Good Practice Guidelines on Accessibility of Streetscapes -

March 2009

Contents

1. 0 Introduction

The Disability Act 2005 places significant new responsibilities on all public bodies, including local authorities. The Department of the Environment, Heritage and Local Government set out actions in its Sectoral Plan on Disability to realise the policy goals outlined in the Disability Act. These commitments include the development of multi-annual accessibility implementation plans by each local authority to ensure that progress is made in a planned way to improve the accessibility of the built and external environment for people with disabilities.

In this context, the Local Government Management Services Board Steering Group on the implementation of the Disability Act has developed good practice guidelines on accessibility of streetscapes. Kildare County Council and the National Disability Authority were key contributors in finalising the guidelines. The purpose of the guidelines is to support local authority staff in auditing and reviewing the accessibility of the streetscapes within their remit. The guidelines aim to ensure that all local authorities are making such assessments from an agreed standard to ensure a coherent approach across all local authority administrative areas.

It is important to note that the good practice guidelines contained in this document do not replace the Traffic Management Guidelines which set out national guidance to be followed. In seeking to be a practical tool for local authorities, the guidelines seek to complement the Traffic Management Guidelines and should be used in conjunction with them.

The guidelines set out accessibility measures in line with current legislation and standards, and should support local authority staff in meeting their accessibility goals. It is understood that designers and planners will face design challenges in certain environments and that in some cases, alternatives will have to be employed which reflect the unique features of an environment. In such cases, designers should refer to specialist advice and to additional materials or options available.

These guidelines originated from a pilot project, originally facilitated by the Equality Authority. They have been developed through a consultation process and owe much to the leadership and commitment of staff in Kildare County Council who invested significant time and energy to see this project to completion. Thanks are also due to the network of local access groups in Kildare, including Kildare Network of People with Disabilities, the Irish Wheelchair Association and the National Council for the Blind in Ireland.

2.0 Policy on the Use of Tactile Paving

Tactile paving surfaces can be used to convey important information to visually impaired pedestrians about their environment, for example, hazard warning, directional guidance, or the presence of an amenity. Research has determined that visually impaired people can reliably detect, distinguish and remember a limited number of different tactile paving surfaces and the distinct meanings assigned to them.

The use of blister paving as a warning device at controlled and uncontrolled pedestrian crossings is now well established. In this document, guidance is given on the use of a number of additional types of tactile surface to give warning of potential hazards and for amenity purposes to give guidance and information.

Each type of tactile paving surface should be exclusively reserved for its intended use and consistently installed in accordance with these guidelines. Visually impaired people are becoming increasingly mobile, both within their local area and more widely, and it is, therefore, very important that conflicting and confusing information is not conveyed. The successful use of tactile paving also depends on visually impaired pedestrians understanding the different meanings assigned to the paving and being made aware of the presence of such facilities in their area.

Local authorities are advised to investigate how this information can most effectively be disseminated. It is strongly recommended that local groups representing visually impaired people are consulted before the installation of tactile paving surfaces which provide directional guidance or information about amenities so that they may indicate what will help them most.

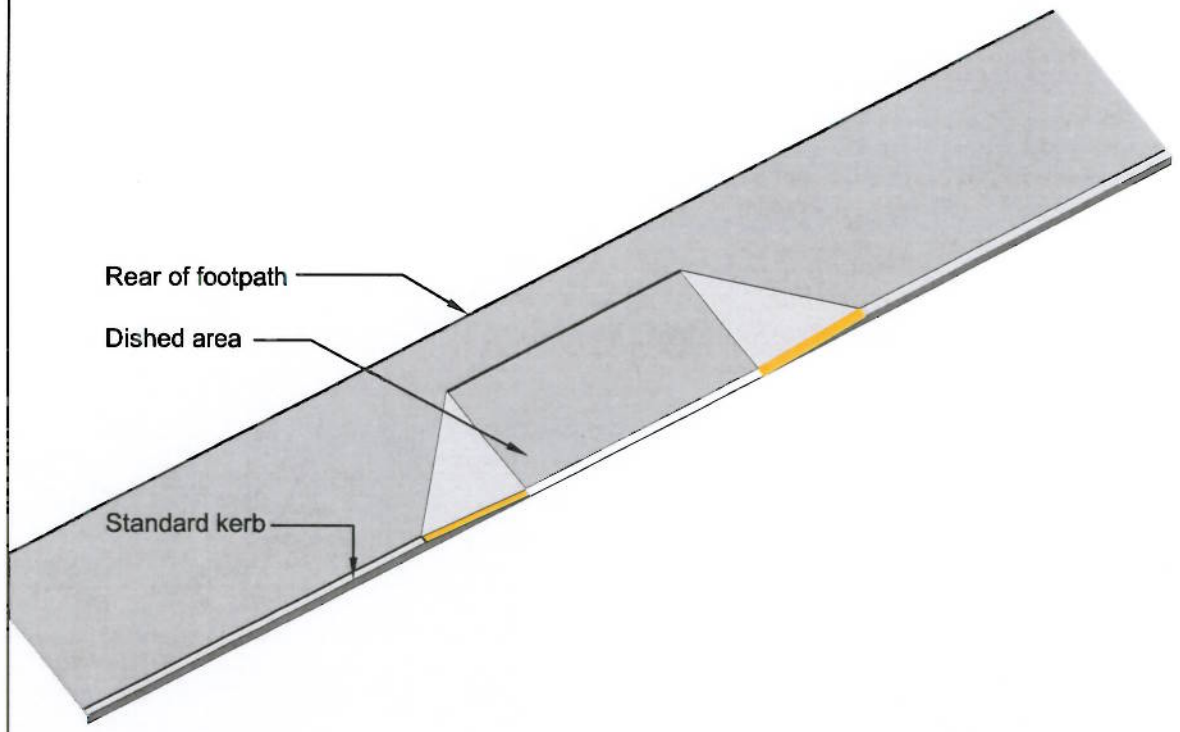
The installation of tactile paving surfaces should be considered as part of a wider package of measures to assist visually impaired people. The installation process should involve an assessment of the surrounding environment. In particular, the condition of the surrounding footway should be examined and hazards, for example, uneven pavements removed and obstacles, particularly inappropriately sited street furniture repositioned.

Street works should be carefully inspected to ensure that the standards of reinstatement of any tactile surface meet the performance requirements of all new roads and street works.

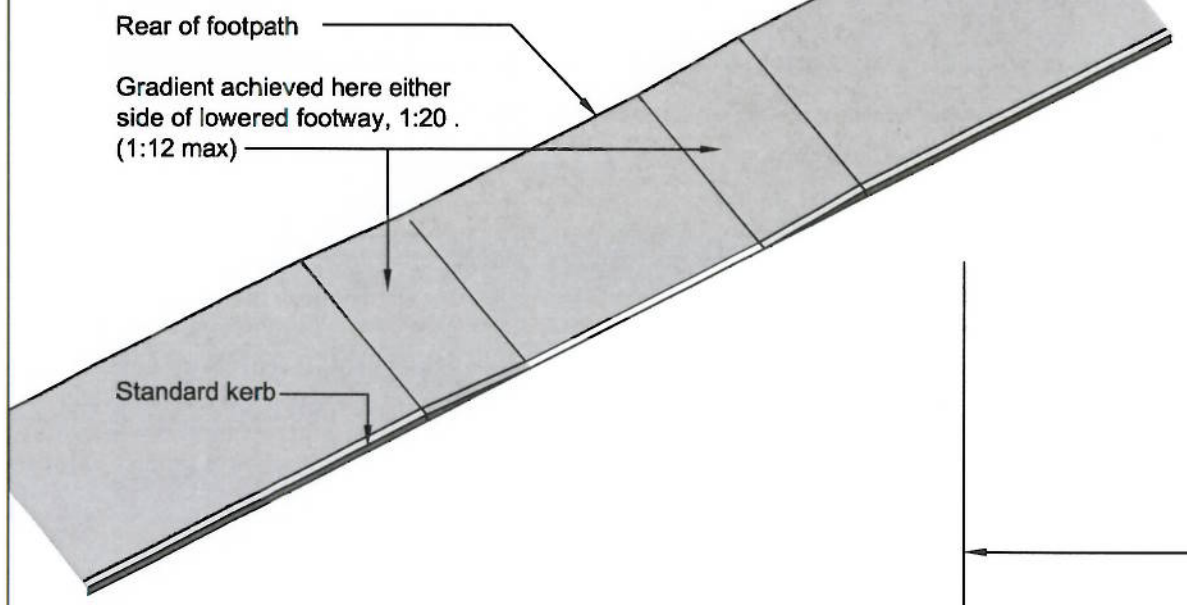
Where local site conditions are such that the guidance contained in this document cannot be implemented, further advice should be sought through consultation with the NCBI, Irish Guide Dogs and the Department for Transport before proceeding. For further information about the way in which visually impaired people move around Ireland contact the NCBI www.ncbi.ie or The Irish Guide Dogs for the Blind www.irishguidedogs.ie

See Detail drawing no's 5 – 10.

References: UK Department for Transport (1999) Guidance on the use of Tactile Paving surfaces



Option 1



Option 2

Dished Kerbs:

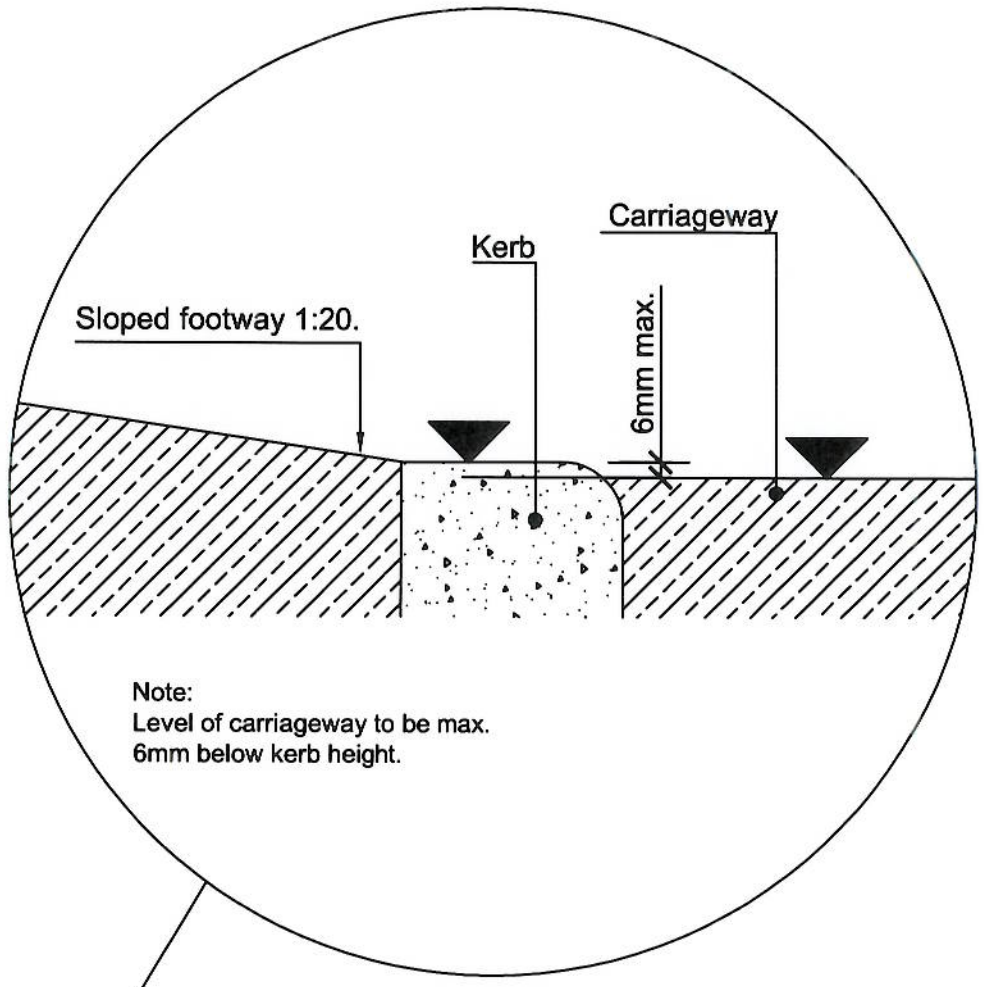
Dished kerb to be painted white/yellow for the benefit of people with impared vision.
Central kerb area to be max. 6mm above carriageway surface. (see dished kerb section detail).

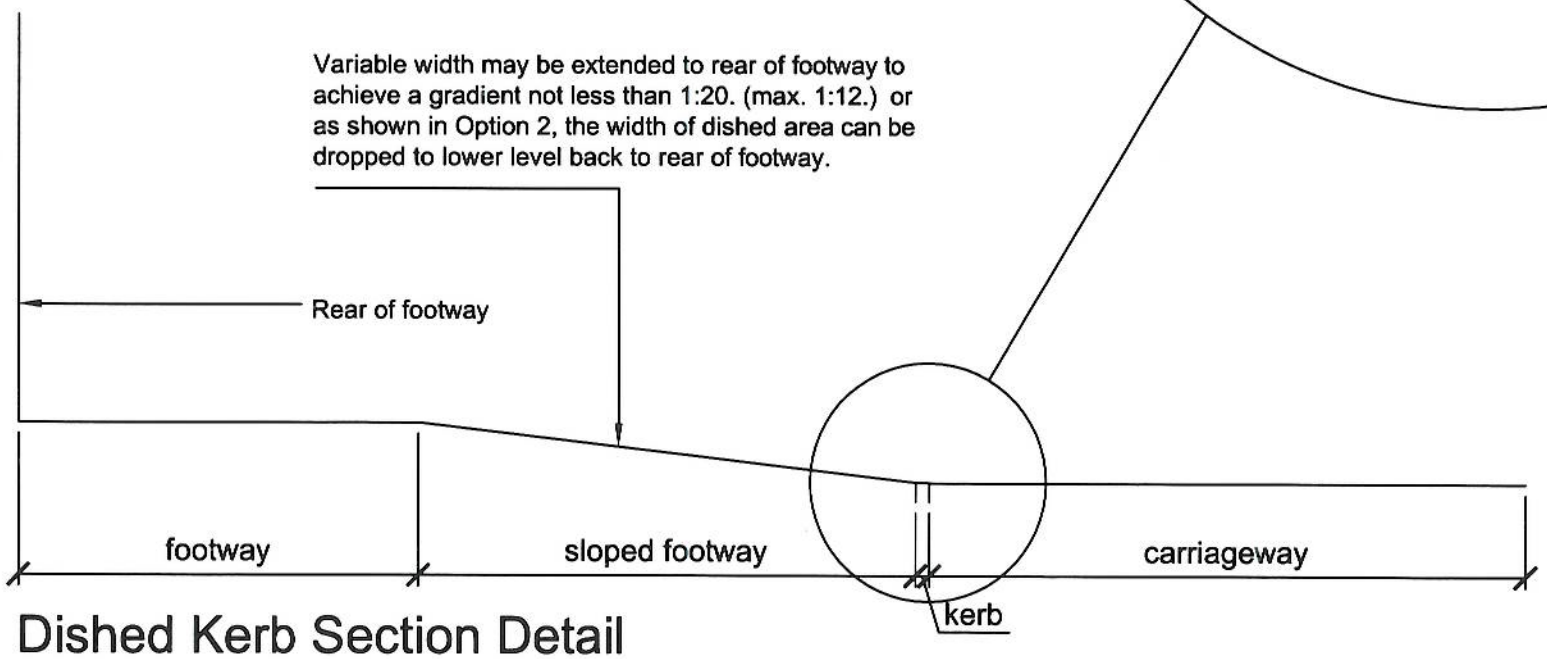
Standard kerb height generally 125mm above carriageway.

Colour and layout of tactile paving to be determined by type of crossing.
Refer to Traffic Signs Manual (TSM) for crossing width dimensions

Footpaths

In urban areas the normal minimum width of a footway should be 1.8m.
Refer to Traffic Management Guidelines (TMG)
Where footpaths are less than 1.8m wide, passing bays may be provided, distance between passing bays should be within sight of each other and where possible, not greater than 50m apart.





Dished Kerb Section Detail

Detail Drawing 1

Blister Tactile Paving:

The blister tactile surface should be installed in the absence of an upstand at both controlled and uncontrolled crossing points:

- where the footway has been dropped flush with the carraigeway or;

- where the carraigeway has been raised to the level of the footway.

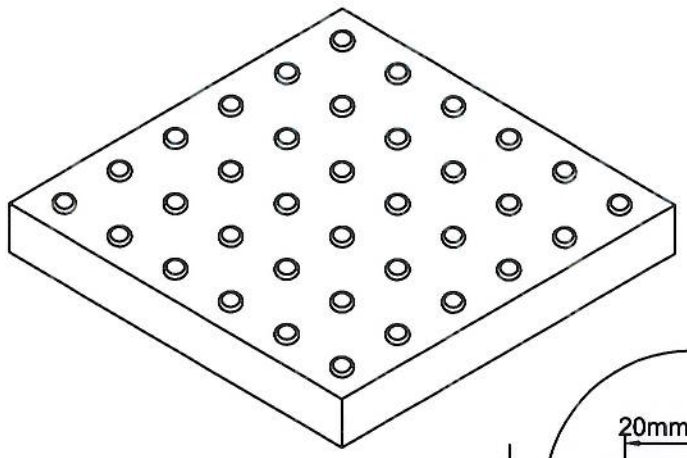
Controlled Crossings: At controlled crossings the pedestrian is able to establish priority over vehicular traffic. For the purposes of this advice the following crossing types are described as controlled: Zebras, Toucans and Traffic signalised junctions with pedestrian phases. The RED blister surface should be used at controlled crossings only.

Uncontrolled Crossings: At uncontrolled crossings the pedestrian does not have priority over vehicular traffic and must make a decision about whether it is safe to cross. For the purposes of this advice the following locations are described as uncontrolled crossings: side road crossings, busy crossovers (vehicle crossings), crossings away from junctions, kerb to kerb flat top road humps, signal controlled junctions without pedestrian phases (traffic lights), including those where studs indicating a pedestriasn crossing place are provided. The blister surfaces should be BUFF or any colour (other than red) which provides a contrast with the surounding footway surface.

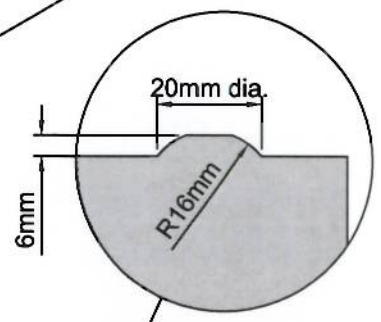
Partially sighted people will be assisted by strong colour contrast this can be achieved by painting or marking the kerb edge white/yellow.

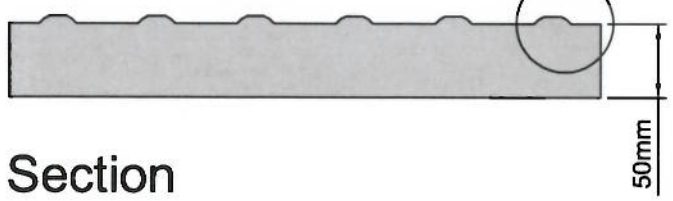
Ref: *'Guidance on the Use of Tactile Paving' Dept. of Transport, Scotland.*

BS. 7997: Products for tactile paving surface indicators - Specification (2003).

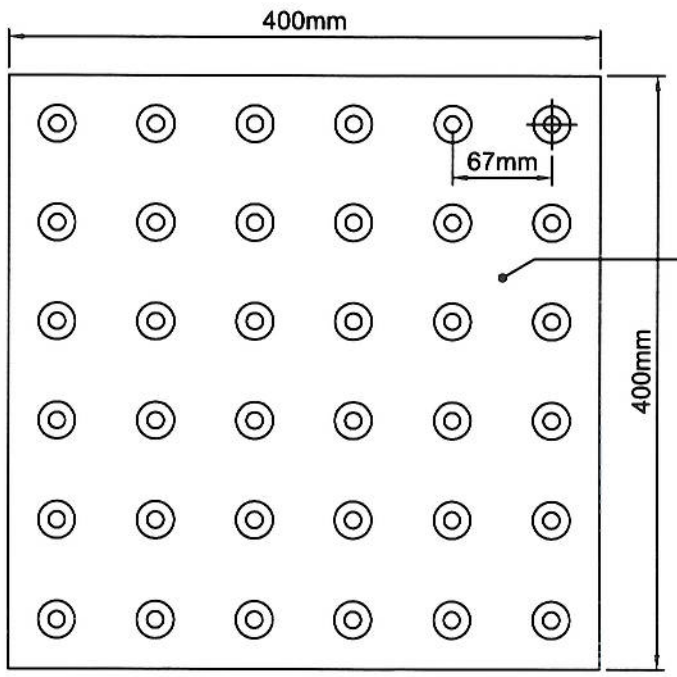


Blister Tactile





Section



Plan

Corduroy Tactile Paving:

Can be used for any situation (except for pedestrian crossings) where visually impaired people need to be warned of a hazard and advised to proceed with caution.

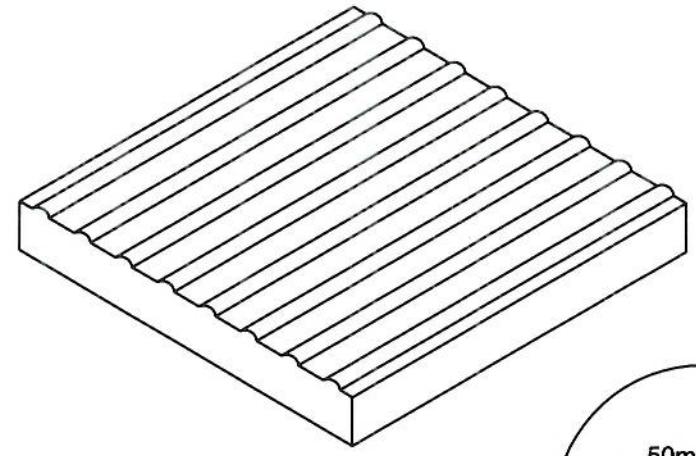
Used to warn visually impaired people of the presence of steps and is also used where a footway joins a shared route, i.e. cycle lanes.

Comprises of rounded bars running transversely across the direction of travel.

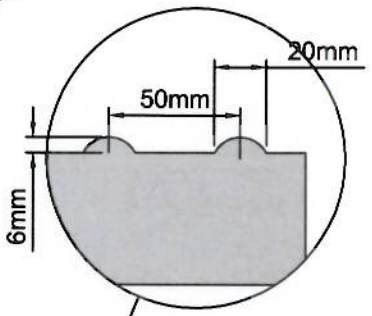
Should be provided in a contrasting colour to the surrounding area but it should NOT be RED, as red is restricted to blister surface at controlled crossings.

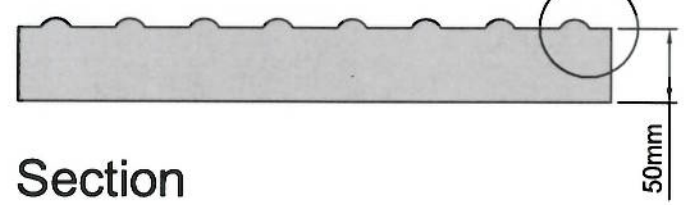
Ref: *'Guidance on the Use of Tactile Paving' Dept. of Transport, Scotland.*

BS. 7997 Products for tactile paving surface indicators - Specification (2003).

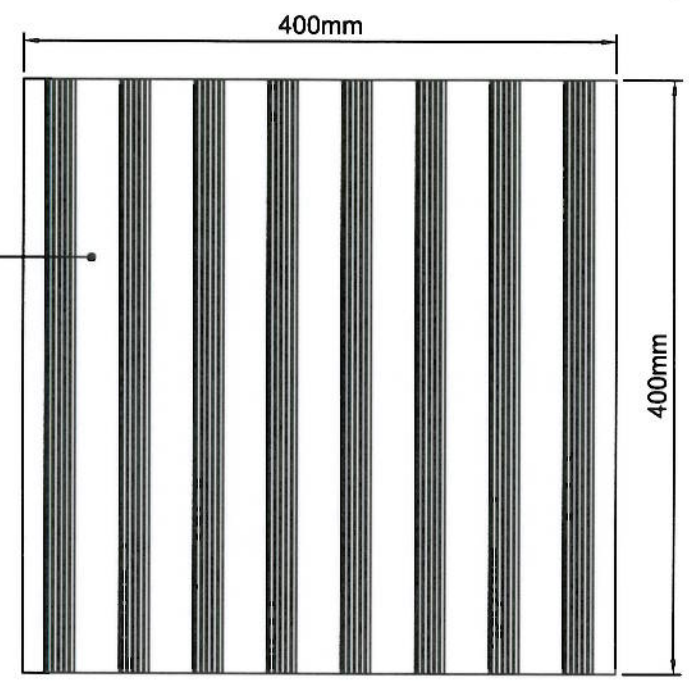


Corduroy Tactile





Section



Alternative sizes are also currently available

Plan

Detail Drawing 2

3.0 Policy on Street Furniture

3.1 Careful positioning of street furniture provides easier access and reduces potential hazards, particularly for people with visual impairments.

3.2 Clearly defined routes should be planned for pedestrians. Consider use of both colour contrast and textural changes in paving, logical grouping of street furniture, including landmarks for orientation as well as visual clues that incorporate audible and olfactory clues such as fountains and fragrant flowers and effective lighting to define routes.

3.3 Avoid where possible placing street furniture where it causes problems for people with visual impairments or obstructs the passage of wheelchair users. Seating should be located in sheltered places where people can enjoy a good and clear view, and after a long sequence of paths and changes on level. Seats should be placed 600mm back from the line of movement so that they do not block the path. The surface should be flush with surrounding levels, as well as firm and stable. A 800 x 1300mm square of firm paving beside a seat will allow a person using a wheelchair to sit with other people. A seat should be no less than 450mm high, although a perch 500-750mm will be easier to use for some people who have difficulty getting up. A heel space at least 100mm deep will also make it easier for people to get off the seat or perch. Seats with backrests are useful for additional support, and arm rests are also useful to lean against, as well as assisting in getting up out of the seat.

3.4 If items of street furniture have to be located within access routes, they should be clearly identified, for example using colour contrasting and luminance with the background against which they will be seen.

3.5 The provision of appropriate seating is important, especially on long or sloping routes. Seating should be provided at regular intervals and should be located not more than 50m apart, where possible.

3.6 Avoid low headroom and safeguard building projections such as signage and hanging baskets. Areas below stairs or ramps where there less than 2100mm headroom above ground level should be protected by guarding and low level cane detection, or a permanent barrier giving the same degree of protection.

3.7 Bollards should be a minimum of 1000mm in height. A wider bollard (250mm in width) incorporating a band of contrasting colour or luminance at 1500-1650mm is earier to detect by people with visual impairments. Adjacent bollards should not be linked with a chain or rope. Bollards should be a minimum of 1200mm apart.

3.8 Freestanding posts or columns which obstruct the safe movement of pedestrians should incorporate a band of contrasting colour or luminance at 1500-1650mm. An additional band at 850-1000mm might also be considered. Two medium bands of colour a little distance apart would be more visible than one broad band of colour.

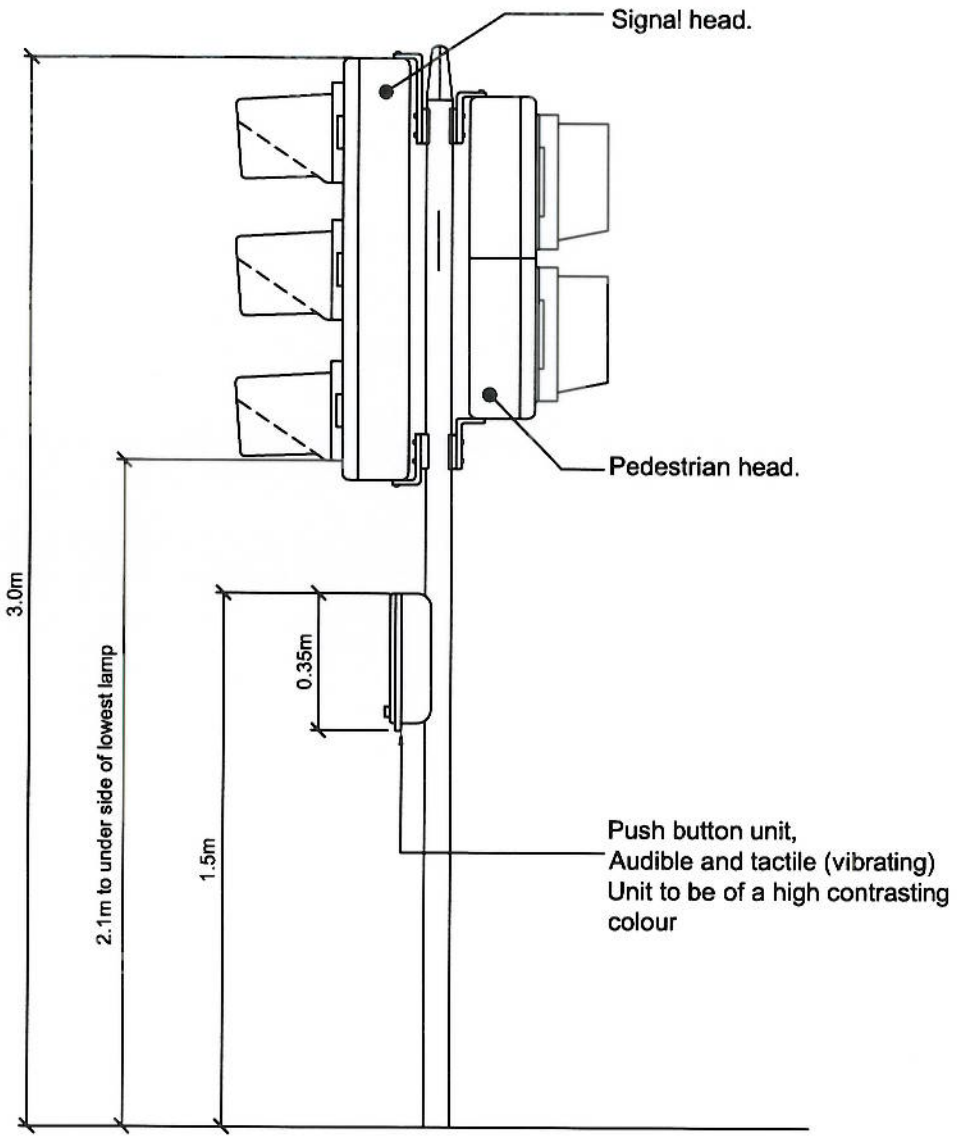
3.9 Cycle parking areas should be clear of pedestrian routes, and cycle stands should be clearly visible even when not in use.

3.10 Hedges and planting, to be maintained regularly to prevent overgrowth onto pedestrian accesses.

3.11 Refuse Bins need to be placed out of the way of pedestrian routes on bin collection days.

3.12 Sandwich Boards to be prohibited from all pedestrian routes.

Ref: UK Centre for Accessible Environments (2004, page 50) Designing for Accessibility, UK Department for Transport (2002, section 3.7), Inclusive Mobility and NDA (2002, page 79), Building for Everyone.



Elevation of Traffic Signal

Ref: Road Traffic (signs) Regulations
S.I. 181 (1997)-33.

Traffic Signal Pole Notes:

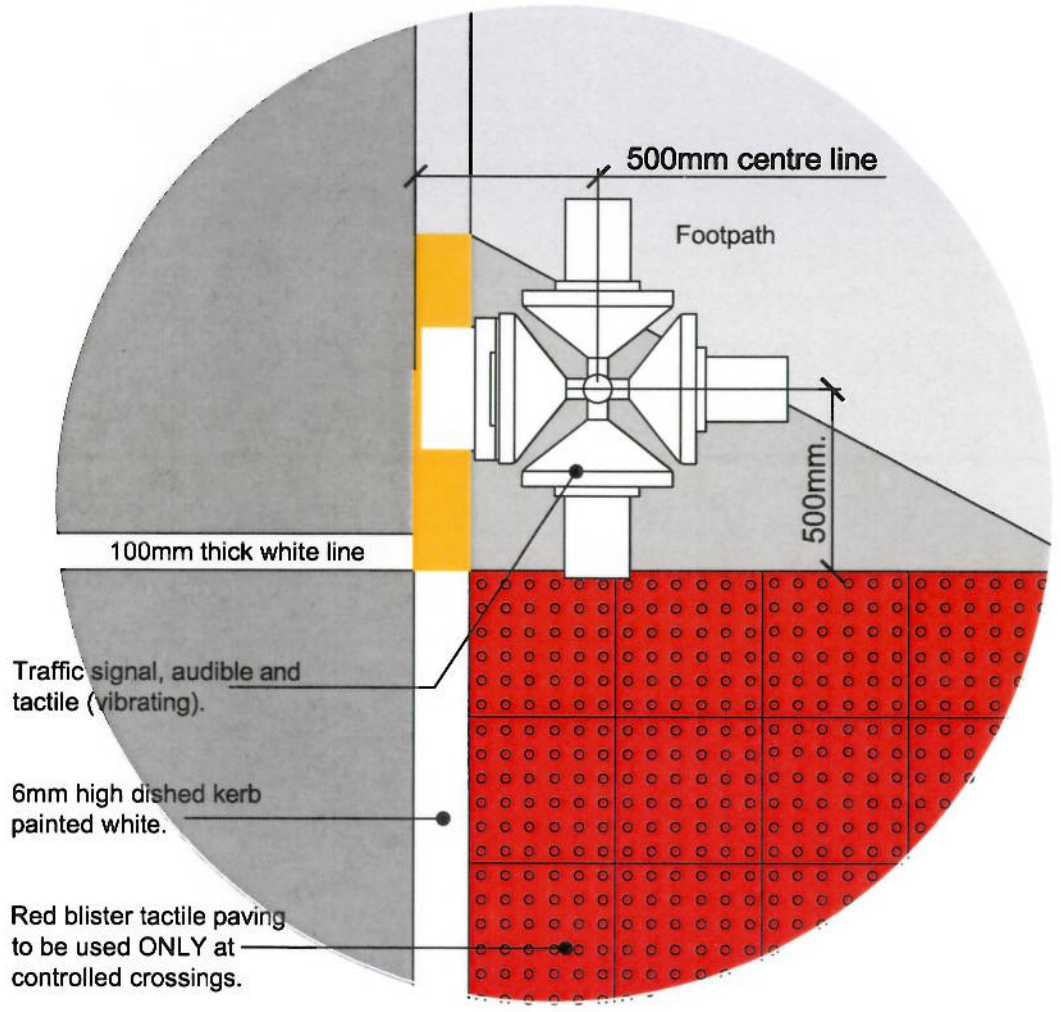
This detail refers to all controlled crossings.

All controlled traffic signals to be Audible, Tactile(Vibrating).

All services and gullies to be kept clear of crossing where possible.

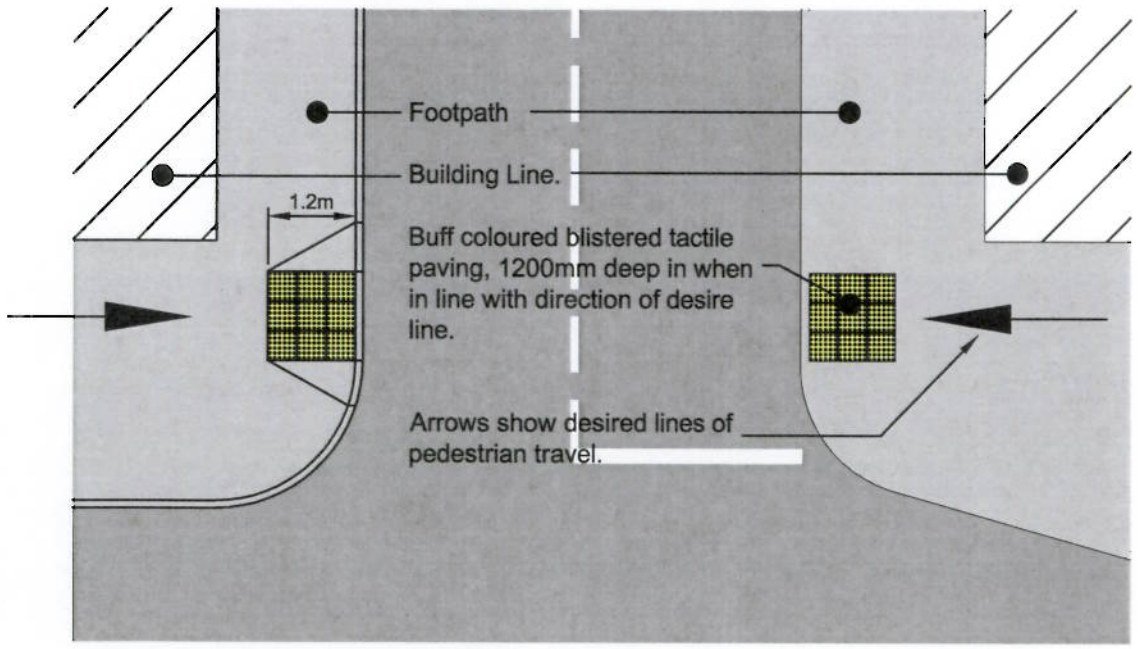
Position of pole to be located max. 500mm from tactile paving edge to centre line of pole, and 500mm from kerb edge to centre line of pole.

Refer to dished kerb detail.

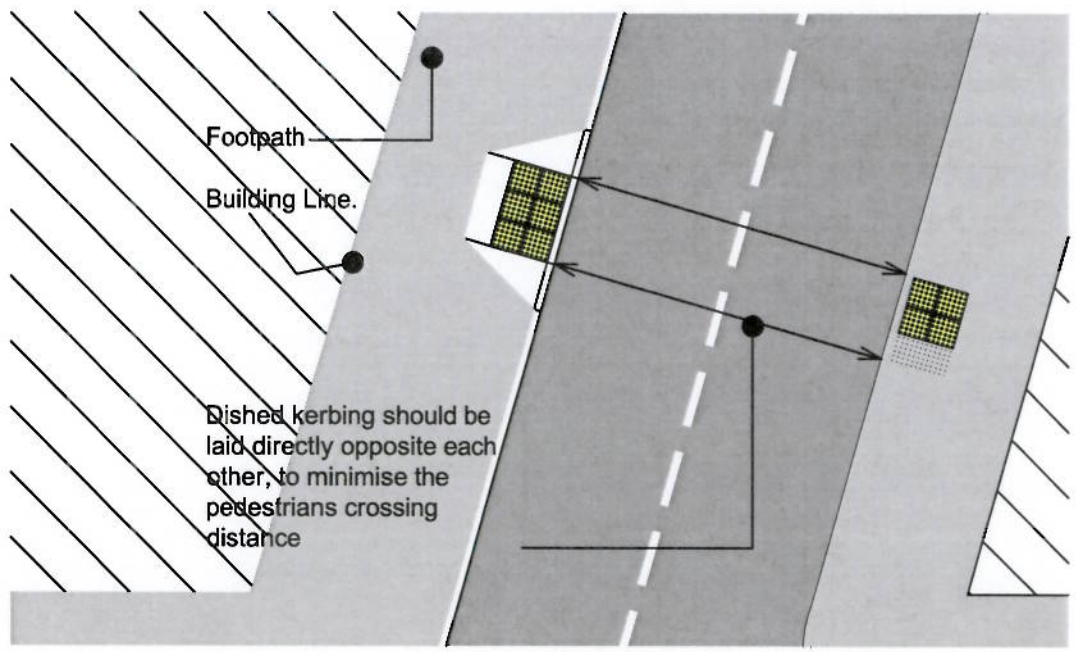


Plan of Traffic Signal

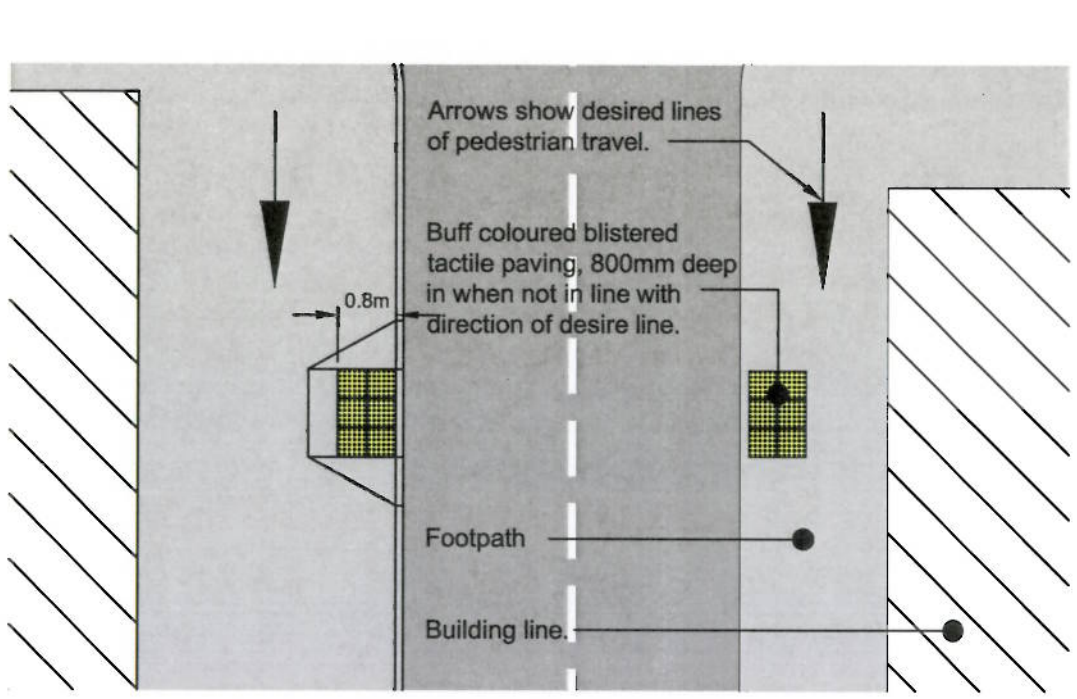
Detail Drawing 3



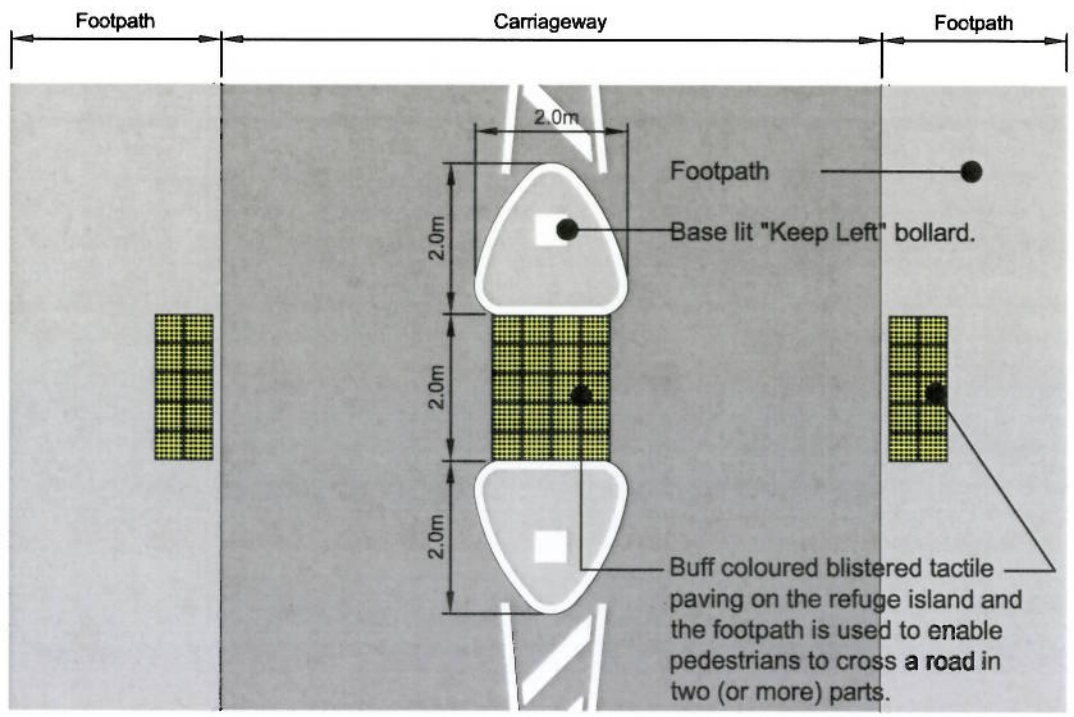
In-line Uncontrolled Crossing.



Uncontrolled Crossing at Angled Junction



Uncontrolled Crossing at Side Road



Uncontrolled Crossing with Island of Refuge

General Notes:

All services to be kept clear of crossing where possible.

Refer to Dished kerb detail.

Uncontrolled Crossings:
At an uncontrolled crossing the pedestrian does not have priority over vehicular traffic. The pedestrian must decide whether it is safe to cross.

Tactile Paving Colour and Type:
Blister tactile paving must be used when the kerbing is dished, at uncontrolled crossings the blister tactile paving should be "Buff" or grey. (Not Red).

Layout:
Blister tactile paving must be laid talong the full width of any dished kerb. Depth of paving will depend on whether the crossing is in line with pedestrian travel, as shown.

In-line uncontrolled crossing:
Blister tactile paving should be installed to a depth of 1.2m, to provide sufficient warning to a visually impaired pedestrian of the presence of the road edge.

Uncontrolled crossing at Angled Junction:
Blister tactile paving should be installed to a depth of 800mm

Uncontrolled crossing at Side Road:
Blister tactile paving should be installed to a depth of 800mm.

Uncontrolled crossing with Island of Refuge:
Blister tactile paving should be installed to a depth of 0.8m at each part of the crossing. Tactile paving on the refuge island and the footpath is used to alert a visually impaired pedestrian that they have reached the opposite side of the crossing (to a place of refuge) and enable pedestrians to continue to cross a road in two (or more) parts. If the island is 2m wide or less then the tactile paving should continue all the way across it. If the island is greater than 2m wide, then a gap should be left between adjacent strips of tactile paving (800mm deep).
Consideration should be given to the provision of an island of refuge where the carriageway is wider than 7m.

Detail Drawing 4

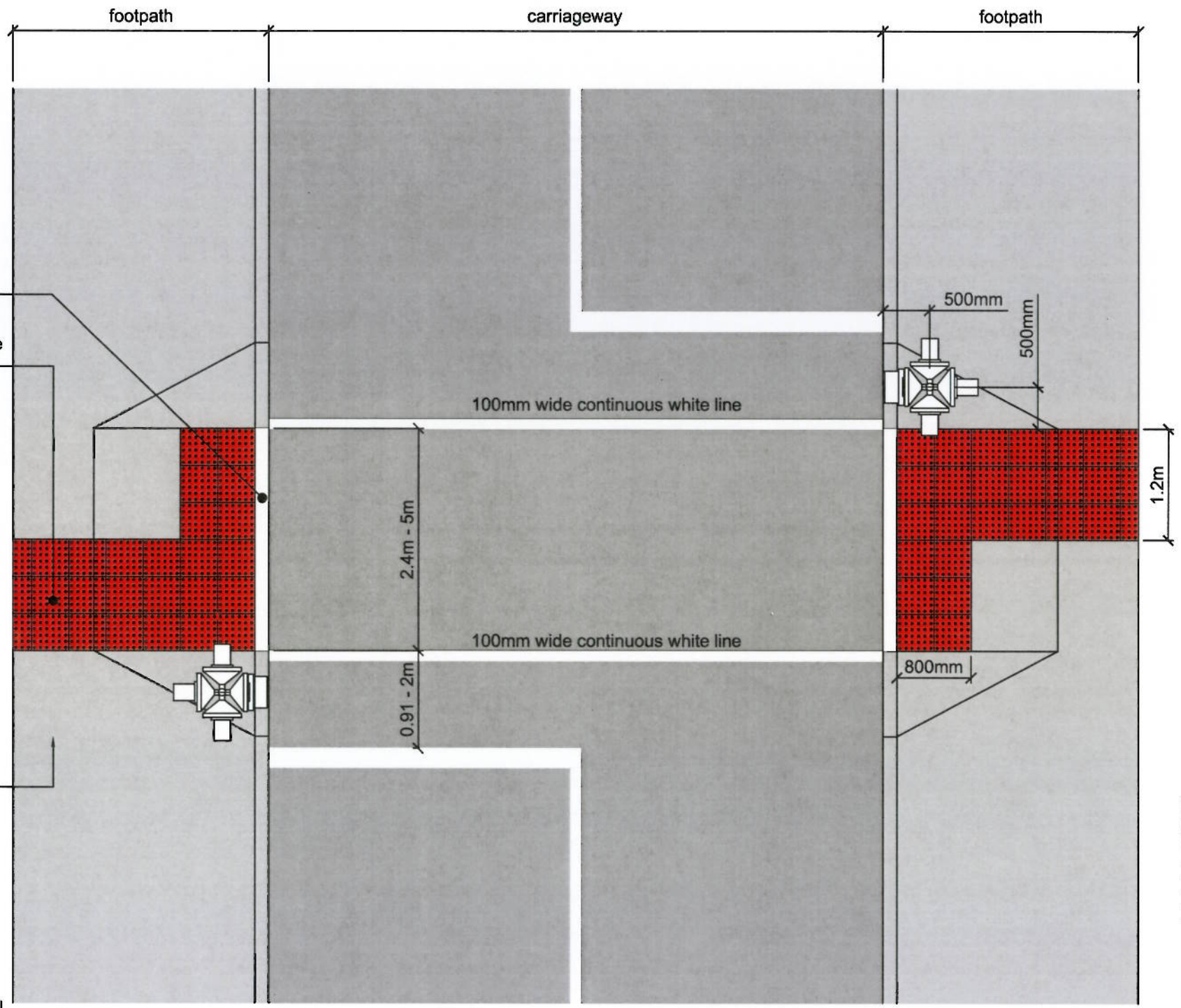
Central dished kerb max. gradient 1:20 (5%) to be 6mm above carriageway surface and painted white for the benefit of partially sighted people.

Red blister tactile paving slabs. (Red to be be used at controlled crossings ONLY)

Note:
The Stem must extend back from the tactile paving adjacent to the push button control box, forming an 'L' arrangement. The stem can then be followed to the push button control which should be at the right hand side of the approach to the crossing. (This is especially useful to Guide dog users who will generally be be working with their dogs on their left hand side.)

900mm optimum minimum level surface to back of dished kerb to provide safe carriage to pedestrians not using the crossing.
Consideration should be given to providing a level area at the back of the crossing to allow ease of movement

NB:
Where the surrounding footway or carriageway material is also red then it will be necessary to provide a contrasting border, min. 150mm wide around the tactile surface.



Signalised Crossing

Signalised Crossing

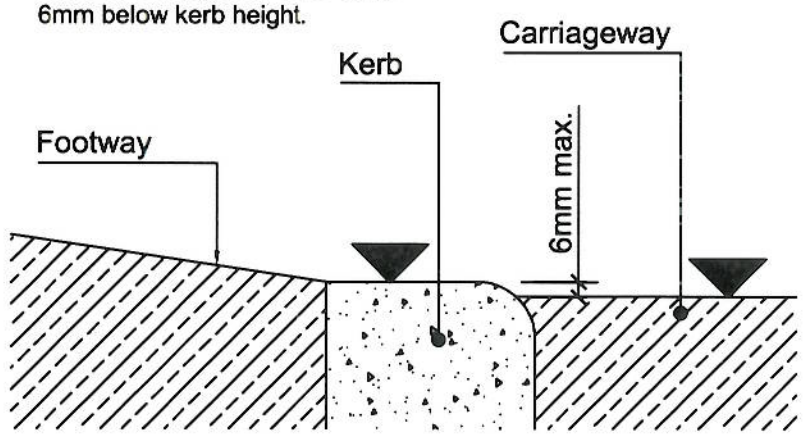
Give positive signal control to both pedestrians and drivers and are generally used in the following circumstances:

Where traffic speeds are 60 Km/h or less.

Where traffic volumes warrant it.

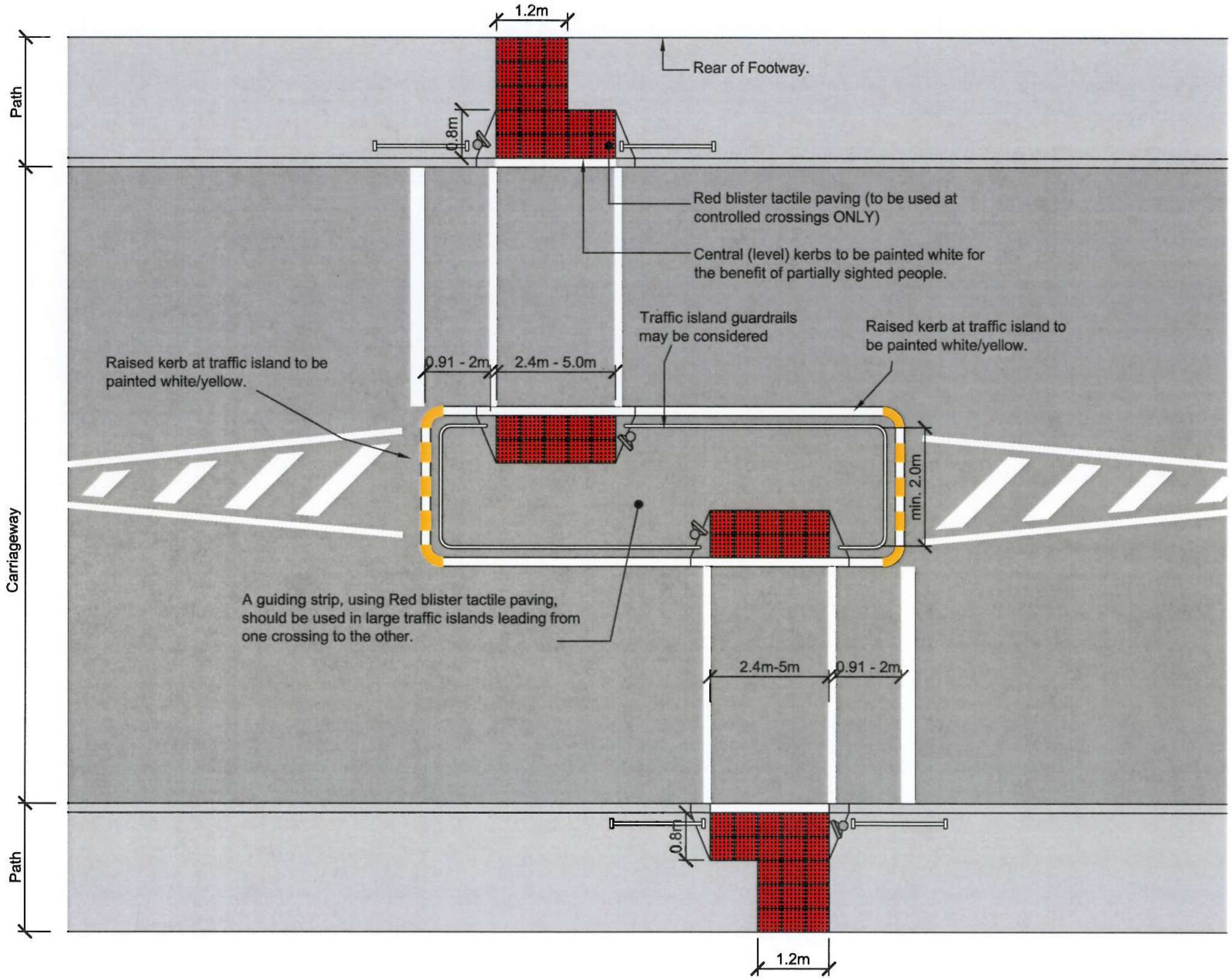
Where pedestrian flows warrant it.

Note:
Level of carriageway to be max. 6mm below kerb height.



Dished Kerb Detail.

Detail Drawing 5



Staggered Signalised Crossing.

General Notes:

All services to be kept clear of crossing where possible.

Refer to dished kerb details.

Refer to traffic signal details.

Where Pedestrian Guardrails are required:
High Visibility Pedestrian Guardrails should be used,
High Visibility Guardrails must provide a minimum 50% transparency from all angles

Staggered Signalised Crossing

Give positive signal control to both pedestrians and drivers and are generally used in the following circumstances:

Where the carriageway is wider than 10m.

When crossing at dual carriageways.

Where traffic volumes are high.

Where pedestrian volumes are high.

General Notes:

All services to be kept clear of crossing where possible.

All guardrails to be painted yellow, top and sides.

Refer to Dished Kerb detail.

Refer to Traffic Signal details.

Zebra Crossing

Pedestrians have right of way as they step out on to the crossing, they cause little delay to pedestrians and are generally used in the following circumstances:

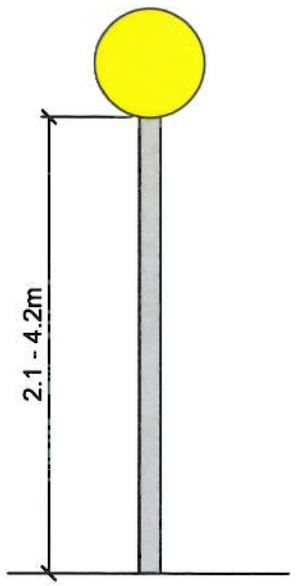
Where traffic speeds are low.

Where traffic volumes are moderate

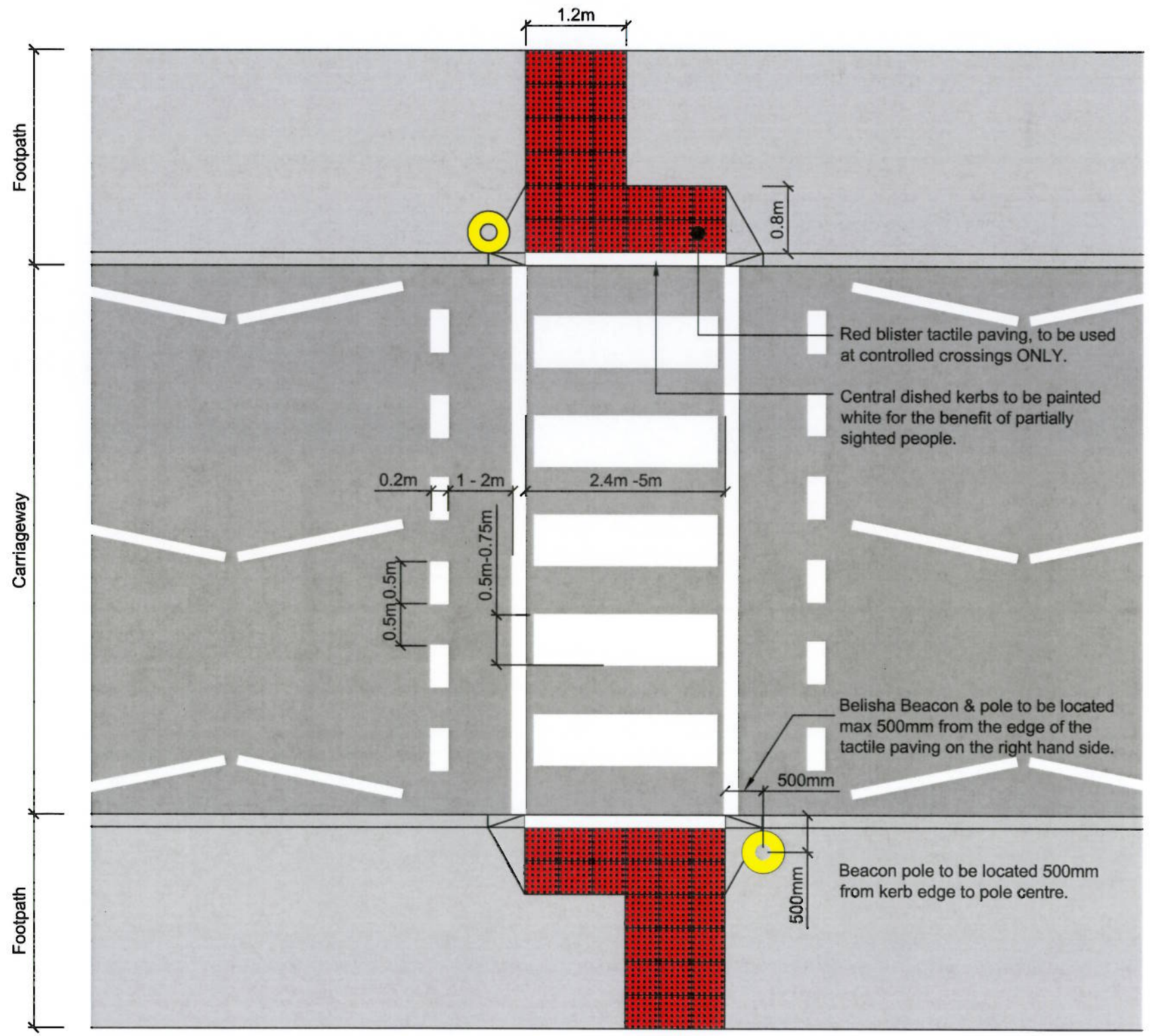
As part of traffic calming schemes

Where the carriageway width exceeds 7m a refuge island may be provided.

Note:
Belisha beacons must be provided at all Zebra crossings.



Beacon Pole Elevation



Zebra Crossing

Ref: Traffic Management Guidelines
Road Traffic (signs) Regulations
S.I. 181 (1997)-38.

Detail Drawing 7

4.0 References

- Department of the Environment, Heritage and Local Government (2000) Building Regulations – Technical Guidance Document: Part M, http://www.environ.ie/en/Publications/DevelopmentandHousing/BuildingStandards/FileDownLoad,1655,en.pdf
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