

Chapter 2 - Structure and Use of the Guidelines

The Guidelines are for reference by those responsible for the planning and the detailed design of the National Cycle Network. They set out measures for tackling many of the situations likely to be encountered in developing the National Cycle Network. The measures are designed to be appropriate for novice cyclists.

The quality standard expressed in these solutions has been set in order that the National Cycle Network might attract more people to cycling. Compromising on these standards will reduce safety, attractiveness and comfort; it will therefore attract fewer people to cycling.

Chapter 3 contains Route Planning Criteria, which should be considered in assessing any proposed section of the National Cycle Network. These criteria provide a design framework to help meet the needs of the Network's target users. They should be used in conjunction with the subsequent chapters, which contain diagrams and drawings of measures likely to be encountered on the National Cycle Network project.

Chapter 4 illustrates the different types of cycle lanes and tracks within the highway boundary. Approximately half the National Cycle Network, including most of the more heavily trafficked urban sections, will be on-highway.

Chapter 5 covers a variety of junction and crossing types that will be encountered in developing the Network.

Chapter 6 deals with traffic calming, including many details applicable in the rural as well as the urban setting.

Chapter 7, covering rural roads and villages, has been considerably revised from Issue 1 of the Guidelines, due to increasing public concern about the pressure that motor traffic growth is placing on rural roads, which were formerly considered quiet and safe.

Chapter 8 gives design guidance for traffic-free paths.

In Chapter 9 can be found the signing arrangements for the National Cycle Network, as well as cycle parking and standard technical details.

The Appendices provide additional information and forms.

It is important that throughout the planning and design process the measures chosen make it clear that cycling is considered a valuable form of transport. In some cases, particularly urban areas, the opportunity should be taken to reinforce the local authority's policies by giving cyclists (and pedestrians) priority over drivers.

Throughout these areas it is unlikely that cycling measures will be considered in isolation from other policies and so it is anticipated that the introduction of a National Cycle Network route will be carried out in conjunction with wider traffic calming and speed control, or other traffic management measures.

The Department of Transport is encouraging local authorities to introduce demand management policies and measures. Reducing the volume of motor traffic will make cycling safer, easier and more appealing, and facilitate the development of high quality local cycling networks.

The designer should always seek to apply these technical drawings in such a way as to enhance the local environment and to improve the conditions for pedestrians, wheelchair users and the wider community. They are guidelines and should not be regarded as prescriptive; in all cases the achievement of a high quality local environmental improvement is a priority

Consultation with residents', cycling, pedestrian and disability access groups is always recommended when designing transport infrastructure and will be essential to ensure that attention is paid to the small details necessary for a successful route. It is to be hoped that the National Cycle Network will be a model project in this regard.

The figures in the following chapters should be read in conjunction with the general notes, which give information on the details appearing in the drawings.

General Notes - Figure 2.1

1. This document contains diagrams and notes on facing pages. The diagrams are illustrative of solutions to particular sets of conditions. The notes elaborate on the conditions and the solutions shown, and cross reference to Department of Transport and other relevant advice.
2. A continuous route will require solutions to the variety of conditions encountered along its length. This will be achieved by amalgamating solutions for intersections, crossings, links etc, as appropriate.
3. The details are illustrative and are to stimulate and guide designers to imaginative and practical solutions in order to create continuous routes. It is not possible to prescribe solutions to every set of circumstances: designers will have to use their professional judgement to arrive at optimum solutions.
4. The diagrams are not drawn to scale.
5. Generally, tactile markings for pedestrian/cyclist segregation and pedestrian crossing points have been omitted from the details for clarity. The DOT are currently reviewing the form of the raised white line delineator Diag No. 1049.1. Tactile markings are to be provided in accordance with current DOT guidance.
6. Traffic signs and white lining have been included in diagrams, to show particular requirements, but will not necessarily be comprehensive of all the signs and white lining required.
7. Traffic signs and white lining are to be provided and located as prescribed in the Traffic Sign Regulations Et General Directions 1994 (SI 1994 No. 1519) and the Traffic Signs Manual. It is expected that the direction signing for the National Cycle Network will be prescribed in the Amendment Regulations in Spring 1997; prior to then authorisation will be required. Hatched taper markings shown in the figures are indicative only; appropriate advice is contained in Chapter 5 of the Traffic Signs Manual.
8. The location of the signs in the figures is illustrative. Existing street furniture should be used whenever possible to locate signs, and care should be taken to avoid causing a hazard for, or inconvenience to, pedestrians or cyclists.
9. Sign clutter is unsightly and confusing. Designers should use signs sparingly and on a case by case basis. The use, for example, of sign Diag No. 963.1 "Cycle Track Look Both Ways" and its variants is not justified at every junction of a footway with a cycle track lane. It should be reserved for those situations where visibility is poor.
10. Most of the solutions detailed within this document will require some degree of public consultation; some will require Traffic Regulation Orders or special authorisation from the Department of Transport. The procedures for these steps are well documented and not referenced here.
11. See Figure 8.6 for details of visibility splays.
12. Examples are given to illustrate where all or some of the details in these diagrams have been used successfully in existing cycle facilities. The responsible local authority is indicated.
13. The "Cyclists Dismount" sign has not been used in these Guidelines. It is important that National Cycle Network routes are coherent and continuous with minimal deviation. The need for appropriate signing should be considered where conflicts may occur between pedestrians and cyclists.

14. Diag No. 1024 "Slow" has been shown on the approaches to some crossings. If the designer wishes to include this marking and the text height prescribed is unsuitable then the text height prescribed for Diag No. 1058 should be used. Half height "Slow" markings currently require authorisation from the DOT, but are expected to be prescribed in the Amendment Regulations.

15. In Wales, bilingual versions of traffic signs should be used.

16. Illuminated Keep Left/Keep Right bollards have not been included in the figures and therefore the designer must consider their use when providing central islands, refuges, splitter islands, build-outs etc.

17. Cycle lanes, cycle tracks, advance stop line reservoirs etc. need only be coloured where there is value in increasing their prominence. The approach should be in line with that adopted elsewhere in the local area. See Chapter 9.

18. Increased prominence of crossings or additional route guidance for cyclists may be necessary. Discussion with Sustrans and the DOT to determine an appropriate solution is encouraged. The application of "Elephant Footprints" (ref. WBM 294) may be suitable but their application requires special authorisation from the DOT. Elephant Footprints are unlikely to be authorised where vehicle speeds are expected to exceed 30mph, except where cyclists are under signal protection.

19. In order to give additional guidance to cyclists on a National Cycle Network route it will be appropriate to show route numbers on cycle information and **direction signs**. See Figure 9. 1.

20. It should be noted that unnecessary or poorly **designed build-outs can** cause problems for cyclists

on the carriageway. Where build-outs are provided as part of parking provisions the build-out should extend into the carriageway by only half the width of the parking bay unless it is intended to assist pedestrians crossing the road. Cyclists can then use the parking bays when not occupied without being forced into the traffic running lane at intervals.

2.1. Where build-outs and other features are constructed the designer must consider highway drainage requirements.

22. All forms of cycle track, cycle bypasses, gaps in refuges, cycle lanes with adjacent traffic islands etc. should be designed to be kept clear of accumulation of rubbish.

23. Definitions:

cycle track: a way for pedal cycles which can either be part of a highway adjacent to a carriageway or a separate highway in its own right, with or without a right of way on foot. For the purposes of this document only, this also includes a permissive cycle route.

cycle lane: a part of a carriageway allocated for use by cyclists.

footway: a pedestrian way within the boundaries of a highway, usually adjacent to a carriageway.

footpath: a separate way provided exclusively for pedestrians.

24. A number of legislative and DOT references in these Guidelines have equivalent versions published by The Scottish Office. These are listed in the Bibliography, and where the corresponding reference appears with a figure, it is annotated as (S).

Key to Figures – Figure 2.2



Cycle lanes, tracks and routes. (Used to highlight the cycle routes; coloured surface not implied)



Cycle lanes, tracks and other areas where contrast colour treatment is recommended. See Chapter 9



Verges/margins which will generally be soft areas



Central refuges, build-outs and margins which will generally be hard areas



Direction of travel for cyclists on the National Cycle Network



Direction of travel for motor vehicles



Cycle symbol marking Diag No. 1057. To indicate a cycle lane, track or route



Avenue trees (These are shown only in Chapter 4. They have been omitted from subsequent figures for clarity)