



## TACTILE MARKINGS FOR SEGREGATED SHARED USE BY CYCLISTS AND PEDESTRIANS

**Summary** - Where a cycle track runs alongside a footway or a footpath, it is not always possible to physically segregate the two as advocated in Local Transport Note 2/86 "Shared Use by Cyclists and Pedestrians" (HMSO). Tactile surfaces have been developed to enable blind and partially sighted people to position themselves on the correct side of such a shared route. A blind or partially sighted person is then

helped to stay on the correct side of the segregated shared route by a raised dividing line.

This leaflet is one of a series aimed to draw the attention of highway authorities to ideas for improving traffic engineering techniques to assist cyclists and pedestrians.



**Background** - In providing safer routes for cyclists, the Department has investigated ways to cater for the needs of blind and partially sighted people when using a shared route. The Transport and Road Research Laboratory undertook to assess how a 'textured' paving slab could be used to enable blind and partially sighted people to find the correct side of a segregated facility, and how a raised dividing line could help them to remain on the correct side throughout.

**Assessment** - The TRRL assessment studies show that the main problems that blind and partially sighted people appear to have when using segregated shared cycle/pedestrian routes are:-

- a. knowing that the route is shared with cyclists,
- b. being able to locate the correct side of a segregated, shared route,
- c. being able to keep on the correct side of a segregated, shared route.

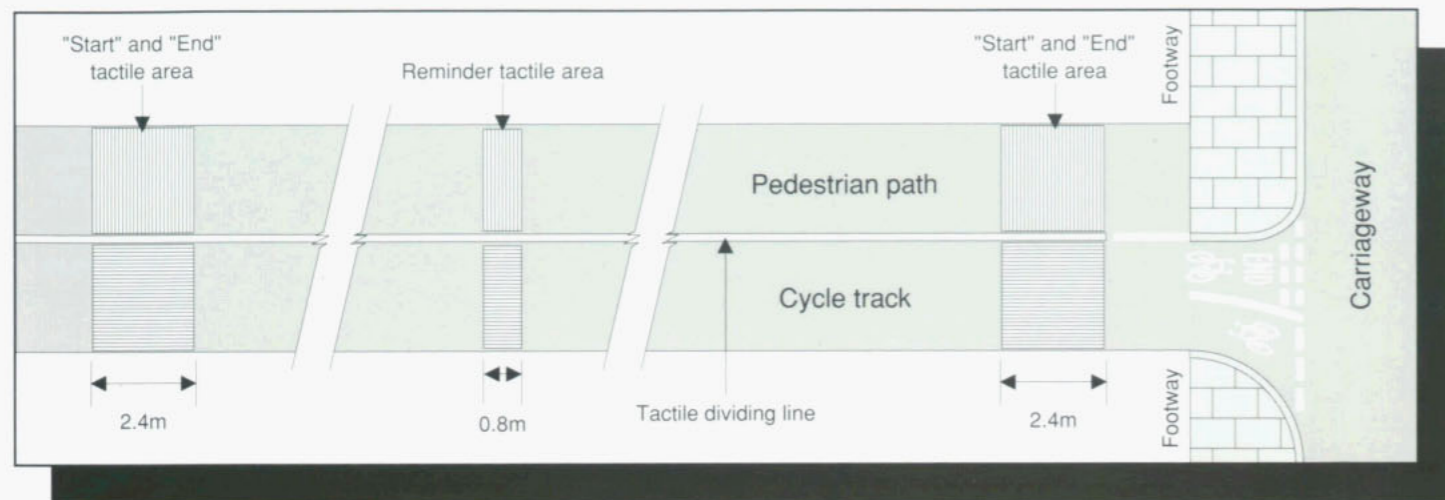
Generally, a pedestrian footway or footpath is at a higher level than the road or cycle track. Blind and partially sighted people can distinguish kerbs and are accustomed to the concept that 'up equals safe'. This concept also plays an important role in the training of guide dogs. Blind and partially sighted people, using guide dogs or long canes, are readily able to position themselves on the correct side of a shared cyclist/pedestrian route that is segregated by a difference in level. Where cyclist/pedestrian routes are segregated with a white line, there are no tactile clues and so blind and partially sighted people are likely to have difficulties in finding the footway or footpath.

**Tactile Paving Area** - A tactile area has been designed to enable blind and partially sighted people to locate themselves on the correct side of a segregated shared cyclist/pedestrian facility which is not separated by a difference in level. The tactile area should be installed at the start and end points of a shared facility. The area is intended to present blind and partially sighted people with a 'start' and 'end' message as well as a 'locational' message. Tactile slabs (WBM 1049.2) with a ribbed surface have been used. Developed by TRRL, they are orientated to offer a 'ladder pattern' on the footway or footpath and a 'tramline pattern' on the cycle track. A 2.4 metre length of tactile paving slabs is used to mark the start and end of a shared route: a 0.8 metre length can be used as a reminder tactile marking along a long length of shared route, or before and after footway or footpath junctions.

**Raised Dividing Line** - A satisfactory tactile dividing line has been devised. Conforming to WBM 1049.1, it is 150mm wide and 12mm high, with a 50mm wide top face. It was designed to replace the solid white line which previously has been the only feature recommended for segregating a cycle track from a footway or footpath where segregation by level or physical structures are not possible. It can be followed with a long cane, and a high proportion of blind or partially sighted people will be able to positively identify it through the feet if they start to stray towards the cycle track. The raised dividing line is formed from a reinforced thermoplastic material applied hot, which is laid in one pass in a similar manner to ordinary thermoplastic paint. However, it is less prone to flatten and has a better controlled profile than thermoplastic paint.

**Rubber Delineator Strip** - A rubber dividing strip has also been developed and is undergoing trial. A profile has been selected that is detectable by blind and partially sighted people, and can also be wheeled over by prams, wheelchairs and ridden over by cycles. Its profile is similar to the raised dividing line, 150mm wide and 20mm high with a 50mm wide top face. Adhesion and durability have not yet been proved. While it is likely to be expensive to install, the rubber strip appears to be acceptable to blind and partially sighted users: it is likely to be useful for locations carrying relatively dense flows of cyclists and pedestrians, such as subways.

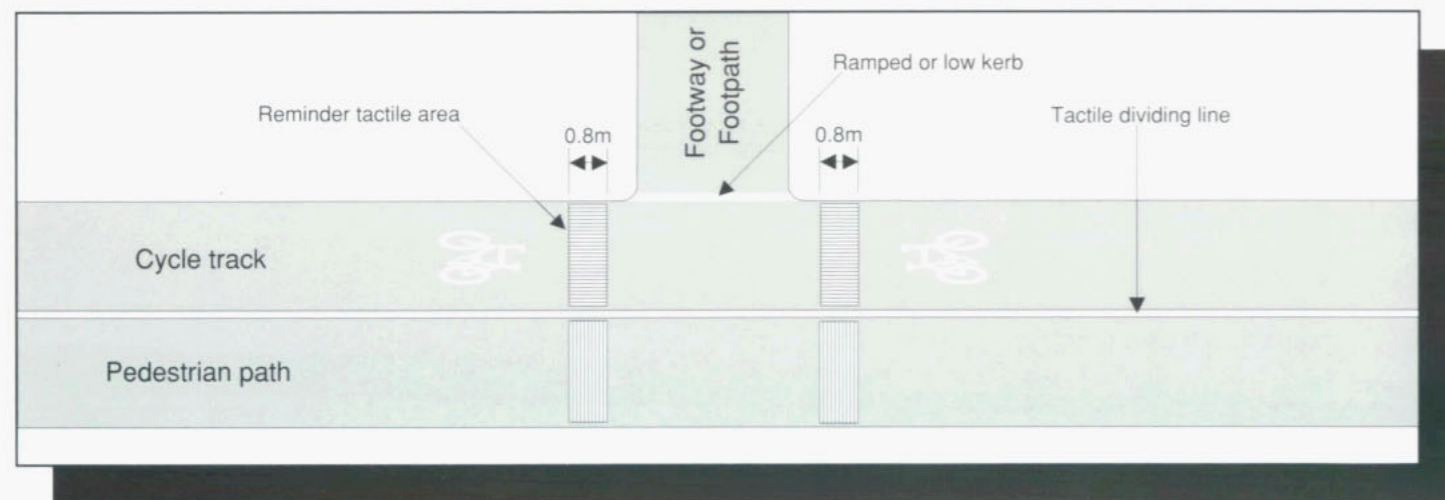
# TYPICAL LAYOUTS OF TACTILE MARKINGS



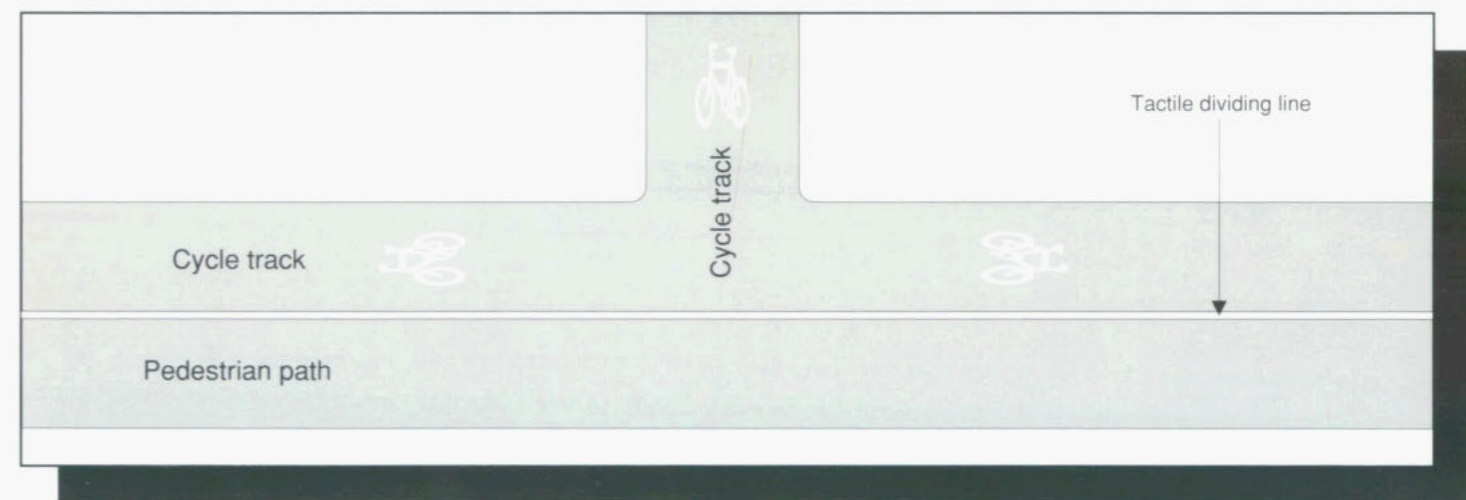
*On a shared cyclist/pedestrian facility showing different end treatments*



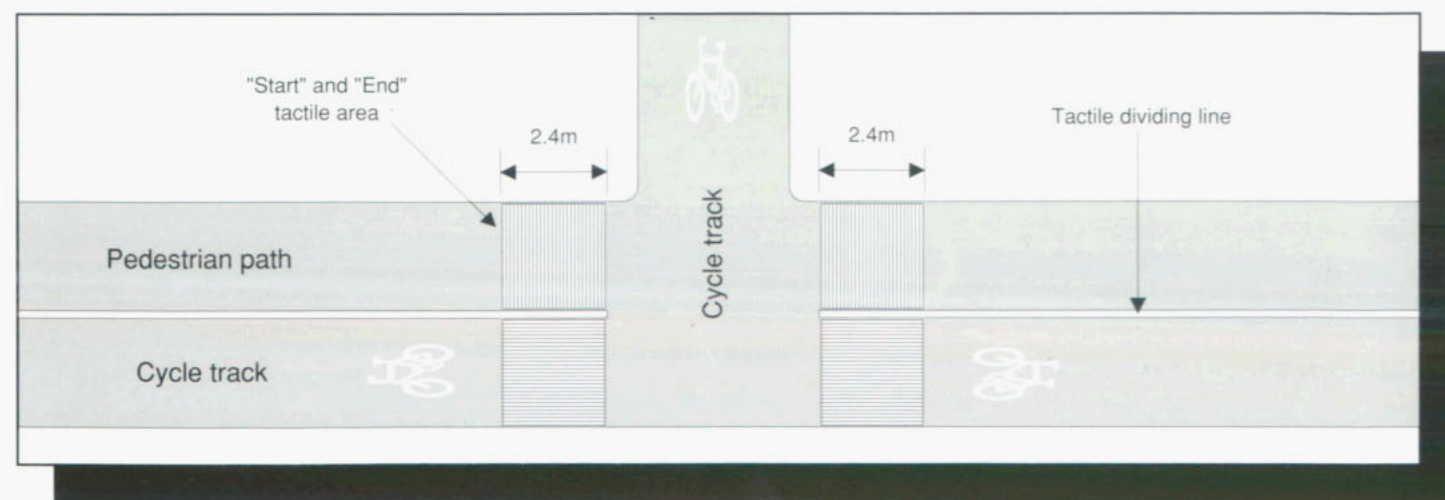
*At a junction with a footway or footpath*



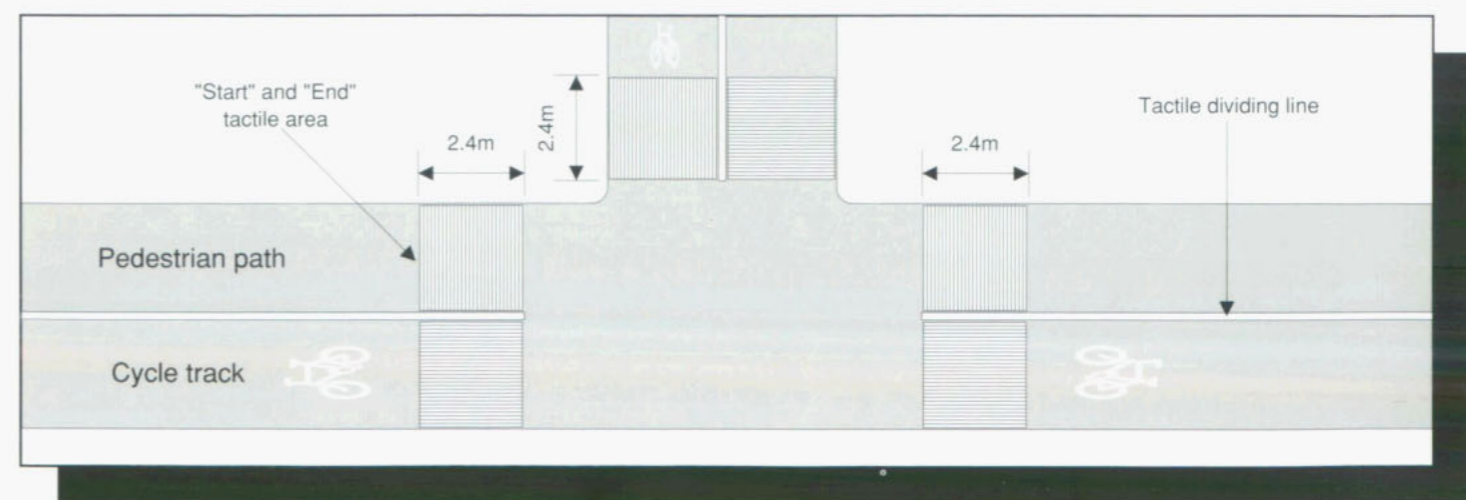
*At a junction where the joining footway or footpath crosses a cycle track*



*At a junction with a cycle track*

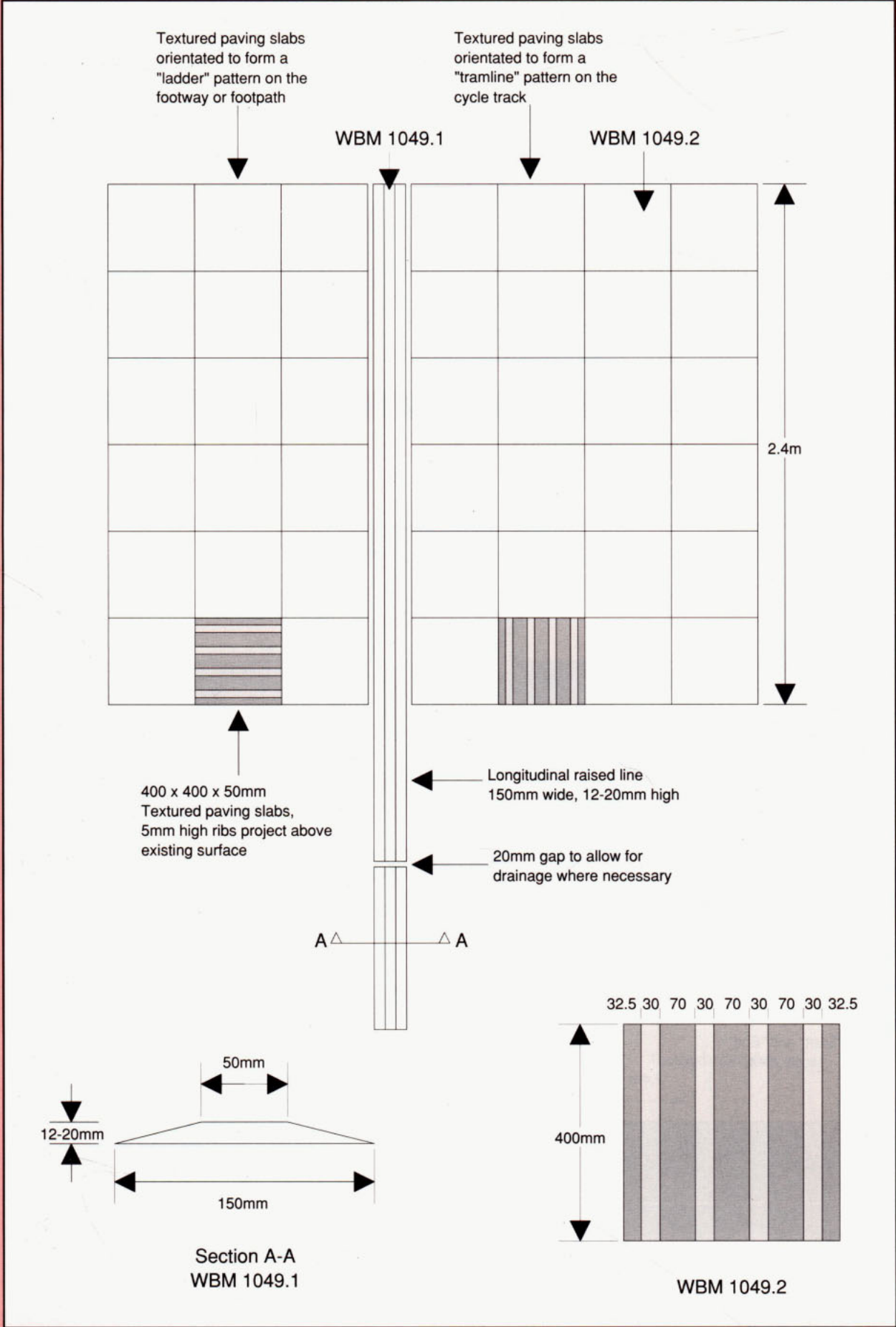


*At a junction where the joining cycle track crosses a footway or footpath*



*At a junction with a shared cyclist/pedestrian facility*

# GENERAL LAYOUT AND PROFILE DETAIL OF TACTILE POSITIONING AREA AND DIVIDING STRIP



**Traffic Signs** - It should be noted that the raised dividing line (WBM 1049.1) and the textured slabs (WBM 1049.2) are considered, in legal terms, to be traffic signs. Their use must be authorised by the Department of Transport until such time as they are prescribed in the Traffic Signs Regulations and General Directions. Until then, the Regional Offices of the Department of Transport are responsible for authorising the use of WBM 1049.1 and WBM 1049.2.

**Acknowledgement** - The Traffic Advisory Unit is grateful for the co-operation of the Joint Committee for the Mobility of Blind and Partially Sighted People, Wokingham Guide Dog School, Essex County Council, Kent County Council, Devon County Council, Avon County Council, York City Council and Manchester City Council.

The Traffic Advisory Unit (TAU) is a multi-disciplinary group working within the Traffic Policy Division in the Department of Transport. TAU seeks to promote the most effective traffic management and parking techniques for the benefit, safety and convenience of all road users.

TAU sponsors a wide range of research into traffic management issues, much of it undertaken by the Transport and Road Research Laboratory.

Enquiries and requests for unpriced TAU publications to:  
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