

Hartlepool Borough Council

Highway Inspection Safety Manual



Highway Safety Inspection Manual

1 — Introduction

2 — Methodology

2.1 - Frequency of Inspections

2.2 - Items for Inspection

2.3 - Degree of Deficiency

2.4 - Nature of Response

3 — Inspection Procedures

3.1 - Locating / Recording Defects

4 — Appendices

– Appendix A

- 'Defect Remediation Categories'

– Appendix B

- Examples of Defects

– Appendix C

- Technical Guidance Note (TGN)

- HIGHWAY SAFETY INSPECTIONS

– Appendix D

- 'Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus'

1 — Introduction

The Council in complying with its duty to maintain the highway, as outlined within Section 41 of the Highways Act 1980 and for the purposes of Section 58, which provides for special defence, undertakes inspections of all adopted highways within the Borough.

This code of practice has been developed with the primary aim of providing assistance to those officers involved in undertaking highways safety inspections so that they may carry out their duties in a systematic and consistent manner to clear and easily understood criteria.

`Well-Managaed Highway Infrastructure- Code of Practice (Oct 2016) makes recommendations in Part B for an inspection, assessment and recording regime which provides the basic information required for addressing the key objectives of highway maintenance strategy:

- Network Safety
- Network Serviceability
- Network Sustainability

It goes on to identify three types of inspections:

- Safety Inspections
- **Service Inspections**
- Condition Surveys

This code deals specifically with service inspections which are derived from two main sources:

- Planned cyclic service inspections to identify potential dangers.
- Reactive service inspections in response to reports regarding the condition of the highway.

All cyclic Service Inspections are carried out to specified frequencies as detailed in section 2.1 of this manual, dependent upon the classification of each highway. During the inspection, defects that are at or exceed the minimum investigation levels, as outlined within this code, are identified and processed for repair. **Note: The investigation levels indicated in this manual are based on the recommendations of the Report on Highway Liability Claims published by the Kindred Association in 1998. Highway Inspectors, whilst giving consideration to these recommendations, must assess each defect in respect of its size and location to determine the risk to the highway users and process the repair at an appropriate level.**

2 - Methodology

Service Inspections are intended to identify those defects, which are likely to create a danger or serious inconvenience to users of the highway network or the wider community and therefore, require immediate or urgent attention. Such defects should include those that require urgent attention (within 24 hours) as well as those where a longer response period would be acceptable.

The following parameters have been used to specify our service inspection regime:

- Frequency of Inspection
- Items for Inspection
- Degree of Deficiency
- Nature of Response

2.1 Frequency of Inspections

The following frequencies for service inspections are based upon network hierarchies as outlined in the Well-Maintained Highways- Code of Practice for Highway Maintenance Management (July 2005), which also takes into account the following considerations:

- > Category within the network hierarchy
- > Traffic use, characteristics and trends
- > Incident and inspection history
- > Characteristics of adjoining network elements
- > Local knowledge / expertise

CARRIAGEWAY INSPECTION HIERARCHIES / FREQUENCIES

Category	Hierarchy Description	General Description	Frequency
2	Strategic Routes	Non Motorway Trunk and some principal "A" roads between primary destinations.	6 Months *
3a	Main Distributor	Major Urban Network and Inter-Primary Links. Short — medium distance traffic.	6 Months *
3b	Secondary Distributor	Classified Road (B & C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions.	6 Months *
4a	Link Road	Roads linking between Main and Secondary Distributor Network with frontage access and frequent junctions.	6 Months
4b	Local Access Road	Roads serving limited number of properties carrying only access traffic. (Culs de sac)	6 Months

* Partly Supplemented by monthly safety inspections

FOOTWAY INSPECTION HIERARCHIES / FREQUENCIES

Category	Hierarchy Description	General Description	Frequency
1a	Prestige Zone Walking	Prestige Areas in towns and cities with exceptionally high usage, such as Prince's Street, Edinburgh.	1 Month
1	Primary Walking Route	Busy urban shopping and business areas, and main pedestrian routes linking interchanges between different modes of transport, such as railways and bus stops etc.	1 Month
2	Secondary Walking Route	Medium usage routes through local areas feeding primary routes, local shopping centres, large schools and industrial centres etc.	3 Months
3	Link Footway	Linking local access footways through urban areas and busy rural footways. To include flagged Local Access Footways.	6 Months
4	Local Access Footway	Footways associated with low usage, short estate roads to the main routes and <i>ads de sac</i> .	6 monthly

CYCLEWAY INSPECTION HIERARCHIES / FREQUENCIES

Category	Hierarchy Description	General Description	Frequency
A	Cycle Lane	Cycle lane, forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure point (exemptions for cycle access).	As for appropriate carriageway category
B	Cycle Track	Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or unsegregated.	As for appropriate footway category
		Cycle track, a route for cyclists not contiguous with the public footway or carriageway. (e.g. Public Bridleway)	1 Year or as and when required
C	Cycle Trail	Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the highway authority. (e.g. Permissive Bridleway)	1 Year or as and when required.

2.2 Items for Inspections

The following list is an example of items that the 'Inspector' should look for whilst carrying out a 'Routine Service Inspection':

- Debris, spillage or contamination on running surfaces or hard shoulder
- Displaced road studs lying in the carriageway
- Overhead wires in a dangerous condition
- Vandalism, particularly if involving electrical consequences (e.g. lighting column door)
- Abrupt level difference in the running surface
- Potholes, cracks or gaps in the running surface
- Edge deterioration of the running surface
- Loss of skidding resistance
- Missing or broken ironwork (gully lids, manholes etc)
- Standing water, water discharging onto or overflowing across the highway
- Blocked drains or grips
- Damaged, defective, displaced, missing or misleading traffic signs, signals, or lighting columns
- Missing or badly worn road markings
- Dirty or otherwise obscured traffic signals and signs
- Damaged safety fencing, parapet fencing, handrail, and other barriers
- Sight-lines obscured by trees, unauthorised signing and other features

Note: 'Routine Service Inspections' should also include the inspection of footbridges and underpasses that form part of the adopted highway network.

2.3 Degree of Deficiency

The degree of deficiency and the level of risk to users of the network also define the category into which the defect is placed which in turn indicates the level of response required.

- Category 1 Defect
 - Those defects or deficiencies 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 Defect
 - All other defects

It is essential that all defects, observed during a service inspection, which require urgent attention (Category 1) because of the high risk to users of the network or the wider community, are recorded.

In addition other defects (Category 2) that do not require urgent attention but may have a detrimental effect on the network and thus on highway safety and serviceability, should be recorded for future works programming.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect
- The location of the defect relative to highway features such as junctions and bends
- The location of the defect relative to the positioning of users', especially vulnerable users, such as in traffic lanes and wheel tracks
- The nature and extent of interaction with other defects
- Forecast weather conditions, especially the potential for freezing of surface water

Examples of typical defects are included in Appendix B

2.4 Nature of Response

All Category 1 defects should, where reasonably practicable, be corrected or made safe within 24 hours of the inspection. This may include displaying warning signs / notices, coning / fencing off the defect or carrying out a temporary repair to protect the public from the hazard.

Where defects are made safe, using temporary signing or repair, appropriate interim inspections should be carried out to ensure the integrity of the temporary repair is maintained until a permanent repair can be carried out.

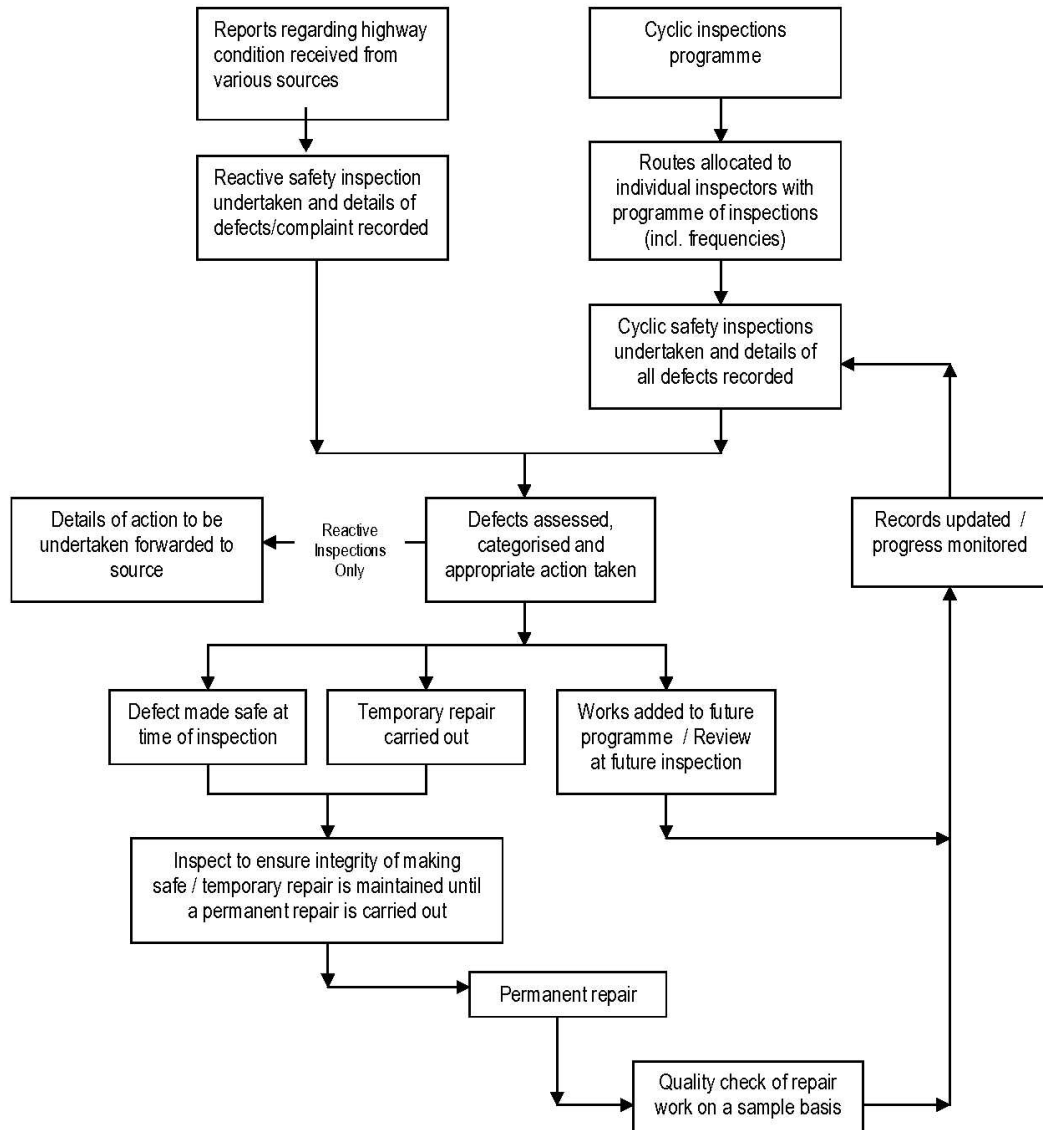
Category 2 defects should be prioritised in accordance with Appendix A 'Defect Remediation Categories'.

NOTE: THE RESPONSE TIMES AND PRIORITISATIONS GIVEN IN APPENDIX A DEFINE THE MAXIMUM ACCEPTABLE TIME PERIOD FOR RECTIFYING A DEFECT.

WHERE APPROPRIATE AN INSPECTOR MAY INCREASE THE PRIORITY RATING FOR A DEFECT, FOR EXAMPLE FROM 'C2.3' TO 'C2.2', AND THEREBY REDUCE THE TIME PERIOD FOR CARRYING OUT A REPAIR.

3 – Inspection Procedures

All highway safety inspections will be carried out in accordance with Technical Guidance Note - HIGHWAY SAFETY INSPECTIONS, included in Appendix C. The following diagram outlines the inspection regime and actions to be taken.



3.1 Locating / Recording Defects

To ensure the repair team can quickly identify the precise defect, it is essential that the information provided by the inspector is simple and easily understood.

Defects shall be marked with temporary road marking paint **only** where necessary, to enable the repair team to locate them quickly and alert the public to any potential danger posed by the defect.

In order to locate a defect effectively, the repair team requires the following information:

- The location of the defect along the length of the highway.
- The position of the defect across the width of the highway
- The size and type of defect

3.1.1 Location along the Highway

This information should be clear, precise and easily understood. This will reduce the lost productivity time of the repair team used to locate a specific defect.

Ideally a combination of the following information should be recorded:

- Street name / road number
- House number / building name
- Distance and direction from nearest road junction
- Street lighting (S/L) column number

WHERE IT IS NOT POSSIBLE TO EASILY DESCRIBE THE POSITION OF A DEFECT ROAD MARKING PAINT SHOULD BE USED.

3.1.2 Position of the Defect on the Highway

This information is essential for assisting the repair team to precisely locate the defect, identified by the inspector.

Again simplicity is the key to success.

Examples

- Channel of carriageway
- On verge
- At start of radius
- Adjacent to
- On pedestrian crossing
- In central reservation
- In slow / fast lane

3.1.3 Describing Size and Type of Defect

When describing a defect the inspector must clearly state the nature of the defect and its approximate size, where applicable. This will enable the repair team to collect the correct materials to carry out the repair.

Descriptions such as 'Pothole', 'Broken Flags' and 'Damaged Kerbs' do not convey enough information for the repair team to carry out a repair efficiently. It is essential that all the information required to carry out the repair is recorded, by the inspector and passed onto the repair team.

4 — Appendices

Appendix A — 'Defect Remediation Categories'

Appendix B — Examples of Defects

Appendix C — TGN - Highway safety inspections

Appendix D — Schedule of Related TGN's

**Appendix E - 'Procedure for Dealing with Statutory Undertakers
Defective Surface Apparatus'**

Appendix A

`Defect Remediation Categories'

APPENDIX A- 'DEFECT REMEDIATION CATEGORIES'					Carriageway					Footway					Cycleway					
					2	3a	3b	4a	4b	1a	1	2	3	4	A	B				
					Strategic Routes	Main Distributor	Secondary Distributor	Link Roads	Local Access Roads	Prestige Zone	Primary Route	Secondary Route	Link Footway	Local Access Footway	Cycle Lane	Cycle Track				
					Monthly	Monthly	Monthly	6 Monthly	6 Monthly	Monthly	Monthly	3 Monthly	6 Monthly	6 Monthly	As Per C/Way	As Per F/way	6 Monthly			
Defect Description :					Defects Remediation Categories															
1.0	Carriageway		1.1	Pothole	>40mm Depth and >300mm wide in any one direction	Ci			C2	C2						As per c/way	As per f/way	C2		
			1.2	Loss of skidding resistance	Where considered hazardous/dangerous, particularly bends/junc/ped xings/t-signals/roundabout approach & exits	C2			C2	C2								C2		
Note: Prior to taking any action, the report should refer to the area traffic section to check any relevant accident / skid test data before taking any remedial action.																				
2.0	Footway	2.1 Flexible	2.1.1	Sharp edged depression (pothole)	>25mm					Ci	Ci	C2	C2			As per f/way	C2			
			2.1.2	Depression	>30mm over a distance <600mm in any one direction					Ci	Ci	C2	C2			As per f/way	C2			
			2.1.3	Cracks/Gaps	>25mm Wide & >25mm Deep					Ci	Ci	C2	C2	C2		As per f/way	C2			
		2.2 Rigid	2.2.1	Trip	(Vertical or near vertical) > 25mm					Ci	Ci	C2	C2			As per f/way	C2			
			2.2.2	Depression	>30mm over a distance <600mm in any one direction					Ci	Ci	C2	C2			As per f/way	C2			
			2.2.3	Cracks/Gaps	>25mm Wide & >25mm Deep					Ci	Ci	C2	C2			As per f/way	C2			
3.0	Kerbs/Edging/Channels		3.1	Missing/Gaps/Cracks Rocking Displaced	>50mm Horizontally or >35mm Vertically	NOTE: Carriageway categories to be applied if there is no footway immediately adjacent to the carriageway. (E.g. C'wayNerge/Footway or C'wayNerge)	C2	C2	C2	C2	C2	Ci	Ci	C2	C2	C2	As per c/way	As per f/way	C2	
			3.2	Shattered/Damaged	Where creating a hazard		C2	C2	C2	C2	C2	Ci	Ci	C2	C2	C2	As per c/way	As per f/way	C2	
4.0	Ironwork	4.1	Missing/Damaged	4.1.1 Small covers		C2	C2	C2	C2	C2	Ci	Ci	C2	C2	C2		As per c/way	As per f/way	C2	
				4.1.2 Gully, M/H, large SU covers or cattle grids		C1	C1	C1	C1	C1	C1	C1	C1	C1		As per c/way	As per f/way	C1		
		4.2	Sunk / Protruding / Rocking	4.2.1 Carriageway > 40mm		C2	C2	C2	C2	C2		I		+1	I		As per c/way			
				4.2.2 Footway >25mm						I	Ci	Ci	C2	C2	C2		As per f/way	C2		
		4.3	Gaps	4.3.1 Carriageway > 25mm (W) x 40mm (D) x 100mm (L) parallel to the direction of flow.			C2	C2	C2	C2						Ci		C2		
				4.3.2 Footway > 25mm (W) x 25mm (D) x 100mm (L) in any direction.							Ci	Ci	C2	C2	C2		As per f/way			
5.0	Obstructions	5.1	Overhanging Trees/vegetation	5.1.1 Carriageway	Where likely to cause peds/cyclists to use adjoining carriageway or branches <2.1m for peds <2.7m for cyclists or obstructing visibility	C2	C2	C2	C2	Ci		I		I		As per c/way		C2		
				5.1.2 Footway												As per f/way				
		5.2	General Hazard	Where considered an immediate or imminent hazard for drivers or pedestrians (includes overhead wires or damaged/detached tree limbs)	C1	Ci	Ci	Ci	Ci	Ci	C1	C1	C1	C1	C1	C1	C1	C1		
					* Where the defect is NOT considered to represent an immediate or imminent hazard - dassification is at the 'Inspectors' discretion. *															
		5.3	Flooding (includes blocked drains/ grips and flowing across highway	Where considered an immediate or imminent hazard for drivers or pedestrians	C1	C1	C1	C1	Ci	H	Ci	Ci	Ci	Ci	H	Ci	Ci	Ci	Ci	
					* Where the defect is NOT considered to represent an immediate or imminent hazard - dassification is at the 'Inspectors' discretion. *															
6.0	Debris/Spillage's /Contamination		6.1	General	Where considered an immediate or imminent hazard for drivers or pedestrians		C1	C1	C1	C1	Ci	H	Ci	Ci	Ci	Ci	H	Ci	Ci	
7.0	Safety Fence/Barrier/ Parapet and Hand Rails		7.1	Missing/Damaged	Where considered an immediate or imminent hazard for drivers or pedestrians		C1	C1	C1	C1	Ci	H	Ci	Ci	Ci	Ci	H	Ci	Ci	
						* Where the defect is NOT considered to represent an immediate or imminent hazard - dassification is at the 'Inspectors' discretion. *														
8.0	Walls/Screens/Fences/Gates and Environmental Barriers		8.1	Missing/Damaged	Where considered an immediate or imminent hazard for drivers or pedestrians		C1	C1	C1	C1	Ci	H	Ci	Ci	Ci	Ci	H	Ci	Ni	
						* Where the defect is NOT considered to represent an immediate or imminent hazard - dassification is at the 'Inspectors' discretion. *														
9.0	Road Studs/Road Markings		9.1	Missing Studs/Inserts	Pothole left by missing stud and in cases where missing from double white line systems.		C2	C2	C2	C2	C2						I		L	
			9.2	Worn Road Markings	Where the total loss of markings >30% at 'Give Way' and 'Stop' markings		Ci/C2	Ci/C2	Ci/C2	Ci/C2	Ci/C2							As per c/way	Ci/C2	Ci/C2
10.0	Traffic Signs (inc. St Lighting Columns and Lit Signs)		10.1	Damaged/DefectiveNandalised/ Obscured	Where considered an immediate or imminent hazard for drivers or pedestrians. (E.g. low mounting height or exposure of live cables or regulatory signs constituting an immediate or imminent hazard)		C1	C1	C1	C1	Ci	H			Ci		H		Ci	
						C1 applies to temporary signing / n ³ applies to renewal of road markings														
						* Where the defect is NOT considered to represent an immediate or imminent hazard - dassification is at the 'Inspectors' discretion. *														
Note: - 1) The categories shown in the above table are the minimum acceptable level(s) and can be raised at the Inspectors discretion (e.g. from to L). UNDER NO CIRCUMSTANCES SHOULD THE CATEGORY BE REDUCED, UNLESS OTHERWISE STATED ABOVE.																				
2) The maximum time taken to carry out a PERMANENT repair after 'Making Safe a Category 1 () must not exceed 28 days																				
Key: Category 1 (Ci) - response within 24 hrs																				
3) All Category C Cycleways - 'Cycle Trails' are to be Inspected and Maintained by Hartlepool Councils 'Parks and Countryside section.																				
4) The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.																				
The depth, surface area, or other extent of the defect																				
The location of the defect relative to highway features such as junctions and bends																				
The location of the defect relative to the positioning of users', especially vulnerable users, such as in traffic lanes and wheel tracks																				
The nature and extent of interaction with other defects																				
Forecast weather conditions, especially for freezing of surface water																				
5) Flagged footway on hierarchy 4 (Local Access Footway) to be reclassified to hierarchy 3 (Link Footway)																				

Appendix B

Examples of Defects

Examples of Defects

Index:

1.1	Carriageway Potholes	B3
1.2	Carriageway Loss of Skidding Resistance	B4
2.1.1	Flexible Footways — Sharp Edged Depression	B5-6
2.1.2	Flexible Footways — Depressions	B7
2.1.3	Flexible Footways — Cracks & Gaps	B8
2.2.1	Rigid Footways — Trips	B9-10
2.2.2	Rigid Footways — Depressions	B11
2.2.3	Rigid Footways — Cracks & Gaps	B12-14
3.1	Kerbs/Edgings/Channels — Missing, Rocking or Displaced	B15-16
3.2	Kerbs/Edgings/Channels — Shattered/Damaged	B17-18
4.1.1	Ironwork — Missing or Damaged (Small Covers)	B19-20
4.1.2	Ironwork— Missing or Damaged (Manholes, Gully's, Large PU Covers and Cattle Grids)	B21-23
4.2.1	Ironwork — Sunk, Protruding or Rocking (Carriageways)	B24-26
4.2.2	Ironwork - Sunk, Protruding or Rocking (Footways)	B27-28
4.3.1	Ironwork — Ironwork Gaps (Carriageways)	B29
4.3.2	Ironwork — Ironwork Gaps (Footways)	B30
5.1.1	Obstructions — Overhanging Trees (Carriageways)	B31
5.1.2	Obstructions — Overhanging Trees (Footways)	B32
5.2	Obstructions — General Hazard	B33-35
5.3	Obstructions — Flooding/Standing Water	B36-37
6.1	Debris Spillages and Contamination — Mud on Road	B38-39
7.1	Safety Fence / Barrier — Damaged or Missing	B40
8.1	Walls, Screens, Fences and Environmental Barriers — Damaged or Missing	B41
9.1	Road Studs and Road Markings — Missing Road Studs/Inserts	B42
9.2	Road Studs and Road Markings — Worn Road Markings	B43
10.1	Traffic Signs (inc. Street Lighting Columns) - Damaged / Defective / Vandalised / Obscured	B44-4

Section 1.0 Carriageway

1.1 Carriageway Potholes

A flexible carriageway with a sharp - edged pothole.



Is urgent treatment required? —

The defect is measured at 40mm deep and is greater than 300 mm wide and is therefore considered a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2, 3a & 3b	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
4a & 4b	6 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme

Further Consideration. -

If there are a considerable number of similar defects in the same street the area should be considered for future carriageway surfacing programme.

Section 1.0 Carriageway

1.2 Carriageway Loss of Skidding Resistance

A flexible carriageway, which has 'fatted up' after being surface dressed, causing poor skidding resistance.



Is urgent treatment required? —

The nearside lane of the derestricted duals has 'fatted up' in the breaking zone approaching the roundabout and is therefore considered a Safety Hazard.

Maintenance Actions. —

Further Consideration. -

If the site, after further investigation, requires remedial action consider adding to resurfacing programme as required.

Section 2.0 Footways

2.1 Flexible Footways (Non Urgent)

2.1.1 Sharp Edged Depression (pothole)

A flexible footway, with an uneven surface, due to loss of wearing course over a substantial area.



Is urgent treatment required? —

The defect is measured at 20mm depth in an area of the footway where it is subject to constant usage and is also approaching the intervention level of 25mm, however the defect depth falls below the intervention threshold, therefore this is not considered a Safety Hazard.

Maintenance Actions. —

No immediate action required, but monitor in future safety inspections

Further considerations. -

The kerb line looks in reasonable condition therefore consideration should be given to including the footway in a future footway resurfacing or thick slurry seal programme.

Section 2.0 Footways

2.1 Flexible Footways

2.1.1 Sharp Edged Depression (pothole)

A flexible footway, with a sharp edge depression or pothole causing a trip hazard.



Is urgent treatment required? —

The defect is measured at 40mm and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3 & 4	6 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme

Further Consideration. -

If there are a considerable number of similar defects in the same street the area should be considered for future footway surfacing programme.

Section 2.0 Footways

2.1 Flexible Footways

2.1.2 Depressions

A flexible footway, with a deep depression in an old statutory undertakers trench.



Is urgent treatment required? -

The defect is measured at 125 mm deep over a width of 450 mm and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3	6 Monthly	C2	28 days	As Above
4	6 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme

Further considerations. -

- a) Investigate the reason for such a severe depression, e.g. poor quality reinstatement (lack of compaction of underlying layers, or a void in the lower layers caused by water erosion/broken drainage pipes etc, refer to relevant statutory undertaker if appropriate).
- b) If the trench had been within the undertakers guarantee period (2/3 years) a dangerous defect notice should be served on the appropriate undertaker.

Section 2.0 Footways

2.1 Flexible Footways

2.1.3 Crack & Gaps (Non-Urgent)

A flexible footway, with a crack caused by tree root growth.



Is urgent treatment required? -

The defect is measured at 10mm width, which falls below the intervention level of 25mm wide, and is therefore not considered a Safety Hazard.

Maintenance Actions. —

No immediate action required, but monitor in future safety inspections.

Is there a vertical displacement?

Further Considerations. -

If the tree is in private ownership the owner should be contacted in order to alert them of the problem.

In the case of the problem worsening consideration may be given to removing the tree root with the aid of advisory bodies.

Section 2.0 Footways

2.2 Rigid Footways

2.2.1 Trips

A rigid footway, with a trip between adjacent concrete slabs.



Is urgent treatment required? —

A trip of 25 mm has been measured and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
la	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3 & 4	6 Monthly	C2	28 days	As Above

Further Considerations. -

The location should be considered for future repair in either a Rapid Response Gang schedule, or possibly a separate scheme if warranted.

Section 2.0 Footways

2.2 Rigid Footways

2.2.1 Trips

A rigid footway, with a trip between adjacent concrete slabs.



Is urgent treatment required? —

A number of trips exceeding 25 mm have been measured and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3 & 4	6 Monthly	C2	28 days	As Above

Further Considerations. -

The location should be considered for future repair in either a Rapid Response Gang schedule, or possibly a separate scheme if warranted.

Section 2.0 Footways

2.2 Rigid Footways

2.2.2 Depressions

A modular footway, with a depression, caused by vehicular overrun.



Is urgent treatment required? -

The depression is measured at 30mm over a width of 500mm and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3 & 4	6 Monthly	C2	28 days	As Above

Further considerations. -

- a) After completing temporary / permanent repair add to future ordinary maintenance programme.
- b) Provision of bollards and / or strengthening of the footway.

Section 2.0 Footways

2.2 Rigid Footways

2.2.3 Cracks & Gaps (Non Urgent)

A rigid footway, with a horizontal gap adjacent to a British Telecom chamber.



Is urgent treatment required? —

The gap measures 15 mm, which is less than the intervention level of 25 mm, and is therefore not considered a Safety Hazard.

Maintenance Action. -

No action required.

Further considerations. -

Monitor and add to a future ordinary maintenance programme as necessary.

Section 2.0 Footways

2.2 Rigid Footways

2.2.3 Cracks & Gaps **(Non Urgent)**

A flagged footway, with a horizontal gap resulting from the edge of the footpath being unrestrained.



Is urgent treatment required? -

The gap measures 55 mm and is greater than the intervention level of 25 mm, however it is filled with compacted material, and is therefore not considered a Safety Hazard.

Maintenance Actions. -

No action required.

Further considerations. -

Add to a future maintenance scheme list and consider providing an edging at the time to provide edge restraint to minimise future 'spread' of flags.

Section 2.0 Footways

2.2 Rigid Footways

2.2.3 Cracks & Gaps

A flagged area, with a horizontal gap, due to stolen blockwork.



Is urgent treatment required? -

The gap measures 200 mm, which is greater than the intervention level of 25mm, and is therefore considered a Safety Hazard.

Maintenance Actions. -

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3 & 4	6 Monthly	C2	28 days	As Above

Further considerations. -

- a) After completing temporary / permanent repair add to future ordinary maintenance programme.
- b) There is a history of vandalism in this particular instance. Therefore consideration should be given to types of materials used when designing possible replacement schemes.

Section 3.0 Kerbs/Edgings/Channels

3.1 Missing, Rocking or Displaced.

A flexible carriageway, which forms part of the footway, with displaced and rocking kerbs.



Is urgent treatment required? —

The defect is a potential danger to pedestrians crossing the road and also to vehicles where tyres are susceptible to damage and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1 a	Monthly	C1	24 hrs	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs immediately or carry out a temporary repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs and then carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3	6 Monthly	C2	28 days	As Above
4	6 Monthly	C2	28 days	As Above

Further Considerations. -

After completing temporary / permanent repair add to future ordinary maintenance programme.

Section 3.0 Kerbs/Edgings/Channels

3.1 Missing, Rocking or Displaced.

A flexible footway, with displaced or rocking kerbs.



Is urgent treatment required? —

The defect is a potential danger to pedestrians walking on the footway or crossing the road and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1 a	Monthly	C1	24 hrs	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs immediately or carry out a temporary repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs and then carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3 & 4	6 Monthly	C2	28 days	As Above

Further Considerations. -

Does the nature and extent of the defect, in the Highways Inspectors opinion, require a higher level of response? If this is thought to be necessary the Highways Inspector may lift the response category to one they consider more appropriate.

Section 3.0 Kerbs/Edgings/Channels

3.2 Shattered / Damaged.

A rigid footway, with total erosion of a kerb.



Is urgent treatment required? —

The defect is a potential danger to pedestrians walking on the footway or crossing the road and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs immediately or carry out a temporary repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs and then carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3	6 Monthly	C2	28 days	As Above.
4	6 Monthly	C2	28 days	As Above

Further Considerations. -

After completing temporary / permanent repair add to future ordinary maintenance programme.

Section 3.0 Kerbs/Edgings/Channels

3.2 Shattered / Damaged.

A flexible footway, with partial erosion of a kerb.



Is urgent treatment required? —

The defect is a potential danger to pedestrians walking on the footway or crossing the road and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
la	Monthly	C1	24 hrs	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs immediately or carry out a temporary repair. b) In the longer term add to ordinary maintenance patching programme
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Highways Inspector to make safe and arrange for the Rapid Response Gang to remove the kerbs and then carry out a temporary / permanent repair. b) In the longer term add to ordinary maintenance patching programme
3	6 Monthly	C2	28 days	As Above
4	6 Monthly	C2	28 days	As Above

Further Considerations. -

After completing temporary / permanent repair add to future ordinary maintenance programme.

Section 4.0 Ironwork

4.1.1 Missing or Damaged Ironwork. **(Small Covers)**

A rigid footway, with a damaged cast iron drainage channel.



Is urgent treatment required? -

This defect is a potential hazard to pedestrians and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
la	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to immediately make safe. b) Highways Inspector / Rapid Response Gang to replace ironwork.
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to make safe. b) Rapid Response Gang to replace ironwork.
3 & 4	6 Monthly	C2	28 days	As Above

Further Considerations. -

Consider replacing entire channel width due to obsolete design.

Section 4.0 Ironwork

4.1.1 Missing or Damaged Ironwork. **(Small Covers)**

Damaged ironwork in a verge adjacent to a footway.



Is urgent treatment required? -

This defect is a potential hazard to pedestrians and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to immediately make safe or report to appropriate Statutory Undertaker. b) If the cover is not the responsibility of a Statutory Undertaker, Highways Inspector / Rapid Response Gang to replace ironwork.
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Rapid Response Gang to make safe or report to appropriate Statutory Undertaker. b) If the cover is not the responsibility of a Statutory Undertaker, Highways Inspector / Rapid Response Gang to replace ironwork.
3 & 4	6 Monthly	C2	28 days	As Above

Further Considerations. -

Monitor for possible cause of damage (Vehicle overrun / vandalism?)

If the cover is the responsibility of a Statutory Undertaker the 'Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus', which is included in Appendix E, should be followed.

Section 4.0 Ironwork

4.1.2 Missing or Damaged Ironwork. **(Manholes, Gully's, Large PU Covers and Cattle Grids**

A flexible carriageway, with a missing / damaged road gully cover.



Is urgent treatment required? -

This defect is a potential hazard to motorists and cyclists and is therefore considered a Safety Hazard.

Maintenance Actions. —

All defects within this category are to be dealt with as Category 1 Safety Hazards and therefore require immediate attention.

- a) Highways Inspector to immediately make safe the defect by replacing the cover (if possible) or cone / fence off the defect.
- b) Highways Inspector to report the defect to the Rapid Response Gang or to the appropriate Statutory Undertaker.
- c) If the cover is not the responsibility of a Statutory Undertaker, Rapid Response Gang to carry out a temporary / permanent repair.

Further Considerations. -

Monitor for possible cause of damage (vandalism?)

If the cover is the responsibility of a Statutory Undertaker the 'Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus', which is included in Appendix E, should be followed.

Section 4.0 Ironwork

4.1.2 Missing or Damaged Ironwork.

(Manholes, Gully's, Large PU Covers and Cattle Grids)

A flexible carriageway, with a missing ironwork cover.



Is urgent treatment required? -

This defect is a potential hazard to pedestrians, crossing the road, and to motorists / cyclists and is therefore considered a Safety Hazard.

Maintenance Actions. —

All defects within this category are to be dealt with as Category 1 Safety Hazards and therefore require immediate attention.

- a) Highways Inspector / Rapid Response Gang to immediately make safe the defect by replacing the cover (if possible) or cone / fence off the defect / fill void with bricks.
- b) Rapid Response Gang to carry out a temporary / permanent repair.

Further Considerations. -

Monitor for possible cause of damage (vandalism?)

Section 4.0 Ironwork

4.1.2 Missing or Damaged Ironwork.

(Manholes, Gully's, Large PU Covers and Cattle Grids)

A rigid footway, with a missing ironwork cover.



Is urgent treatment required? -

This defect is a potential hazard to pedestrians and is therefore considered a Safety Hazard.

Maintenance Actions. —

All defects within this category are to be dealt with as Category 1 Safety Hazards and therefore require immediate attention.

- a) Highways Inspector to immediately make safe the defect by replacing the cover (if possible) or cone / fence off the defect.
- b) Highways Inspector to report the defect to the Rapid Response Gang or to the appropriate Statutory Undertaker.
- c) If the cover is not the responsibility of a Statutory Undertaker, Rapid Response Gang to carry out a temporary / permanent repair.

Further Considerations. -

Monitor for possible cause of damage (vandalism?)

If the cover is the responsibility of a Statutory Undertaker the 'Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus', which is included in Appendix E, should be followed.

Section 4.0 Ironwork

4.2.1 Sunk, Protruding or Rocking (Carriageways)

A cobbled back street, with a gully cover protruding above the level of the road.



Is urgent treatment required? -

The defect is measured at 40mm, which is equivalent to the intervention level, and is therefore considered a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2 & 3a	Monthly	C2	28 days	a) Highways Inspector / Rapid Response Gang to make safe by coning off the area or providing temporary bitmac fillets. b) Rapid Response Gang to reset / replace gully as part of an ordinary maintenance programme.
3b	Monthly	C2	28 days	a) Rapid Response Gang to reset / replace gully as part of an ordinary maintenance programme. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary
4a	6 Monthly	C2	28 days	As Above
4b	6 Monthly	C2	28 days	As Above

Further Considerations. -

The existing gully design is such that it could be a hazard to cyclists. Therefore, the defect may require a higher level of response. If this is thought to be necessary the Highways Inspector may lift the response category to one they consider more appropriate. For example, if the gully was located on a road classified as a 3b or 4a it would be repaired within 6 months as a Category 2 defect. The Highways Inspector may consider this inappropriate due to the nature of the defect and increase the 'Defect Classification' to either a Category 2 or Category 1.

Section 4.0 Ironwork

4.2.1 Sunk, Protruding or Rocking (Carriageways)

A flexible carriageway, with a sunken road gully cover.



Is urgent treatment required? -

The defect is measured at approximately 50 — 75 mm, which is above the intervention level, and is therefore considered a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2 & 3a	Monthly	C2	28 days	a) Highways Inspector / Rapid Response Gang to make safe by coning off the area or providing temporary bitmac fillets. b) Rapid Response Gang to reset / replace gully as part of an ordinary maintenance programme.
3b	Monthly	C2	28 days	a) Rapid Response Gang to reset / replace gully as part of an ordinary maintenance programme. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary
4a	6 Monthly	C2	28 days	As Above
4b	6 Monthly	C2	28 days	As Above

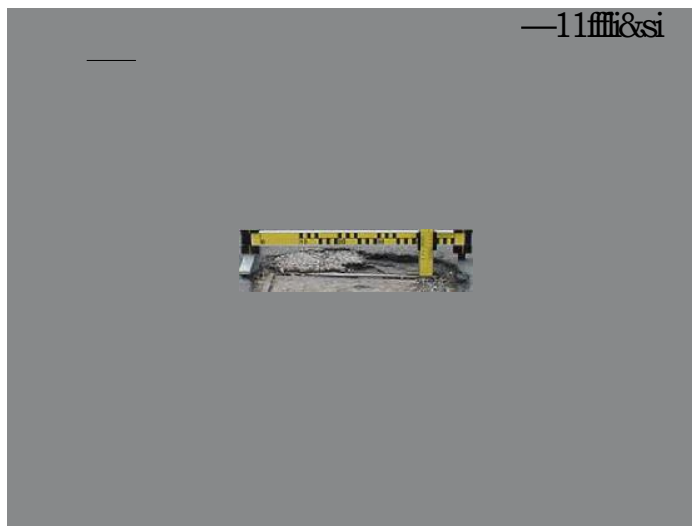
Further Considerations. -

Monitor for possible cause of damage.

Section 4.0 Ironwork

4.2.1 Sunk, Protruding or Rocking (Carriageways)

A flexible carriageway, with a sunken manhole cover.



Is urgent treatment required? -

The defect is measured at 50mm, which is greater than the intervention level, and is therefore considered a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2 & 3a	Monthly	C2	28 days	a) Highways Inspector / Rapid Response Gang to make safe by coning off the area / providing temporary bitmac fillets or report to appropriate Statutory Undertaker. b) If the cover is not the responsibility of a Statutory Undertaker, Rapid Response Gang to reset / replace manhole cover as part of an ordinary maintenance programme.
3b	Monthly	C2	28 days	a) If the cover is not the responsibility of a Statutory Undertaker, Rapid Response Gang to reset / replace manhole cover as part of an ordinary maintenance programme. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4a	6 Monthly	C2	28 days	As Above
4b	6 Monthly	C2	28 days	As Above

Further Considerations. -

If the cover is the responsibility of a Statutory Undertaker the 'Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus', which is included in Appendix E, should be followed.

Section 4.0 Ironwork

4.2.2 Sunk, Protruding or Rocking (Footways)

A rigid footway, with a cover protruding above the level of the footway.



Is urgent treatment required? -

The defect is measured at 50mm, which is at the intervention level and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to make safe by coning off the area / providing temporary repair or report to appropriate Statutory Undertaker. b) If the cover is not the responsibility of a Statutory Undertaker, Rapid Response Gang to reset / replace cover.
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	If the cover is not the responsibility of a Statutory Undertaker, Rapid Response Gang to reset / replace cover.
3	6 Monthly	C2	28 days	a) If the cover is not the responsibility of a Statutory Undertaker, Rapid Response Gang to reset / replace cover as part of an ordinary maintenance programme. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4	6 Monthly	C2	28 days	As Above

Further Considerations. -

If the cover is the responsibility of a Statutory Undertaker the 'Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus', which is included in Appendix E, should be followed.

Section 4.0 Ironwork

4.2.2 Sunk, Protruding or Rocking (Non-Urgent) **(Footways)**

A rigid footway, with a manhole cover protruding above the level of the footway.



Is urgent treatment required? -

The defect is measured at 10 mm therefore it is not considered a Safety Hazard.

Maintenance Actions. -

Monitor for further deterioration

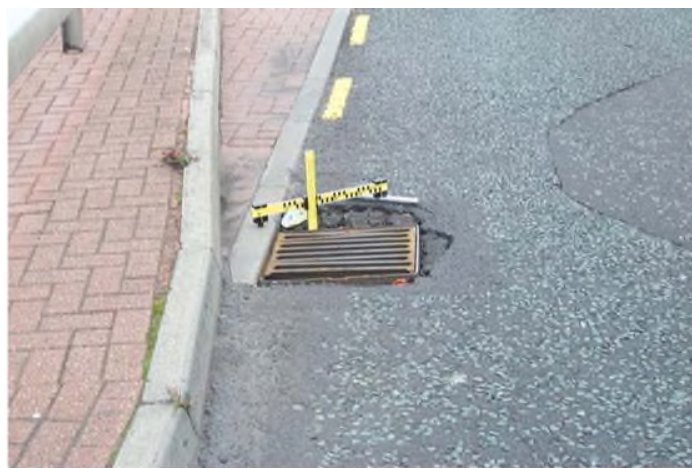
Further Considerations. -

No further considerations

Section 4.0 Ironwork

4.3.1 Ironwork Gaps **(Carriageways)**

A flexible carriageway, with gaps adjacent to the ironwork.



Is urgent treatment required? -

The gaps on this defect are greater than the intervention level of 25mm, and are therefore considered a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2 & 3a	Monthly	C2	28 days	a) Highways Inspector / Rapid Response Gang to make safe by coning off the area / providing temporary bitmac. b) Rapid Response Gang to carry out permanent repair.
3b	Monthly	C2	28 days	a) Rapid Response Gang to carry out a permanent repair as part of an ordinary maintenance programme. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4a	6 Monthly	C2	28 days	a) Highways Inspector to add to future programme. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4b	6 Monthly	C2	28 days	As Above

Further considerations. -

After temporary repair add to future maintenance programme.

Section 4.0 Ironwork

4.3.2 Ironwork Gaps (Footways)

A footway, with gaps adjacent to the ironwork.



Is urgent treatment required? -

The gaps on this defect are greater than the intervention level of 25mm, and are therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C1	24 hrs	a) Highways Inspector / Rapid Response Gang to immediately make safe by coning off the area / providing temporary bitmac. b) Rapid Response Gang to carry out permanent repair.
1	Monthly	C1	24 hrs	As Above
2	3 Monthly	C2	28 days	a) Highways Inspector / Rapid Response Gang to make safe by coning off the area / providing temporary bitmac. b) Rapid Response Gang to carry out permanent repair.
3	6 Monthly	C2	28 days	a) Rapid Response Gang to carry out a permanent repair as part of an ordinary maintenance programme. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4	6 Monthly	C2	28 days	As Above

Further considerations. -

After temporary repair add to future maintenance programme.

Section 5.0 Obstructions

5.1.1 Overhanging Trees (Carriageways)

Foliage from the large bush/tree, encroaching onto the carriageway.



Is urgent treatment required? -

The overhanging foliage is forcing road users towards the centre of the carriageway and is therefore considered a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2, 3a & 3b	Monthly	C2	28 days	a) Highways Inspector to establish who is responsible for the maintenance of the tree / bush. b) If it is the responsibility of the Highway Authority the Rapid Response Gang are to trim back the overgrown vegetation.
4a	6 Monthly	C2	28 days	a) Highways Inspector to establish who is responsible for the maintenance of the tree / bush. b) If it is the responsibility of the Highway Authority the Rapid Response Gang are to trim back the overgrown vegetation. c) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4b	6 Monthly	C2	28 days	As Above

Further considerations. -

- a) If the large bush / tree is growing within the highway boundary and is therefore the responsibility of the Highway Authority. Consider the removal of the large bush / tree.
- b) If the large bush / tree is growing outside of the highway boundary the Highways Inspector should make contact with the property owner and request the cutting back of the foliage.

Section 5.0 Obstructions

5.1.2 Overhanging Trees **(Footways)**

Foliage from the large bush/tree, encroaching onto the footway.



Is urgent treatment required? -

The overhanging foliage is forcing pedestrians to step onto the carriageway and is therefore considered a Safety Hazard.

Maintenance Actions. —

Footway Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
1a	Monthly	C2	28 days	a) Highways Inspector to establish who is responsible for the maintenance of the tree / bush. b) If it is the responsibility of the Highway Authority the Rapid Response Gang are to trim back the overgrown vegetation.
1	Monthly	C2	28 days	As Above
2	3 Monthly	C2	28 days	As Above
3	6 Monthly	C2	28 days	a) Highways Inspector to establish who is responsible for the maintenance of the tree / bush. b) If it is the responsibility of the Highway Authority the Rapid Response Gang are to trim back the overgrown vegetation. c) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4	6 Monthly	C2	28 days	As Above

Further considerations. -

- a) If the large bush / tree is growing within the highway boundary and is therefore the responsibility of the Highway Authority. Consider the removal of the large bush / tree.
- b) If the large bush / tree is growing outside of the highway boundary the Highways Inspector should make contact with the property owner and request the cutting back of the foliage.

Section 5.0 Obstructions

5.2 General Hazard

Road works sign on a main road.



Is urgent treatment required? -

The fallen roadworks sign is obstructing the carriageway and presents an immediate or imminent hazard to motorists and cyclists, therefore, this should be dealt with as a Category 1 Safety Hazard.

Maintenance Actions. -

Highways Inspector/Rapid Response Gang to remove hazard from the carriageway and re-erect sign.

Further considerations. —

- a) Bring to the attention of the contractor responsible.
- b) Concrete blocks are not to be used in place of sand bags.

Note. —

Due to the nature and diversity of defects, which can be classed as a 'General Hazard', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as a 'General Hazard', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 5.0 Obstructions

5.2 General Hazard

A rigid footway, with a damaged `13`1' inspection chamber cover.



Is urgent treatment required? -

The damaged BT cover presents an immediate or imminent hazard to pedestrians using the footway; therefore, this should be dealt with as a Category 1 Safety Hazard.

Maintenance Actions. -

Highways Inspector / Rapid Response Gang to immediately cone / fence off the defect and then report to the relevant statutory undertaker.

Further Considerations. -

The 'Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus', which is included in Appendix E, should be followed.

Note. —

Due to the nature and diversity of defects, which can be classed as a 'General Hazard', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as a 'General Hazard', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 5.0 Obstructions

5.2 General Hazard

An estate road with builder's material deposited on the footway and carriageway.



Is urgent treatment required? -

The material is causing an obstruction for both pedestrians and motorists and is therefore considered a Safety Hazard. As a result of the obstruction pedestrians will be forced to walk on the carriageway, which has also been severely restricted by the debris. Therefore, this should be dealt with as a Category 1 Safety Hazard.

Maintenance Actions. -

Bring to the attention of the property owner immediately if possible. If not, Highways Inspector / Rapid Response Gang to cone / fence off the area.

Further considerations. —

- a) Has property owner applied for a licence?
- b) Monitor in future safety inspections for removal of material / damage to highway

Note. —

Due to the nature and diversity of defects, which can be classed as a 'General Hazard', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as a 'General Hazard', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 5.0 Obstructions

5.3 Flooding / Standing Water (Non Urgent)

Localised flooding to the footway, 24 hours after rainfall.



Is urgent treatment required? -

The defect is not considered a Safety Hazard as it presents an inconvenience rather than a hazard to pedestrians. However, it is located immediately adjacent to a large hospital and in sub-zero temperatures it may become a potential hazard.

Maintenance Actions. -

No immediate action required.

Further considerations. —

Re-level the block line and resurface the footway to shed water to the carriageway channel and away to nearby road gully.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Flooding', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Flooding', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 5.0 Obstructions

5.3 Flooding / Standing Water

A bituminous carriageway, with typical 'half moon' flooding.



Is urgent treatment required? -

The flooding is causing an obstruction to motorists and is therefore considered a Safety Hazard. As a result of the flooding, the carriageway width has been severely restricted, and motorists will pull into the centre of the road. Therefore, this should be dealt with as a Category 1 Safety Hazard.

Maintenance Actions. -

Highways Inspector / Rapid Response Gang to erect flood warning signs / boards and if applicable remove debris from gullies. If there is no existing drainage consider cutting grips.

Further considerations. —

If this is a reoccurring problem carry out drainage investigation.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Flooding', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Flooding', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 6.0 Debris Spillages and Contamination.

6.1 Mud on Road

A bituminous carriageway, where H.G.V. 's have been turning from a grassed area and deposited mud on the road.



Is urgent treatment required? -

The mud that has been deposited on the carriageway, will considerably reduce the skidding resistance of the road surface, and is therefore considered a Safety Hazard. As the road is a main, de-restricted, route along which vehicles may be traveling at speed, it should be dealt with as a Category 1 Safety Hazard.

Maintenance Action. -

Highways Inspector to contact landowner to clear carriageway and / or Highways Inspector / Rapid Response Gang to place temporary 'Slippery Road' or 'Mud on Road' signs.

Monitor situation to achieve improvement

Further Considerations. -

Write to land owner to make them aware of their actions and responsibilities.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Mud on Road', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Mud on Road', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 6.0 Debris Spillages and Contamination.

6.1 Mud on Road

A bituminous carriageway, where site traffic, from an adjacent demolition works, has deposited mud on the road.



Is urgent treatment required? —

The mud that has been deposited on the carriageway, will considerably reduce the skidding resistance of the road surface, and is therefore considered a Safety Hazard. As this is an estate road, where children may play, it should be dealt with as a Category 1 Safety Hazard.

Maintenance Action. -

Highways Inspector to contact landowner / developer to clear carriageway and / or Highways Inspector / Rapid Response Gang to place temporary 'Slippery Road' or 'Mud on Road' signs.

Monitor situation to achieve improvement

Further Considerations. -

Contact the developer in order to make them aware of their actions and responsibilities.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Mud on Road', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Mud on Road', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 7.0 Safety Fence / Barrier

7.1 Damaged or Missing

A roundabout, with damaged pedestrian guardrail.



Is urgent treatment required? -

The protruding barrier is considered a hazard to pedestrians, therefore is a Category 1 Safety Hazard.

Maintenance Actions. -

The barrier is to be removed by The Rapid Response Gang and the gap made safe immediately. The damage has obviously been caused by a vehicle failing to negotiate the roundabout. The police should be contacted in order to obtain the name of the vehicle owner so that HBC are able to recharge the repair costs. Finally raise a rechargeable works order to replace the damaged barrier.

Further considerations. -

The layout should be investigated e.g. would this type of accident be reduced if anti-skid material was laid on the approaches to the roundabout. Inspector to note if this is a reoccurring problem and refer for further investigation.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Damaged or Missing Safety Fence / Barrier etc', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Damaged or Missing Safety Fence / Barrier etc', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 8.0 Walls, Screens, Fences, and Environmental Barriers.

8.1 Damaged or Missing

-Missing boundary wall immediately adjacent to a steep embankment



Is urgent treatment required? -

The boundary wall is missing, therefore, there is an immediate problem with the possibility of pedestrians injuring themselves, from either the jagged wall edges or by falling through the damaged area. This is therefore a Category 1 safety hazard.

Maintenance Actions. -

Highways Inspector/Rapid Response Gang are to make the location safe by erecting temporary fencing or placing barriers across the gap. Ownership of the boundary wall should then be determined. The owner will then be asked to carry out permanent repairs on the grounds of highway safety.

Further consideration. -

The situation should be monitored to ensure that the repairs are undertaken.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Damaged or Missing Walls, Screens etc', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Damaged or Missing Walls, Screens etc', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 9.0 Road Studs & Road Markings

9.1 Missing Road Studs / Inserts

Missing road stud on a principal derestricted road



Is urgent treatment required? -

A missing road stud is not an immediate Safety Hazard although the hole left is considered to be a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2, 3a & 3b	Monthly	C2	28 days	a) Highways Inspector / Rapid Response Gang to make safe or carry out a temporary / permanent repair using temporary repair material. b) In the longer term add to road stud replacement programme.
4a	6 Monthly	C2	28 days	a) Rapid Response Gang to make safe or carry out a temporary / permanent repair using temporary repair material. b) Highways Inspector to monitor situation and deal with more urgently should it become necessary. c) In the longer term add to road stud replacement programme.
4b	6 Monthly	C2	28 days	As Above

Further Considerations. -

Where the loss of road studs exceeds 25% on straight or large radius curves or 10% on bends add to road stud replacement programme.

Section 9.0 Road Studs & Road Markings

9.2 Worn Road Markings

Well-worn give way marking at the junction with a principal derestricted road.



Is urgent treatment required? -

Regulatory marking is badly faded and exceeding 30% loss at 'Give way' junction and is therefore considered a Safety Hazard.

Maintenance Actions. —

Road Hierarchy	Inspection Frequency	Defect Remediation Category	Response Time	Maintenance Actions
2, 3a & 3b	Monthly	C1/C2	24 hours/ 28 days	a) Highways Inspector / Rapid Response Gang to erect 'No Road Markings' sign immediately. b) Highways Inspector to add site to road markings recovery programme as a priority site.
4a	6 Monthly	C1/C2	24 hours/ 6 months	a) Highways Inspector / Rapid Response Gang to erect 'No Road Markings' sign immediately. b) Highways Inspector to add site to road markings recovery programme. c) Highways Inspector to monitor situation and deal with more urgently should it become necessary.
4b	6 Monthly	C1/C2	As Above	As Above

Further Considerations. -

In the case that loss of markings due to statutory undertaker reinstatement consider serving defect notice.

Section 10.0 Traffic Signs (inc. Street Lighting Columns)

10.1 Damaged / Defective / Vandalised / Obscured

(Non-Urgent)



Is urgent treatment required? -

One of the 'Warning' signs is faded and both are damaged. Motorists would have difficulty, in poor light and at night, in reading them. Although, this is not an immediate hazard, new signs are needed.

Maintenance Actions. -

In the short term the bottom sign should be realigned to the correct position. A works order should also be raised to replace the signs within one month.

Further considerations. -

Monitor in future safety inspections.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 10.0 Traffic Signs (inc. Street Lighting Columns)

10.1 Damaged / Defective / Vandalised / Obscured

A faded regulatory 30 limit sign.



Is urgent treatment required? —

In cases of defects affecting the legality of regulatory signs, they are to be dealt with as Category 1 Safety Hazards.

This is a regulatory sign and is therefore considered to be a Category 1 Safety Hazard.

Maintenance Actions. -

Highways Inspector/ Rapid Response Gang to arrange for replacement within 24 hours.

Further Considerations. —

Monitor in future safety inspections

Note. —

Due to the nature and diversity of defects, which can be classed as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

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- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 10.0 Traffic Signs (inc. Street Lighting Columns)

10.1 Damaged / Defective / Vandalised / Obscured

Obscured Give Way Sign



Is urgent treatment required? -

The advertisement sign is on the adopted highway and is obscuring an illuminated give way sign. This can be classed as an immediate safety hazard.

Maintenance Actions. -

The firm who erected the sign should be asked to remove it without delay. If there is no response it should be removed by HBC.

Further considerations. -

A letter should be sent to the developer's head office drawing his attention to this problem and asking for it not to be repeated.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

The following should be considered when deciding on the prioritisation of a defect or deficiency and the level of response required.

- The depth, surface area, or other extent of the defect.
- The location of the defect relative to highway features such as junctions and bends.
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Section 10.0 Traffic Signs (inc. Street Lighting Columns)

10.1 Damaged / Defective / Vandalised / Obscured Vandalised

Street Lighting column access door with exposed wiring



Is urgent treatment required? -

The exposed wiring is live and therefore is a Category 1 Safety Hazard.

Maintenance Actions. -

Inspector to contact the Public Lighting manager who will refer it immediately to HBC DSO as an emergency.

Further considerations. -

No further considerations.

Note. —

Due to the nature and diversity of defects, which can be classed as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', only those, which represent an immediate or imminent hazard, should be dealt with as Category 1 Safety Hazards. All other defects, identified as 'Damaged / Defective / Vandalised / Obscured Traffic Signs', that do not represent an immediate or imminent hazard are to be classified at the inspector's discretion.

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- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes and wheel tracks.
- The nature and extent of interaction with other defects.
- Forecast weather conditions, especially for freezing of surface water.

Appendix C

Technical Guidance Note (TGN)

**-HIGHWAY SAFETY
INSPECTIONS**

HIGHWAY SAFETY INSPECTIONS

1. SCOPE

This Technical Guidance Note describes the procedure involved in highway safety inspections carried out at pre-determined frequencies to detect and document dangerous defects on the County Highways Network as undertaken by the Area Inspector(s).

2. TECHNICAL GUIDANCE

- 2.1 The frequency and method of carrying out the highway safety inspection is determined using the Highway Inspection Schedule (Appendix 1). At the defined interval the Area Inspector(s) will carry out the inspection of the highway in accordance with the Highway Safety Inspection Manual and record the date of inspection.
- 2.2 Schedules of Inspection Routes and Highway Inspection Programmes are to be held on the highway management database (CONFIRM).
- 2.3 The Area Inspector(s) will carry out the inspection by the method detailed in 2.1 above, entering all 'dangerous highway' defects onto portable hand-held devices as appropriate in accordance with the guidance given in the Highway Safety Inspection Manual. Where no safety issues are apparent a 'No Defect Encountered' will also be entered for each inspected street for record completeness.
- 2.4 Copies of all Safety Inspection Reports will be held on the highway management database (CONFIRM). Inspection reports shall be processed through the highway management database.

Schedule Of Related TGN's:- (to be developed)

- 1) Drainage / Ditching
- 2) Ordering Repairs of Highway Defects
- 3) Mud on Road

- 4) Overhanging Vegetation
- 5) Builders Materials — Consent to Deposit Within the Highway.
- 6) Administration of Public Liability Insurance Claims

Hartlepool Borough Council

Rev 2/- 21/09/18

Appendix D

`Procedure for Dealing with Statutory Undertakers Defective Surface Apparatus'

NEHAUC - Agreed Working Procedures

Reference No. GN4/98

**Title: NRSWA 1991 - Procedure for Dealing with Statutory Undertakers
Defective Surface Apparatus**

**PROCEDURE FOR DEALING WITH UNDERTAKERS DEFECTIVE
SURFACE APPARATUS**

- 1) When a highway authority inspector identifies any undertakers defective surface apparatus Part A of the attached form (Form - NRSW05/98/DEF) should be completed and emailed to the relevant undertaker.
- 2) The undertaker should acknowledge receipt of the defect notice and advise on appropriate working timescales. From this point, the undertaker takes full responsibility for any third party liability claims made as a result of the defective apparatus.
- 3) If the statutory undertaker has not responded within a reasonable time frame the highway authority may take appropriate action and reclaim costs from statutory undertaker.
- 4) The defect should be repaired, where practicable, within 24 hours (depending upon on the severity and location).

NEHAUC Minutes 29.7 - 22May1998

NEHAUC - Agreed Working Procedures

Reference No. GN4/98

**Title: NRSWA 1991 - Procedure for Dealing with Statutory Undertakers
Defective Surface Apparatus**

Undertakers Defective Surface Apparatus

Part A			Details of Defect		
Highway Authority			Date		
Location					
Details of Defect					
Dangerous			Yes No		
Inspector			Fax No.		
			Tel No.		

Part B			Undertakers Acknowledgement			
Received by						
Date						
Time			Fax No.			
			Tel No.			

Part C			Notification of Repair		
Action taken					
Contact					
Date					
Time					

Form - NRSW05/98/DEF

