

Defect Investigatory Levels

This document should be used as a guide to help identify the level at which a defect needs repair on public roads, pavements and cycle paths.

Hounslow Highways (HH) has reviewed and updated the “defect investigatory levels” (defined as “where a defect has reached a threshold where it requires action for the safety of users, pedestrian and vehicular”) which gives Inspectors a guide to which defects should be considered for treatment, in line with the provision of the Well-Maintained Highways-Code of Practice. HH have a depth and width criteria for a defect that is recognised as being a pothole. This would enable a consistent road maintenance, risk assessment, intervention and approach to repair. The need for, and priority of, any treatment that is applied varies depending upon the Hierarchy of the Carriageways (roads) (Table 2), Footways (pavements) and Kerbs (Table 3), and Cycle tracks and Cycle paths (Table 4) in accordance with the risk evaluation and management process.

Table 1: Network Hierarchies and Categories

Hierarchy	Categories
Road Network (Link Hierarchy used)	Link 1 Strategic Route Link 2 Main Distributor Link 3 Secondary Distributor Link 4 Link Road Link 5 Local Access Road
Footway Network including Public Rights of Way (Place Hierarchy used)	Place A and B Primary Walking Routes Place C Secondary Walking Routes Place D Link Footways Place E Local Access Footways
Public Rights of Way	Hierarchy 1 Paved Hierarchy 2 Unpaved
Cycle Route	B Cycle track C Cycle trails

Table 2: Hierarchy of Carriageways – Investigatory levels on Carriageways

Defect Type	Investigatory level		
	Crossings, Junctions and in or adjacent to the Kerb	Other Locations on Link 1, 2, 3, and 4	Link 5
Pothole/Spalling	40mm depth	50mm depth	75mm depth
Crowning (raised surface)	50mm depth	50mm depth	75mm depth
Depression (area 2m2) (sunken surface)	50mm	50mm	75mm
Gap/Crack	20mm depth (20mm wide)	20mm depth (20mm wide)	30mm depth (20mm wide)
Sunken and Raised Ironwork (e.g. manhole cover)	20mm level difference	20mm level difference	25mm level difference
Level Difference within Ironwork Frame	15mm	15mm	15mm

Table 3: Investigatory levels on Footways (pavements) and Kerbs and Public Rights of Way Hierarchy 1

Defect Type	Investigatory level			
	Place A & B	Place C	Place D	Place E & PROW Hierarchy 1
Trip/Pothole	15mm depth	20mm depth	25mm depth	25mm depth
Rocking Slab/Block	15mm vertical movement	20mm vertical movement	25mm vertical movement	25mm vertical movement
Open Joint (a gap in between slabs)	20mm width x 200mm length (min depth 20mm)			
Tree Root Damage	15mm trip	20mm trip	25mm trip	25mm trip
Sunken and Raised Ironwork (e.g. manhole cover)	15mm level difference	20 mm level difference	25mm difference	25mm difference
Dislodged Kerb	50mm horizontally	50mm horizontally	50mm horizontally	50mm horizontally
Loose/Rocking Kerb	15mm vertically	20mm vertically	25mm vertically	25mm vertically
Missing Kerb	Yes			

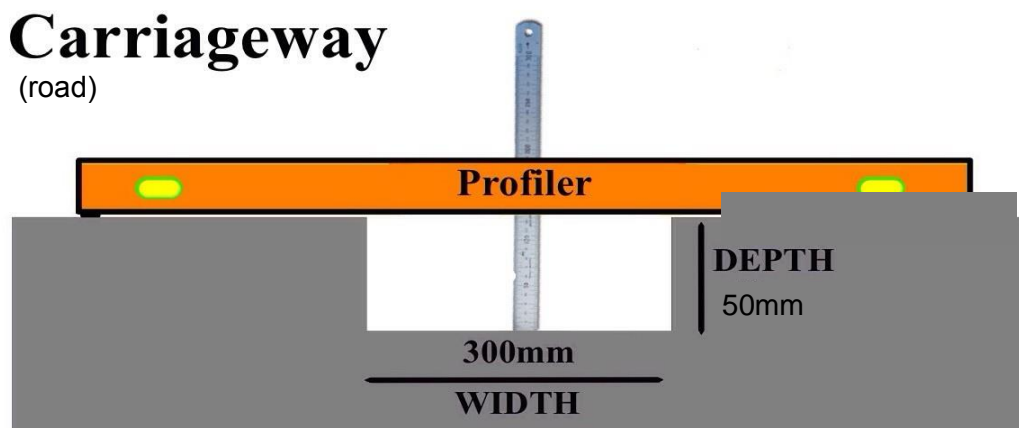
Table 4: Investigatory levels on Cycle tracks and Cycle Paths (where it is not shared with pedestrians, in which case Footway criteria applies)

Defect Type	Investigatory level
Trip/Pothole	25mm depth
Depression (area 2m ² or more) (sunken surface)	50mm
Gap/Crack	20mm depth (20mm wide)
Sunken and Raised Ironwork (e.g. manhole cover)	20mm level difference

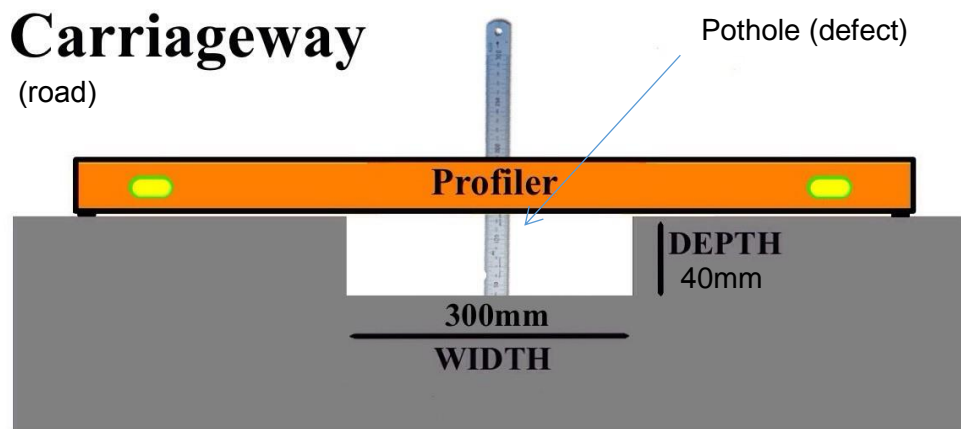
1. Method of Measuring Defects Investigatory Levels

1.1 Example of a potential Category 1 Link 1,2,3,4 carriageway defect

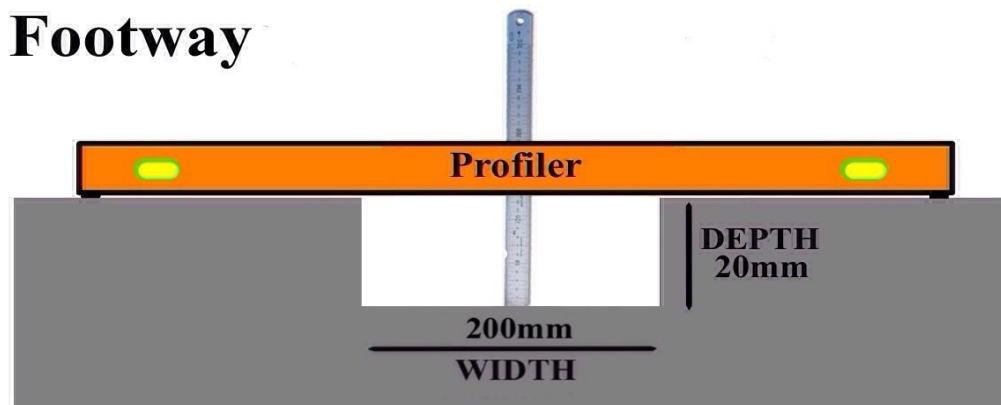
Diagram 1



1.2 Example of a potential Category 2 Link 1,2,3,4 carriageway defect
Diagram 2

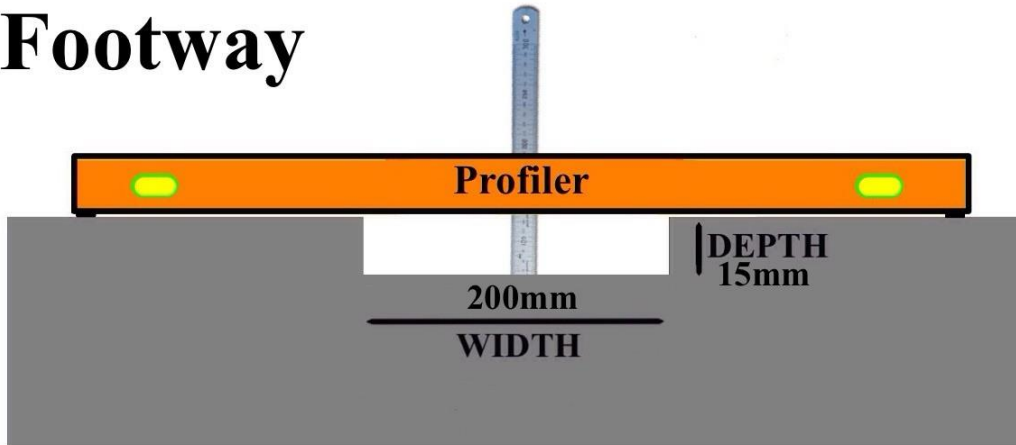


1.3 Example of a potential Category 1 Place A & B footway defect
Diagram 3



1.4 Example of a potential Category 2 Place A & B footway defect
Diagram 4

Footway



1.5 Example of a potential Category 1 very high priority abrupt footway level difference
Diagram 5

