

Replacement of Road Markings and Studs

Cambridgeshire County Council is responsible for the provision of road markings and studs on the road network throughout Cambridgeshire other than on motorways, trunk roads and private or non-adopted roads.

Road markings are as important as signs. The purpose of road markings and studs are to define traffic lanes, & alignment changes, provide warning, identify parking and waiting restrictions and to convey Give Way & other instructions to road users in a manner that is clearly visible both day and night.

This policy identifies the procedures and guidelines for the placement and maintenance of road markings and studs within the public highway and forms the basis of the decision making process for the provision of all road markings and studs on the public highway.

Over the years there has been an inconsistent approach to the provision of road markings and studs across Cambridgeshire County. Therefore it is necessary to review existing road markings when undertaking resurfacing works and routine maintenance works to ensure that they are used in the most effective manner and applied consistently across Cambridgeshire in line with:

- The Traffic Signs Regulations and General Directions 2002 (TSRGD)
- Chapter 5 of the Traffic Signs Manual 2003 (TSM)
- Cambridgeshire County Council guidance
- Requirements BS EN 1436:2007 + A1:2008 Road marking materials – road marking performance for road users.

The over-use of road markings can diminish their effect on road users. This policy aims to rationalise their use and maximise their effectiveness, where they are necessary.

STANDARDS & GUIDELINES FOR THE PROVISION & MAINTENANCE OF ROAD MARKINGS & STUDS

Proposals for road markings on the public highway must be approved by the scheme manager. Road markings or layouts that are not contained within the TSRGD 2002 are not permitted without prior approval from the Department for Transport (DfT) including any that are experimental and under trial.

Unless being provided as part of accident remedial work or as part of a speed management scheme, the following rules will apply to the provision of road markings:

Centre Lines

Centre line markings and centre warning line markings should not be provided on any carriageway of typically less than 5.5 metres total width.

Centre line markings must not be used on:

- unclassified roads
- estate roads
- residential cul-de-sac.

Centre warning line markings should only be used on

- unclassified roads
- estate roads
- residential cul-de-sac.

in conjunction with give way markings and at other significant hazards.

Centre warning line markings should only be provided on approach to a hazard. They must not be used in place of standard centre line markings between hazards.

Centre warning line markings should only to be provided as per DfT guidance:

- at significant bends/crests
- each side of junction centres or significant

Where parking bays are provided, centre line markings should be omitted where the remaining carriageway width is less than 5.5 metres.

Edge of Carriageway Markings

Edge of carriageway markings should generally only be used:

- in conjunction with centre warning line markings
- with double white line systems where no kerbing exists
- at sites where there is a persistent recorded problem with vehicles overrunning the highway verge.

Edge of carriageway markings shall only be provided on carriageways of typically less than 5.5 metres in width where it is not permissible to provide a centre warning line. For example: on bends, alongside deep drains or other hazards.

In locations where occasional short lengths of kerb exist, edge of carriageway markings should be continued through the kerbed length to maintain continuity.

Wherever used, edge of carriageway markings must be offset from the edge of the carriageway surface by 180mm to prevent their deterioration and facilitate future maintenance of the lines.

Give Way Markings

Give way markings will be laid at all junctions where no other marking is provided on:

- strategic routes
- main distributor roads
- local roads at their junctions with secondary distributors
- on any road if their use is recommended following an accident investigation study.

Give way triangle markings will be laid:

- on the approach to strategic routes
- on main distributor roads
- in conjunction with give way signs
- at other locations where their use is recommended following an accident investigation study.

Give way markings should only be provided on estate roads in situations where the priority is not obvious or where there is recorded evidence of an accident problem.

Other Road Markings

Road markings such as (but not limited to) bus stops, 'School Keep Clear', 'Keep Clear', access protection markings, pedestrian crossings, disabled/parking bays and stop lines must be assessed for suitability by the Policy and Regulation team before replacement.

Longitudinal carriageway markings approaching traffic islands should be continued around and offset outside the island to provide adequate vehicle deflection.

Conservation Areas and Environmentally Sensitive Locations

Where used in conservation areas and other environmentally sensitive locations, yellow road markings for waiting restrictions should be 50mm in width and must be "primrose" yellow.

Other yellow waiting restriction markings should be in yellow material and be 50mm or 75mm in width. 100mm-wide markings should only be used on high speed roads (outside 40mph speed limits).

Studs

Under current regulations it is only a requirement for road studs to be used in conjunction with a solid double white line system.

Road Studs may be replaced on A roads except in street lit areas or inside 30mph limits. They may only be replaced on other roads in exceptional circumstances such as accident reduction schemes.

Long-type studs shall be used on principal roads with Halifax-type reflecting "cats eye pads".

All road studs within proximity of a level crossing **MUST** be stick-on type.

The use of 360 degree studs or solar powered studs shall only be considered where night-time accident rates are high and only after consultation with the Road Safety Engineering team.

FURTHER INFORMATION

The table titled General Rules for Road Classification in Appendix A, at the end of this document, specifies the road markings and studs requirements for each road type.

If clarification is required on any aspect of road markings or studs please contact the Network Management Team for guidance in the first instance.

Appendix A: GENERAL RULES FOR ROAD CLASSIFICATIONS

Classification	Centre Line	Edge Line	Road Studs
A	Yes, with warning lines where appropriate	Yes, on high speed sections except alongside kerbed sections and inside 30 mph speed limits.	Yes, except in street lit areas or inside 30mph limits.
B	Yes, where carriageway width typically exceeds 5.5 metres and with warning lines where appropriate.	Only on consistently high traffic flow routes (typically >6000 vehicles in 12 hours) or at specific hazard locations (eg: bends and alongside deep drains or where buildings abut the highway).	No, except in conjunction with a double white line system or in exceptional circumstances such as accident reduction schemes.

C	Only on <u>consistently</u> high traffic flow routes (typically >2000 vehicles in 12 hours) where carriageway width typically exceeds 5.5 metres. Warning lines at specific hazard locations (eg: junctions and bends).	Only at specific hazard locations (eg: bends and alongside deep drains or where buildings abut the highway).	No, except in conjunction with a double white line system or in exceptional circumstances such as accident reduction schemes.
U & Estate	No markings at all except warning lines at specific hazard locations (eg: junctions and bends).	No markings at all except at specific hazard locations (eg: alongside deep drains or where buildings abut the highway).	No, except in conjunction with a double white line system or in exceptional circumstances such as accident reduction schemes.