# C.03 Signs

## Key Principles

The use of "CYCLISTS DISMOUNT" and "END OF ROUTE" signs should always be avoided unless there is a ***proven*** need.

The use of advance directions signs, particularly map-type where this will direct cyclists through complex junctions, can help cyclists conserve energy lost when stopping to read signs erected at junctions.

Existing posts should be used whenever practicable to minimise clutter. Posts and sign faces should not reduce the effective width of a cycle track by being placed in the path of pedestrians or cyclists. Where possible, sign posts and lamp columns should be set back 500mm beyond the edge of a cycle track. Where walls or fences prevent this they should be placed tight up against them.

Where vandalism is a problem signs should be mounted high enough to discourage graffiti and anti-rotational fixings used to prevent rotation.

Sign x-heights should reflect the positioning and likely speed of approaching cyclists.

## Design Guidance

**Manual for Streets:**

9.2.2 Designers should start from a position of having no signs, and introduce them only where they serve a clear function:

> *'Signs are used to control and guide traffic and to promote road safety. They should only be used where they can usefully serve these functions.'*

### *'Cyclists dismount' and 'End of Route' signs*

These two signs have been used indiscriminately and incorrectly by many local authorities.

The 'cyclists dismount' sign (Diagram 966) is widely ignored by cyclists who understandably wish to remain on their bikes. With careful design it should be possible to design a cycle route that avoids the use of this sign and replaces it with a give way option to join the carriageway or another route (see also B09 Obstruction of cycle track accesses).

Draft DfT guidance (LTN 3.03) states that Diagram 965 "Indicates the end of a cycle lane, track or route. Can be used with Diagrams 1057 and 1058. It should not be used for short breaks in the route. The use of this sign is not mandatory and it should be used sparingly".


Diagram 966


Diagram 965

The Scottish variant saying 'cyclists rejoin road' is not approved for use in England and requires DfT authorisation. A number of English local authorities (e.g. Leicestershire CC) have developed other variants, which also require authorisation.

Example of sign needing authorisation

Picture Adrian Lord


Good practice: it is much better to provide a safe means of returning to the carriageway than to instruct cyclists to dismount

Picture © Alex Sully


Bad practice: this is clearly not the end of anything

Picture © Alex Sully

***Siting Signs***

The use of advance directions signs, particularly map-type where this will direct cyclists through complex junctions, can help cyclists conserve energy lost when stopping to read signs erected at junctions.


Map-type advance direction sign

Picture © Alex Sully

Sign posts can severely restrict the available width of a cycle track especially one adjacent to a road. In this situation posts, lamp columns and railings have to be set back 450mm from the kerb face to allow for the overhang of vehicles which could otherwise damage the post etc. This reduces the width available to cycle as pedals/handlebars must be kept inside the post. It is generally preferable if all posts are located at the back of the cycle track where this will not cause as much problem. Cantilever signs are very effective at reducing clutter on the surface.

Bad practice: Badly sited signs and columns can create major problems for cyclists

Picture © Alex Sully

Signs should ideally be fixed on existing posts or lamp columns to minimise clutter.

**Manual for Streets:**

2.3.5 The choice of surface materials, planting and street furniture has a large part to play in achieving a sense of place. The excessive or insensitive use of traffic signs and other street furniture has a negative impact on the success of the street as a place. It is particularly desirable to minimise the environmental impact of highway infrastructure in rural areas, for example, where excessive lighting and the inappropriate use of kerbing, signs, road markings and street furniture can urbanise the environment.

Where new posts are required these should be located at the back of footway / cycle track wherever possible to maximise the effective width of the cycle track. Where possible, sign posts and lamp columns should be set back 500mm beyond the edge of a cycle track. Where walls or fences prevent this they should be placed tight up against them. If the sign overhangs the cycle track its lowest edge should be at least 2.3 m and preferably 2.4m above the surface (see also C01 Headroom).

Round posts often allow signs to be turned even when the banding has been tightened as much as possible. Where this is likely to be a problem anti-rotational fixings should be used. In cases of repeated vandalism, square posts may offer a solution.


Signs mounted on square posts to prevent rotation, East Sussex

Picture: Sustrans

***'X' Heights***

The size of all direction signs is determined by its "x-height", which is the height of the lower case letter "x". The DfT range of proscribed x-heights for cycle directions signs (Diagram 2602.1) used within the highway is from 30 to 60mm.

The choice will be determined by a range of factors including the speed of the approaching cyclist, the distance from which it will be read and the need to stand out from distractions such as other road signs. The desire to minimise clutter and adverse impact in sensitive areas may also play its part. As a rule of thumb for determining the x-height, someone with normal vision may be expected to read a sign with lowercase lettering 30mm high from 18m away (given by the rule of 6m per cm). When more than one destinations are included together with a cycle symbols and perhaps the National Cycle Network number path the sign is likely to be large as a result carrying all this information. In such cases, an x-height of 30mm is normally advisable unless local conditions dictate a larger one, for example at a large busy urban junction where there are often many signs all competing for a road user's attention.

Off-highway an x-height of 25mm 0r even 20mm is less obtrusive and more suitable on traffic-free routes where speed is not of the essence and it is usually safer to slow down or stop. Nevertheless, care always needs to be taken to ensure that the signs are large enough to be clearly visible to potential users of the routes at the speeds that they may be travelling, otherwise their effectiveness is compromised.

End-fixed signs look neater in position but care needs to be taken to ensure they are not too long. It is good practice to keep the length to within 1m if possible. Whenever practicable, 'back-to-back' mounting brackets should be used to help improve the appearance of sign installations.

Regrettably, many designers locate signs without a thorough site inspection. This is not recommended as the size needs to be determined by reference to site conditions and likely fixing positions.

***Examples***

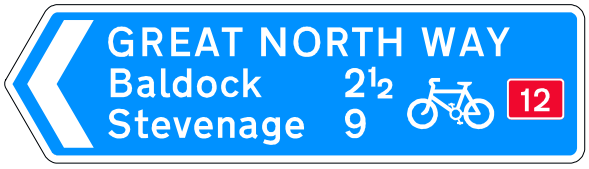
The following are a comparison of sign sizes using different x heights. The sign dimensions change by approximately 15% with each 5mm change in x height. In the first four examples the route name governs the length of the sign whereas in the latter two it is the destination name and logos (source Sustrans).


x-height = 20mm 537x214mm

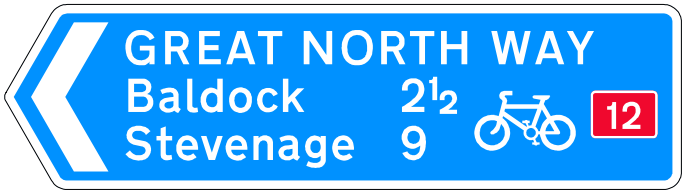

x-height = 25mm 683x269mm


x-height = 30mm 819x322mm


x-height = 35mm 940x375mm




x-height = 30mm 850x232mm




x-height = 35mm 992x271mm

Bad practice: Here a sign with an x-height of 25mm (non-proscribed) is lost in the background

Picture: Sustrans

Off-highway the same 25mm x-height may be more acceptable

Picture: Sustrans

Map signs can be very useful on traffic-free routes where cyclists have room to stop safely

Picture: Sustrans

***Road Marking in place of signs***

Carriageway markings may also be useful for guiding cyclists through complex junctions and streets in urban areas. Where there is insufficient room for the introduction of cycle lanes the bicycle symbol (Diag.1057) accompanied by the rectangular upright sign (white bicycle on blue background, Diagram 967) may be used to let vehicle drivers know they are on a route used by cyclists (see A11 Cycle Lanes). Preformed thermo-plastic surface markings can also reduce both sign clutter and vandalism.

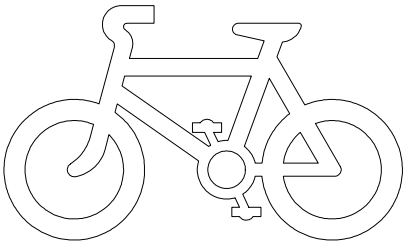


Diagram 1057

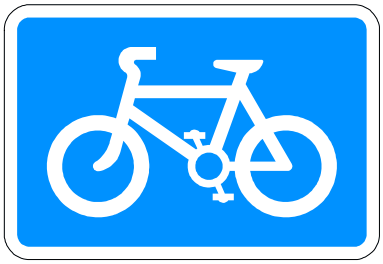


Diagram 967

Road markings can be more effective than signs

Picture: Sustrans

Direction sign applied to cycle track Surface

Picture: Patrick Lingwood


Road Markings used to denote the route of the National Cycle Network in a rural area

Picture: Sustrans

**Publications**

*Traffic Signs Regulations and General Directions* DfT 2002

*Signs: General Symbol Drawings – S Series* DfT

TAL 6/05 *Traditional Direction Signs* (pdf – 237kb) DfT 2005

*Manual for Streets* DfT, Communities & Local Government 2007

*Policy, Planning and Design for Walking and Cycling* – Local Transport Note 1/04, Public consultation Draft, DfT 2004

*Cycling by Design*, Scottish Executive 1999

*Adjacent and Shared Use Facilities for Pedestrians and Cyclists* – Local Transport Note 2/04, Public consultation Draft, DfT 2004

*Cycling England, Engineering, Picture Gallery* (pictorial examples)

*London Cycling Design Standards – A guide to the design of a better cycling environment* (Sections 3.4, 3.5, and 3.6) TfL 2005

*Lancashire - The Cyclists' County* (pdf - 5.45Mb) (Section 3) – creating pleasant road conditions Lancashire County Council, 2005

*CTC Benchmarking – Best practice case studies*

*National Cycle Network – Guidelines and Practical details, Issue 2* Sustrans 1997

**Other references**

*Cycle Friendly Infrastructure - Guidelines for Planning and Design*, Bicycle Association et al 1996