



Safety Inspection Manual

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1.0 CONTROL OF DOCUMENT

- 1.1 The Risk Team Leader will hold the signed original copy of each revision of the Gloucestershire Highways Safety Inspection Manual.

2.0 INTRODUCTION TO THE POLICY

- 2.1 The establishment of an effective regime of inspection, assessment and recording is the most crucial component of highway maintenance. The Safety Inspection regime provides the basic information for addressing the first core objective of highway maintenance, network safety.
- 2.2 In line with the principles of 'Well-maintained Highways: Code of Practice for Highway Maintenance Management July 2005' (CoP), guidance for safety inspections has been modified in the light of particular local circumstances, and the relative risks and consequences associated with these. The characteristics of the regime, including the frequency of inspection, items to be recorded, and the nature of response are defined by this Safety Inspection Manual, which is set in the context of Gloucestershire County Council's (GCC) overall policy and maintenance strategy.

3.0 PURPOSE OF SAFETY INSPECTIONS

- 3.1 Safety Inspections are designed to identify all defects likely to cause danger or serious inconvenience to users of the network or the wider community. Such defects include those that require urgent attention as well as those where the locations and sizes are such that longer periods of response are appropriate.
- 3.2 The Safety Inspection regime forms a key aspect of GCC's strategy for managing liability and risk.
- 3.3 GCC uses its Safety Inspection process, monitoring information and a regime of proactive maintenance to reduce risk and provide the public with a safer highway network. Further, if compliance with the Safety Inspection process permits, Section 58 of the Highways Act 1980 may be used in defence of claims against the Highway Authority. By virtue of the Highways Act 1980 GCC are able to repudiate a claim relating to alleged injury, loss or damage if it can prove that:
- It had in place adequate policies and procedures to maintain the highway.
 - The policies and procedures were being implemented effectively.

4.0 DEFINITIONS

- 4.1 Unless otherwise stated, terms used in this manual are as defined in 'Well-maintained Highways: Code of Practice for Highway Maintenance Management July 2005'.
- 4.2 The code defines defects in two categories.
- Category 1: Those that require prompt attention because they represent an immediate or imminent hazard or because there is a risk of short-term structural deterioration.
 - Category 2: All other defects.

4.3 Detailed guidance about the level of response to defects is contained in Section 5.0 and Appendix A of this document. However, in general the following applies:-

- Category 1 defects shall be corrected or made safe at the time of the inspection, if this is reasonably practicable. If it is not possible to correct or make safe the defect at the time of inspection, repairs of a permanent or temporary nature should be carried out as soon as possible and in any case by the end of the next working day. Permanent repairs should be carried out within 28 days.
- Category 2 defects are those which, following a risk assessment, are deemed not to represent an immediate or imminent hazard or risk of short term structural deterioration. Such defects may have safety implications, but are more likely to have a serviceability or sustainability implications.

5.0 FREQUENCY AND METHODOLOGY OF INSPECTIONS

5.1 The CoP sets out frequencies for Safety Inspections based upon categories within the network hierarchy (Table 1). These have been linked to GCC's network hierarchy to determine the frequency of Safety Inspections on the GCC network. Where appropriate the following considerations have been taken into account: -

- The hierarchy of the network
- Traffic use
- Incident or insurance history
- Characteristics of adjoining network elements
- Wider policy and operational considerations

Where two categories of the network intersect, the category with the higher intervention levels shall be applied to both at that location.

Table 1 – Safety Inspection Frequency

Feature	Description	COP Frequency	GCC Frequency
Roads	Key Routes	1 month	1 month
	Link	3 month	3 month
	Local Access	12 month	12 month
Footways	Town Centre	1 month	1 month
	Secondary	3 month	3 month
	Link	6 month	6 month
	Local Access	12 month	12 month
Cycle	Cw/Fw	As /cw/fw	As /cw/fw
	Remote	6 months	6 months
	Cycle	1 year	1 year

5.2 Planned Safety Inspections shall be carried out at the frequencies shown in Table 1 and within the tolerances shown in Table 2.

Table 2 - Safety Inspection Tolerances

Frequency of Inspection	1 month	3 month	6 month	1 year
Tolerance	+/- 5 days	+/- 7 days	+/-20 days	+/- 27days
Max period between inspections	36 days	100 days	200 days	392 days

Note: all time periods are in calendar days

- 5.3 The minimum number of safety inspections to be completed each year will be:
- Monthly – 1 per month
 - 3 monthly – 1 every 3 months
 - 6 monthly – 1 every 6 months
 - 12 monthly – 1 per year
- 5.4 Safety Inspections are designed to identify all defects likely to create danger or serious inconvenience to the users of the network or the wider community. The risk of danger is assessed on site and the defect is categorised as either Category 1 or 2 and the appropriate response time is then allocated based on the guidelines in Appendix A.
- 5.5 Safety Inspections are undertaken in a slow moving vehicle with two personnel, one driving and the other inspecting. Consideration must be given to the safety of the inspection team and other road users during the driven inspections. The inspection covers all areas within the highway boundary along that road. In urban areas, particularly when inspecting footways, it may be difficult to ensure that the inspection is carried out correctly by vehicle and it may be necessary to carry out these inspections by foot. Walked inspections will be the normal method for town centre inspections. Cycle routes/trails may also be inspected by bicycle.
- 5.6 Defects that are reported by the public will be inspected within 5 working days and the appropriate level of response will be determined using the guidelines set out within this document.
- 5.7 Section 81 of the New Roads & Street Works Act 1991 places a duty on undertakers (utilities) to maintain their apparatus to the reasonable satisfaction of the Highway Authority.
- 5.8 When an inspection identifies a particular piece of apparatus that is deemed to be unsafe and requiring attention, notification will be sent to the appropriate party requiring them to carry out remedial action under Section 81 of the Act. This notification should detail the apparatus and its location complete with maps, postcode and grid reference.
- 5.9 If remedial action is not carried out within a reasonable time period, the Highway Authority may carry out repairs themselves and recharge their reasonable costs.

6.0 ADDITIONAL INSPECTIONS AND EXCEPTIONAL CIRCUMSTANCES

- 6.1 Additional inspections may be necessary in response to user or community concern, as a result of incidents, extreme weather conditions or monitoring information. These have been identified through the risk management process and have been summarised below. The occurrence of any such inspection and its outcome is recorded in the same format as a programmed Safety Inspection but is recorded as being an additional inspection.

Reactive Inspections

- 6.2 An appropriate person with the relevant experience and knowledge responds to user or community concerns and requests for service. Based upon the severity of the situation, a site visit may be required to make a more thorough assessment of the safety or service request. The defects are assessed with the same criteria and intervention levels as those within the programmed Safety Inspection process.

Adverse/extreme weather conditions

- 6.3 *Ice/snow* - Inspections are linked to the GCC's Winter Maintenance Policy and are prioritised by strategic routes and secondary routes. Inspections are carried out by an appropriate person with the relevant experience and knowledge for making an assessment of condition.
- 6.4 *Floods/flood damage/storm damage* - Inspections are prioritised in order of strategic routes and secondary routes. Response gangs are allocated to routes on a prioritised basis for initial assessment and making safe where possible. Defects that cannot be made safe immediately are referred to an appropriate person for prioritisation and additional resources.
- 6.5 *Extreme heat* - Inspections are carried out in response to known or reported problems and are carried out by an appropriate person with the relevant experience and knowledge.

Monitoring of protection

- 6.6 Where defects with potentially serious consequences for network safety are made safe by means of temporary signing or other protection, arrangements may be made for a special inspection regime to ensure the continued integrity of the protection is maintained until a repair can be made.

Exceptional Circumstances

- 6.7 In exceptional circumstances, inspections may not be able to be carried out, e.g. during periods of extreme weather. In these circumstances, the Safety Inspection policy may be suspended and/or a temporary policy put in place. The authority for such action lies with GCC's Environment Department and Directors.

7.0 ITEMS FOR INSPECTION

- 7.1 Items included in safety inspections are outlined in Appendix A. The Safety Inspectors also record any other defects not included on this list that they consider are likely to create danger or serious inconvenience to the community.
- 7.2 Additional inspections relating to centre and edge line road markings or road studs may be carried out in the hours of darkness to assess reflectivity. The occurrence of any such inspection and its outcome is recorded in the same format as a programmed Safety Inspection but is recorded as being an additional inspection. Any work resulting is carried out as programmed work.

Safety Inspection of Highway Trees

- 7.3 All trees within falling distance of the highway are termed 'highway trees'. A basic inspection of all highway trees that can be seen from the carriageway is included in the routine Safety Inspections. Any defect or feature likely to cause an obvious danger by encroachment, visibility obstruction, damage, ill health or trip hazard is recorded and the appropriate action taken. Under Section 154 of the Highways Act 1980, GCC deals, by notice, with hedges, trees and shrubs growing on adjacent land which overhang the highway. GCC carries out additional tree inspections with qualified arboriculturalists. Details of this can be found in GCC's Tree Inspection Policy.
- 7.4 All Safety Inspectors receive some basic arboricultural guidance but a qualified arboricultural advisor carries out an inspection when specialist knowledge is required. Their advice is also sought before any work is carried out on tree roots causing a problem to a footway surface. Qualified tree surgeons inspect any sites where they are conducting tree maintenance work for GCC.

8.0 DEGREE OF DEFICIENCY AND NATURE OF RESPONSE

- 8.1 Defects are risk assessed based upon hierarchy, intervention level, response time, likelihood of predictable deterioration and the requirement for permanent or temporary repair.
- 8.2 Defects that represent an immediate or imminent hazard shall be corrected or made safe at the time of the inspection. If it is not possible to correct or make safe the defect at the time of the inspection, repairs of a permanent or temporary nature shall be carried out by the end of the next working day.
- 8.3 Other significant defects which, following a risk assessment, are deemed not to represent an immediate or imminent hazard, or when there is not deemed to be a risk of rapid structural deterioration, shall be repaired within the timescales shown in Appendix A.
- 8.4 The intervention levels, the making safe, and the permanent repair times for each item listed for inspection have been determined for each category of the network by evaluating the likely impact (should the risk occur) and the probability of it actually occurring. The resulting risk factor determines the category and timescale to rectify the defect (see below). The subsequent intervention levels apply as a minimum unless the feature is by design and are set out in Appendix A.
- 8.5 On-site judgement will need to take into account particular circumstances such as the defect's location, and where necessary the Safety Inspector may increase the Reaction Time for a defect. If a defect is not listed the inspector will carry out a risk assessment to determine the appropriate response, taking into account the location of the defect.
- 8.6 Where a permanent repair will necessitate obtaining details of equipment from statutory undertakers before work can be safely carried out, a timescale of 3 months will apply. This will generally only apply where excavations are required.
- 8.7 Gloucestershire has a wide variety of road and footway network. From high volume dual carriage in congested urban environments to single lane rural roads connecting

small farms or villages. Road and footway users should expect to find a condition which is safe and consistent with the type of and location of that particular infrastructure. Simply put, a motorist would expect the condition of a principal class A road carrying high volumes of traffic at speed to be in a high standard of repair without potholes or significant depressions in the running lane; whereas the motorist using an unclassified road in a very rural environment should not be surprised to find a road surface that may have minor potholes, depressions or other deterioration. This concept of fit for purpose roads is captured in the Code of Practice by dividing road types up into classes and maintenance hierarchies. As such, Gloucestershire's approach to Local Access Roads will be to consider safety defects as those having a lower intervention level, or longer response time, than those on other parts of the network. The tables in Appendix A outline the detailed requirements for each defect type.

Safety Defect Repair Times

Key	Timescale for the repair of safety defects
	No action – review condition of defect at next inspection
	Repair within 3 months or erect warning notices to advise of inadequate highway condition
	Repair within 28 days
	Repair or make safe within one working day
	Repair or make safe within 2 hours
	Other – pass to AHR/Area Team

General Defect Matrix

Probability \ Impact	Very Low	Low	Medium	High
	Local Access Roads (Annual)	Link Roads (Quarterly)	Secondary Routes/Main Distributors (Monthly)	Strategic Routes/Town Centres (Monthly)
Negligible Minor defects that are not considered a danger/hazard				
Low Some defects present, but unlikely to create danger/hazard				
Noticeable Significant defects that could be a danger/hazard				
High Major defects that could result in a serious danger/hazard				
Non Safety Related Defects Defects worthy of note Potential future work programme				

9.0 RECORDING AND MONITORING OF INFORMATION

- 9.1 All information obtained from safety inspections, together with the nature of response, including nil returns, shall be recorded consistently. The data obtained shall be able to be reviewed independently and in conjunction with other survey information. It shall be stored electronically on a server which is backed-up on a daily basis. Service requests, complaints, reports or information from users and other third parties shall also be recorded, along with the nature of response, including nil returns.
- 9.2 All inspections shall record time, weather conditions, any unusual circumstances of the inspection, and the persons conducting the inspection.
- 9.3 Each Safety Inspector shall have a minimum of one inspection per year re-inspected by the Risk Team Leader or Lead Inspector to ensure consistency and quality of the Safety Inspection regime is maintained. These re-inspections shall be carried out within 24 hours of the original inspection and will cover various sections of the hierarchy over the year.

Variations/review of Hierarchy and Inspection Frequency

- 9.4 The network and its hierarchy is fluid and as a minimum the network shall be reviewed for changes with regard to hierarchy annually. Changes in safety inspection frequency shall be approved by the Risk Team Working Group and may be altered in response to the factors listed below:
- Traffic growth or reduction
 - Sections of the network which have a higher than normal level of accidents
 - Pedestrian/cyclist growth or reduction
 - Sections of the network being promoted as safer routes to school or for leisure use
 - Recurring defects of the same nature being identified at a location where non-routine maintenance work is required to resolve the issue
 - Non-routine maintenance work carried out to resolve recurring defects identified at a specific location

Risk Team Working Group Members may include some or all of the following:

- Data Manager
- Risk Team Leader
- Lead Inspector
- Safety Inspector from Area being reviewed
- Insurance Team Representative

10.0 HEALTH, SAFETY AND TRAINING

- 10.1 Highway safety inspections require concentration on the identification and recording of defects, but not at the expense of the safety of the inspector or road user.
- 10.2 Health and safety risk assessments and safe systems of work must cover all inspection activities identifying potential hazards to inspectors and road users and appropriate control measures. These risk assessments and safe systems of work must be reviewed regularly to take into account newly identified risks, new or amended legislation, new or revised inspection methods and new or revised defect

repair methods. Reference should be made to the Corporate Health and Safety Policy Statement, the Environment Health and Safety Policy Statement and the Highways Maintenance Plan.

- 10.3 All personnel involved in managing or carrying out highway safety inspections must be fully familiar and compliant with the safe systems of work set out. Should a highway inspector feel that a safe system of work does not provide sufficient protection at a specific location on the network, he/she must stop work immediately and inform their Line Manager. It may then be necessary to amend or develop a new risk assessment and safe system of work for that particular location or inspection before the inspection is continued.
- 10.4 The following guidelines relate to the various ways in which a safety inspection may be carried out. These guidelines are not exhaustive and any unique situation which may arise associated with an inspection needs to be carefully appraised to ensure that appropriate systems of work are identified and implemented.
- 10.5 In general highway safety inspections are carried out from a slow moving vehicle, on foot or occasionally by bicycle. General control measures are listed below but should not be considered exhaustive.
- 10.6 Inspections from a vehicle
- The highway inspector shall not drive the vehicle while undertaking an inspection. A driver, or second inspector, must be used to ensure the safety of all occupants and other road users.
 - The vehicle must be fitted with the appropriate beacons and reflective signing, and the equipment used where appropriate.
 - Appropriate personal protective equipment and clothing will be used at all times.
 - Should it be necessary for the vehicle to stop, the vehicle shall be parked off the live highway wherever possible. If this cannot be achieved then there must be clear visibility in both directions and the roof mounted beacon must be switched on. Traffic must not be forced across any continuous white centre lining. If this cannot be achieved, advanced temporary traffic signing must be installed.
 - When conducting an inspection on foot in the carriageway or on a verge closer than one metre to the carriageway then adequate temporary signing and traffic management arrangements shall be provided.
 - Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g. snow, fog or heavy rain.
 - Only special inspections of, for example, road markings and studs, shall be carried out during the hours of darkness/dusk.
 - When possible inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.
- 10.7 Inspections on foot
- Lone working procedures must be followed.
 - Appropriate personal protective equipment and clothing will be used at all times.
 - Inspections will be conducted from footways or verges where possible.
 - When conducting an inspection on foot in the carriageway or on a verge closer than one metre to the carriageway then adequate temporary signing and traffic management arrangements shall be provided.
 - Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g. snow, fog or heavy rain.
 - Only special inspections of, for example, road markings and studs, shall be carried out during the hours of darkness/dusk.
-

- When possible inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.

10.8 Inspections by bicycle

- Lone working procedures must be followed.
- Appropriate personal protective equipment and clothing will be used at all times.
- Inspections will be conducted from the cycle track.
- Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g. snow, fog or heavy rain.
- Only special inspections of, for example, road markings and studs, shall be carried out during the hours of darkness/dusk.
- When possible inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.

10.9 Appropriate training is needed to ensure that personnel responsible for managing and carrying out highway inspections understand the reasons and importance of highway inspections. These reasons include public safety and the council's insurance claim procedures.

10.10 The aim will be for inspectors to be trained in accordance with City and Guilds Scheme 6033 where reasonably practicable. New inspectors joining the organisation without this level of training will be given in-house training provided by the safety inspection team (and assessed by the Lead Inspector and Risk Team Leader) to achieve consistency in the identification of safety defects and the prioritisation of defect repairs in accordance with the guidance set out in this policy.

11.0 REFERENCE DOCUMENTS

Well-maintained Highways, Code of Practice for Highway Maintenance Management, Roads Liaison Group, July 2005.

Appendix A – Inspection Tables

CAT 1: Those defects that require prompt attention because they represent an immediate hazard or because there is a risk of short-term structural deterioration.

CAT 2: All other defects.

Safety Defect Repair Times

Key	Timescale for the repair of safety defects
	No action – review condition of defect at next inspection
	Repair within 3 months or erect warning notices to advise of inadequate highway condition
	Repair within 28 days
	Repair or make safe within one working day
	Repair or make safe within 2 hours
	Other – pass to AHR/Area Team

General Defect Matrix

Probability \ Impact	Very Low	Low	Medium	High
	Local Access Roads (Annual)	Link Roads (Quarterly)	Secondary Routes/Main Distributors (Monthly)	Strategic routes/Town Centres (Monthly)
Negligible Minor defects that are not considered a danger/hazard				
Low Some defects present, but unlikely to create danger/hazard				
Noticeable Significant defects that could be a danger/hazard				
High Major defects that could result in a serious danger/hazard				
Non Safety Related Defects Defects worthy of note Potential future work programme				



Where two intervention levels are shown the inspector has discretion to determine which level of response is appropriate.

CARRIAGEWAYS

POTHOLES

A pothole is a sharp edged depression anywhere in a carriageway where part or all of the surface layers have been removed including carriageway collapses, surrounds to ironwork and missing cats eyes. A pothole will be classed as a safety defect when its maximum horizontal dimension is greater than 300mm and is greater than 40mm deep. At controlled pedestrian crossing or other defined crossing points, e.g. at junctions or dropped crossings, intervention levels will be as for the adjacent footway. In high prestige or high footfall areas in town centres, footway criteria will be used.



C/WAY POTHOLES				
Depth	Local Access	Link Roads	Strategic & Secondary	Town Centres
< 40 mm				
40 – 75 mm (CAT 2)				
> 75 mm (CAT 1)				

ABRUPT LEVEL DIFFERENCES

An abrupt level difference in the carriageway will be classed as a safety defect when it has a vertical displacement of greater than 40mm over a distance of 300mm.



CWAY ABRUPT LEVEL DIFFERENCES				
Depth	Local Access	Link Roads	Strategic & Secondary	Town Centres
< 40 mm				
40 – 75 mm (CAT 2)				
> 75 mm (CAT 1)				

CARRIAGEWAYS

CRACKS OR GAPS

Longitudinal and transverse cracking or gaps in the carriageway will be classed as safety defects when they are greater than 40mm deep (20mm in town centres), and greater than 300mm in continuous length (200mm in town centres).



CWAY CRACKS OR GAPS				
Width	Local Access	Link Roads	Strategic & Secondary	Town Centres
< 30 mm				
30 – 40 mm (CAT 2)				
> 40 mm (CAT 1)				

CROWNING, RUTTING & DEPRESSIONS

Crowning, rutting and depressions will be classed as safety defects when they are greater than 50mm high over a distance of 1200mm.



CWAY CROWNING, RUTTING OR DEPRESSIONS				
Height/Depth	Local Access	Link Roads	Strategic & Secondary	Town Centres
< 50 mm				
50 – 100 mm (CAT 2)				
> 100 mm (CAT 1)				

CARRIAGEWAYS

EDGE DETERIORATION

Edge deterioration of the carriageway will be classed as a safety defect when the edge of the surfaced carriageway breaking up is over 150mm (300mm for Link & Local access) into the carriageway, it is greater than 40mm deep and greater than 300mm in length.



CWAY EDGE DETERIORATION				
Depth	Local Access	Link Roads	Strategic & Secondary	Town Centres
< 40 mm	Green	Green	Green	As for potholes
40 – 75 mm (CAT 2)	Blue/Yellow	Yellow	Yellow	
> 75 mm (CAT 1)	Yellow/Orange	Yellow/Orange	Orange	

OVER-RIDING

Over-riding of the verge in the highway will be classed as a safety defect when the length of the over-riding is greater than 3m and the vertical side adjacent to the surfaced carriageway is greater than 40mm deep.



CWAY OVER-RIDING				
Depth	Local Access	Link Roads	Strategic & Secondary	Town Centres
< 40 mm	Green	Green	Green	As for potholes
40 – 150 mm (CAT 2)	Blue/Yellow	Yellow	Yellow	
> 150 mm (CAT 1)	Yellow/Orange	Yellow/Orange	Orange	

CARRIAGEWAYS

**EDGE OF CARRIAGEWAY KERBING &
CHANNELS**

INTERVENTION LEVELS AND DEFECT
REPAIR PERIODS WILL BE IDENTIFIED
USING THE GENERAL DEFECT MATRIX



FOOTWAYS

POTHOLES & EDGE DETERIORATION

A pothole is a sharp edged depression anywhere in a footway where part or all of the surface layers have been removed including footway collapses and surrounds to ironwork. A pothole will be classed as a safety defect when it is greater than 20mm deep and its maximum horizontal dimension is greater than 100mm.



FWAY POTHOLES & EDGE DETERIORATION				
Depth	Local Access	Link F/way	Secondary F/way	Town Centres
< 20 mm				
20 – 40 mm (CAT 2)				
> 40 mm (CAT 1)				

ABRUPT LEVEL DIFFERENCES

An abrupt level difference in the footway will be classed as a safety defect when it has a vertical displacement greater than 20mm deep over a distance of 100mm.



FWAY ABRUPT LEVEL DIFFERENCES				
Depth	Local Access	Link F/way	Secondary F/way	Town Centres
< 20 mm				
20 – 40 mm (CAT 2)				
> 40 mm (CAT 1)				

FOOTWAYS

CRACKS OR GAPS

Longitudinal or transverse cracking or gaps in the footway will be classed as safety defects when they are greater than 20mm deep, 300mm in continuous length and 40mm wide.



FWAY CRACKS OR GAPS				
Width	Local Access	Link F/way	Secondary F/way	Town Centres
< 40 mm				
> 40 mm (CAT 1)				

CROWNING, RUTTING & DEPRESSIONS

Crowning, rutting and depressions will be classed as safety defects when they are greater than 25mm in depth over a distance of 600mm. All measurements will exclude 500mm around the base of trees.



FWAY CROWNING, RUTTING OR DEPRESSIONS				
Depth/Height	Local Access	Link F/way	Secondary F/way	Town Centres
< 25 mm				
25mm - 100 mm (CAT 2)				
> 100 mm (CAT 1)				

FOOTWAYS

OVER-RIDING

Over-riding of the verge in the footway will be classed as a safety defect when the length of the over-riding is greater than 300mm long and over 100mm deep.



OVER-RIDING				
Width	Local Access	Link F/way	Secondary F/way	Town Centres
< 100 mm				
> 100 mm (CAT 1)				

ROCKING OR UNSTABLE SLABS

A rocking or unstable slab will be classed as a safety defect when the vertical displacement is 20mm or greater in height or depth.

Inspection records should record the material type in order to assist with the repair operation.

Where slabs are in areas of amenity slabbing with no footfall, the general defect matrix should be used.



FWAY ROCKING OR UNSTABLE SLABS				
Depth/Height	Local Access	Link F/way	Secondary F/way	Town Centres
< 20 mm				
20 – 40 mm (CAT 2)				
> 40 mm (CAT 1)				

FOOTWAYS

KERBING DEFECTS

Cracked, chipped or missing kerbs will be classed as safety defects where they represent a tripping hazard, are greater than 40mm deep and 100mm in length.



FWAY KERBING DEFECTS				
Depth	Local Access	Link F/way	Secondary F/way	Town Centres
< 40 mm				
> 40 mm				
Missing				

CYCLEWAYS

Where cycleway forms part of the carriageway – apply carriageway criteria

Where cycleway forms part of the footway or is off road – apply footway criteria

OTHER INSPECTION ITEMS

HIGHWAY COVERS, GRATINGS & FRAMES

A cover, grating or frame in the carriageway, footway, cycle route or verge that is significantly damaged, dislodged, missing or not seated correctly will be classed as a safety defect. Privately owned rainwater channels that are significantly damaged, dislodged, missing or not seated correctly will be made safe and/or the property owner notified by letter.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING THE GENERAL DEFECT MATRIX



A cover, grating or frame which is higher or lower (40mm carriageways and 20mm footways) than the adjacent carriageway or footway will be classed as a safety defect. At controlled pedestrian crossing or other defined crossing points, investigatory levels will be as for the adjacent footway.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS FOR CARRIAGEWAYS WILL BE IDENTIFIED USING THE POTHOLE DEFECT MATRIX, AND FOR FOOTWAYS OR CYCLE ROUTES WILL BE IDENTIFIED USING THE ROCKING AND UNSTABLE SLABS DEFECT MATRIX



OTHER INSPECTION ITEMS

EMBANKMENTS AND CUTTINGS

Where a safety inspection identifies an embankment or cutting that is apparently unstable and represents an immediate or imminent hazard or there is a risk of short term failure, the area will be made safe within an appropriate timescale. These will then be referred to area staff for further investigation and reactive inspections.



OVERGROWN VEGETATION

Hedges and trees that encroach within the envelope described below will be identified as a safety defect. Clearance envelope: 5.5m over carriageways and 2.5m over footways, cycle routes and verges. Vegetation on highway verges that significantly obscures forward visibility, visibility to signs, lighting units and visibility splays will be identified as a safety defect. Defects will be reported to area staff.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING THE GENERAL DEFECT MATRIX



OTHER INSPECTION ITEMS

FENCES AND BARRIERS

Safety fencing, pedestrian guardrails or boundary fencing which is significantly damaged or protruding into the footway or carriageway will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING THE GENERAL DEFECT MATRIX

Significant or major defects will generally be made safe by the end of the next working day and permanent repairs carried out as programmed work.



OTHER INSPECTION ITEMS

ROAD MARKINGS

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS FOR WORN ROAD MARKINGS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

White line markings on strategic and main distributor roads of high safety risk or with a relevant accident record should be renewed when they are no longer adequate for their intended purpose.



TRAFFIC SIGNALS, ILLUMINATED BOLLARDS, PELICAN CROSSING LAMPS & STREET LIGHTING

Damaged, missing or dirt obscuring any of the above that represents a significant or major hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Generally all defects will be made safe and reported as soon as possible to the Traffic Signals or Street Lighting department.



GULLIES, DRAINS OR GRIPS

Damaged gullies, drains or grips that represent a significant or major hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX



OTHER INSPECTION ITEMS

ILLEGAL SIGNS, FLY POSTERS AND ADVERTISING BOARDS

Illegal signs, fly posters or advertising boards that represent a significant or major hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Generally signs will be removed at the time of inspection if possible, otherwise will be passed to area staff for action.



UNSAFE STRUCTURES

Highways inspections will only be required to identify significant or major defects that can be identified visually during the normal course of inspections e.g. damage to the superstructure or supports of over-bridges, parapets and expansion joints. Significant or major defects will be reported to the Asset Bridge Engineer immediately who will arrange for the appropriate action to be taken.



OTHER INSPECTION ITEMS

DEBRIS, SPILLAGE OR CONTAMINATION, TREES WITH UNSTABLE BRANCHES

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX



GRAFFITI

Graffiti that represents a significant or major hazard will be classed as a safety defect, e.g. obscured traffic lights.



GRAFFITI – TRAFFIC SIGNS AND BOLLARDS

Type	Local Access	Link Roads	Secondary Routes	Strategic Routes
Directional and other signs				
Warning signs				
Stop, give way and chevron signs				
A major hazard that could result in a serious danger/hazard or deemed offensive.				

OTHER INSPECTION ITEMS

TRAFFIC SIGNS AND BOLLARDS (Inc posts and plates)

Significant or major defects caused by damage to traffic signs will be classed as a safety defect. Stop, give way and chevron signs that are significantly damaged, missing or are not legible such that a sign is not effective, presenting a hazard to highway users will be temporarily replaced by the end of the next working day and permanently repaired within 28 days. Other repairs will be carried out as programmed work.



TRAFFIC SIGNS AND BOLLARDS				
Type	Local Access	Link Roads	Secondary Routes	Strategic Routes
Directional and other signs				
Warning signs				
Stop, give way and chevron signs				
Defect that is a major hazard that could result in a serious danger/hazard				

TRAFFIC SIGNS AND BOLLARDS - ELECTRICAL

A traffic sign that has damaged or exposed electrical components will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Generally damaged or exposed electrical components will be made safe as an emergency and reported to the Street Lighting team to arrange for permanent repair.



OTHER INSPECTION ITEMS

TRAFFIC SIGNS AND BOLLARDS - BOLLARDS

A bollard that is significantly damaged or missing such that it presents a hazard to highway users will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX



STREET FURNITURE

Damage to street furniture that represents a significant or major hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Damage to street furniture will be reported to the relevant owner. Litter bins are the responsibility of the Litter Authority (typically the local authority). Bus stops are generally privately owned. Damage should be reported to the Public Transport Officer for action.

