
Inspection and prioritisation of Highway Repair and Maintenance

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Statutory Requirements

Buckinghamshire Council has a statutory requirement to identify and address defects arising on the highway in order to provide a reasonable level of service and to prevent (insofar as is practicable) any imminent or immediate danger being presented to road users.

This Statutory Requirement is discharged through a contractual arrangement with Transport for Buckinghamshire (TfB). TfB therefore have a responsibility for inspection, identification, classification and repair of defects in line with Policies and Strategies defined by BC.

National Standards



The Highway Safety Inspections Method Statement and Manual is defined to provide detailed guidance on the requirements, and is prepared in line with national standards of good practice laid down within documentation such as Well Maintained Highways, and also in line with recommendations within the Highway Maintenance Efficiency Programme and ADEPT guidance, **Potholes – A Repair Guide**, published in March 2019. .

Main requirements, in brief, are as follows:

Undertake formal inspections of all roads forming the highway network (all assets, not just carriageway) at appropriate intervals defined in line with national guidance and taking cognisance of strategic importance, road classification, traffic/cyclist/pedestrian usage and other local factors.



Definition of a Pothole

There is no agreed definition of a pothole, nor does there necessarily need to be one. To most road users, any carriageway defect is a pothole. However a pothole could be described as an isolated failure in a road, footway or cycleway that has caused a sizeable defect and penetrated deeper than surface course.

The principal reasons for pothole formation are water, freeze-thaw and traffic and potholes are therefore more likely to form during or after poor weather conditions. On ageing road networks where the surfacing has become brittle over time, potholes can form more rapidly with little or no advance warning.

Identifying and Prioritising a Defect

Identify existing defects and prioritise repairs through classification of Category 1 (High priority) or Category 2H/2M (Lower priority) defects.

Identification of defects

Defects are recorded by our Highway Inspectors or Local Area Technicians at the time of identification, on a tablet based recording device. Defects are raised within a central system on a daily basis and output from this is sent to the operational teams to carry out the repair.

The inspectorate will specify both the defect characteristics and the type of repair to be undertaken (full or make safe).

All highway authorities are required to treat carriageway defects on a risk assessed basis. As well as assessment of the risk presented by the defect and therefore the timescale within which a repair should progress, this assessment also considers the options available for repair.

Category 1 Defect

Category 1 defects are those which represent an imminent or immediate hazard to road users, or which may result in rapid structural deterioration of the asset. These are repaired within 2 working days of identification



Category 1 defects in the carriageway may include potholes or areas of significant crazing/cracking or unevenness.



Category 2H/M Defects

Category 2 defects are those defects which, following a risk assessment, are

deemed not to represent an immediate or imminent hazard or a risk of short

term structural deterioration. These defects may have safety implications of a

lesser significance than Cat 1 defects, but are more likely to have serviceability or sustainability implications, or a possibility of further deterioration to Category 1 status prior to the next inspection being undertaken.

A Category 2H defect is repaired within 2 – 5 working days

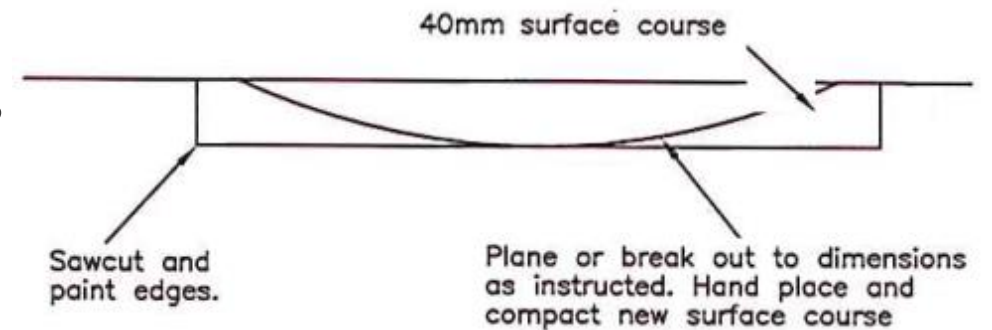
A Category 2M defect is repaired within 28 working days



Full Repair

Wherever possible, a full repair will be made to save a repeat visit and reduce inconvenience to the road user. Where a temporary repair is carried out it is usual that a follow full repair is raised. *The exception to this is where roads have been designated for conventional resurfacing or where the existing surface material is not sufficient for a full repair to be carried out.*

*Simple 40mm excavated pothole
/carriageway defect repair*

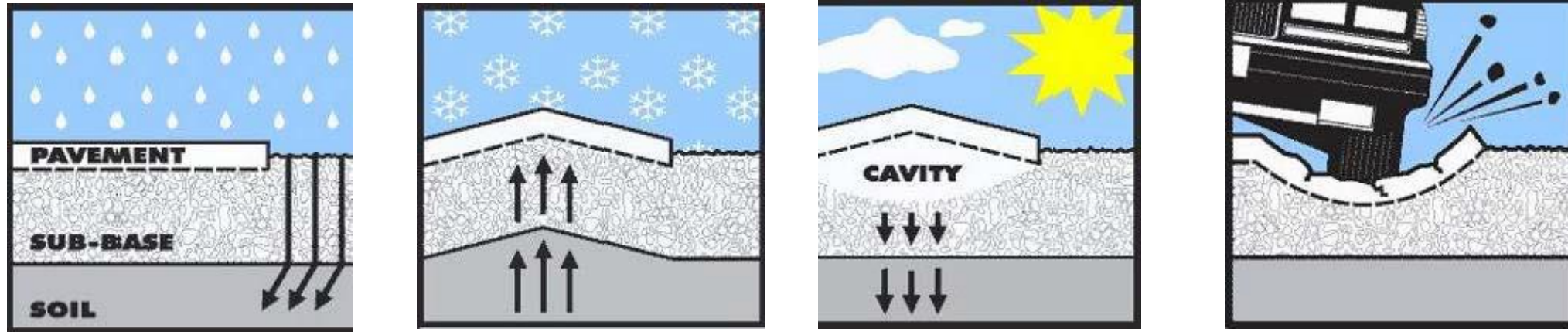


Examples of completed full repairs



How Potholes Form

'Top down' Pothole formation in freeze-thaw conditions



As we all know many defects form during the winter months. This is due to what is known as a 'Top down' failure (as above) which will generally be related to a single defect which has been exploited by the weather, in particular freeze/thaw. The pothole will generally be surrounded by good intact surfacing.

Audit and Verification

It is incumbent upon TfB to carry out site audits to satisfy themselves that operations are undertaken timeously and appropriate to the site instruction.

These are carried out monthly both as a H&S audit and through a joint inspection with a BC quality auditor. Findings from these audits are reported on at the monthly joint quality meetings.

Supervisors also regularly check completed works, using information where appropriate, against instructed work.

Random Audits

Confirm, our data operating system, randomly identifies 5% of all carriageway repair orders every month for a Post Completion inspection (PCI). These will show as “Actions Due” against the originator, with schedules of inspections undertaken, managed by the Highway Inspectorate teams. The outcome of these PCIs are monitored through our Contract Performance Indicators.

