

## CATEGORISATION OF POTHOLES

### Introduction

How potholes are dealt with depends on the severity of the risk that the pothole creates. As such Northamptonshire County Council with their Highway Service provider, KierWSP, has taken a risk based approach to repairing potholes. Potholes that fall into the criteria are called “safety defects” and have a time bound response within which the pothole needs to be repaired.

The following definitions, response times and repair techniques relates to how potholes that are considered to be a safety defect are defined and treated. The response times do not apply to potholes that fall outside the criteria and are not considered safety defects.

### Definition of a Pothole:

There is no formal definition for a pothole recognised nationally, although the recent Highway Maintenance Efficiency Programme (HMEP) Pothole Review documents suggest that a more formal definition may be jointly developed by local authorities and the Department for Transport (DfT).

Northamptonshire County Council and KierWSP have adopted a risk based definition recognising that potholes pose different risks to users of the highway network, depending on the pothole location and network hierarchy of the asset. Subsequently we have provided a different definition of a pothole for carriageways and footways.

### CARRIAGEWAY



For a carriageway a pothole has been defined as a sharp edged depression anywhere in the carriageway where part or all of the surface layers have been removed including carriageway collapses, surrounds to ironwork and missing cat’s eyes. A pothole will be identified when its maximum horizontal dimension is greater than 250mm and is:

- Greater than 40mm deep on strategic roads, main distributors and secondary distributors
- Greater than 50mm deep on local access roads and link roads.

At controlled pedestrian crossings or other defined crossing points (ie junctions or where dropped crossings are provided) footway standards apply.

## FOOTWAY

For a footway a pothole has been defined as a sharp edged depression anywhere on the footway where part or all of the surface layers have been removed including footway collapses and surrounds to ironworks. A pothole will be identified when it has a maximum horizontal dimension greater than 75mm and a depth greater than 20mm.

## Response Times:

The maximum permissible time between a pothole being identified and the defect being repaired is dependent on two key factors:

- The magnitude of the pothole
- The network hierarchy of the asset containing the pothole

Both of these factors relate to the risk the pothole creates as well as the likelihood of a danger being realised.



Currently three response times are used, from the most urgent response first, these are:

**Emergency** A two hour response. Examples include a road collapse.

**Category 1** A repair is required within five working days

**Category 2** A repair is required within four calendar months for carriageway potholes and two calendar months for footway potholes.

The two tables below outline how response times vary depending on the depth of the pothole and the category of road or footway that the pothole lies on. Where the defect may be either a category 1 or category 2 defect it is for the inspecting officer to use their judgement when the defect is identified.

Depth \ Hierarchy	Local Access Road	Link Road	Secondary Distributor	Strategic Route
≥ 40mm - < 50mm	No action		Category 2	
≥ 50mm - < 75mm > 30mph	Category 2		Category 1 or Category 2	Category 1
≥ 50mm - < 75mm > 30mph	Category 1 or Category 2		Category 1	
≥ 75mm	Category 1			

Table of carriageway pothole responses

Hierarchy Depth	Category 4 (Little used rural)	Category 3 (Busy rural)	Category 2 (Busy Urban)	Category 1 (Main Shopping)
< 20mm	No action			
≥ 20mm - < 30mm	Category 2		Category 1 or Category 2	
≥ 30mm - < 40mm	Category 2	Category 1 or Category 2	Category 1	
≥ 40mm	Category 1 or Category 2	Category 1		

Table of footway pothole responses

## Repair Types



KierWSP has agreed with Northamptonshire County Council that pothole repairs will fall into the following three categories:

- Permanent
  - o The most robust repair that includes removing debris from a pothole, saw cutting edges and overbanding using a hot applied material mechanically compacted.
- Semi-permanent
  - o A repair that includes removing debris from a pothole and repairing the pothole using a cold applied material mechanically compacted.
- Temporary
  - o Minimal preparation of the defect and repaired using a cold applied material and manually compacted.

Whilst KierWSP's aim is to have all repairs as permanent repairs, the additional time needed on the highway to undertake a permanent repair may result in a temporary repair being made to immediately remove the hazard the defect poses, with a permanent repair carried out in the future.