still be inappropriate in situations where a less prominent solution is needed
- Necessary safety measures such as safety fencing and parapets should, wherever possible, be an integral part of the design of the bridge. Creative solutions can enhance the design and look good as well as providing the necessary protective strength.
- The width of a bridge should be kept to a practical minimum necessary for safety purposes and future use, especially when the approach roads are narrower or have no footways
- Sometimes in areas with a more open character, parapets which allow views through may be preferable to solid parapets

Providing for wildlife -

Right (above) bat bricks and (below) otter run at the new Ballingdon Bridge

Materials and Detailing

In most cases, the choice of materials should reflect the character and traditional building materials of the area and be environmentally sustainable. Historically, local bricks, clay copings, stone, cast and wrought iron, concrete and timber were all used in the construction of bridges in the County. Other factors to take into account when specifying materials include:

- The choice of brick should be both technically and aesthetically appropriate. The use of standard engineering bricks will be visually intrusive in many locations.
- Concrete and brick pointing should usually have a lime mortar colour – creamy rather than grey
- White painted concrete post and metal rail fencing on the approaches to bridges reflect those seen traditionally throughout the County
- Decorative features should be considered as part of the overall design solution. The new bridge should be aesthetically pleasing as well as functional.

Providing for Wildlife

- Bat bricks, otter ledges and other wildlife measures should be provided where necessary [see Section 2.2]

