

Highway Safety Inspection and Repairs Plan –2018

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1. Introduction

- 1.1. This plan has been developed as a risk based approach to highway inspection and repair to meet the requirements of the 2016 Code of Practice “Well Managed Highway Infrastructure” (WMHI).
- 1.2. This plan should be used in conjunction with the Highway Safety Inspection and Repairs Policy Statement and the most up to date version of the Functional Network Hierarchy. The plan provides guidance on the way in which the defects will be identified and recorded and the timescales for subsequent repair work.
- 1.3. Stockport has approximately 945km of carriageway, and approximately 1,500km of footway that requires inspection and maintenance. A large amount of this is also promoted for use by cyclists with or without the provision of specific cycle lanes/infrastructure. It is therefore important that inspection and repair work is carried out in line with the plan below in order to ensure that public safety is maintained as far as reasonably practical and support the Council’s defence against highway related claims where the Council has acted to achieve the most effective maintenance reasonably possible.

2. Health & Safety

- 2.1. The Health and Safety at Work Act 1974 in conjunction with the Construction (Design and Management) Regulation 2015 require Highways Authorities to carryout work in a safe manner.
- 2.2. Highway Inspectors will comply with the following requirements:-
 - Lone worker policy must be followed were applicable.
 - Plan inspection routes in advance of leaving the office.

- Check with Highway operations and The Council's highway management team if there are any emergency / safety repair works taking place in the area.
- Inform colleagues of their intended whereabouts.
- Ensure they have necessary equipment.
- Ensure that their vehicle is roadworthy.
- Park legally when carrying out inspections.
- Wear a high visibility safety vest or jacket and suitable shoes while working on site. If undertaking cycled inspection cycle helmets will also be worn.
- Carry out a basic risk assessment of the highway to be inspected and act upon it to keep themselves and others safe.
- Not walk along the carriageway while inspecting the street.
- Measure actionable defects using a combination of a straight edge and tape measure.
- Inspectors must remain aware of their surroundings and approaching hazards while performing safety inspections.

3. Training

- 3.1. In line with recommendation 15 as covered in A5.3 of the WMHI and continuous professional development.
- 3.2. Inspector training will include:-
 - Induction & briefing
 - Work shadowing
 - Introduction to the Code of Practice
 - Work monitoring and follow-up
 - Team meetings/ Discussion forums
 - Staff development review
 - Appropriate accreditation for inspectors
 - Other courses of relevance to the post
 - Workshops held with the Council Insurers and legal advisers around the 2016 code and civil liability for claims.
- 3.3. Line managers will also undertake follow-up checks on new inspectors work to ensure that defects are recorded accurately and consistency of recording is achieved within the team.
- 3.4. Call handling staff will receive training to enable them to identify appropriate actions and response needs for reports from the public. This will include the response to emergencies and to ensure appropriate co-ordination between them and the emergency response teams.
- 3.5. Guidelines on inspection in line with this plan and its related policy will be issued to every new member of staff.

3.6. The inspection process is reviewed annually by the Totally Local Company (TLC) management team and The Council's highway management team with guidance issued to inspectors as necessary.

4. Methodology for Inspections

4.1. Inspections should be undertaken by the most appropriate means for the route being inspected and the level of detail needed.

4.2. *Walked Inspection*

4.3. Streets will be inspected in two halves, divided at the centre line of the carriageway.

4.4. The following will apply to walked inspections:-

- 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.

4.5. All defects will be recorded on hand-held GPS device or audio tape recorder and entered into the Confirm safety inspection management system for further action.

4.6. Walked inspections will be the normal method for the town centre and other pedestrianised areas.

4.7. *Ridden inspection*

4.8. In the case of some off-carriageway cycle routes the utilisation of inspection by bicycle may be advantageous.

4.9. The following will apply to ridden inspections:-

- Bicycle would be fitted with appropriate lights and bell and be maintained in good working order.
- Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g. snow, fog or heavy rain.
- Where possible inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.

4.10. All defects will be recorded on hand-held GPS device or audio tape recorder and entered into the Confirm safety inspection management system for further action.

4.11. Cycleways within carriageways or shared with footways will be inspected as part of the overall highway inspection.

4.12. **Vehicle Inspection**

4.13. The following will apply:-

- 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 / 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.
- Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g. snow, fog or heavy rain.
- Where possible inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.

4.14. **Safety Inspection Frequency**

4.15. The general frequencies of inspection are as follows:-

Feature	Category	Frequency of Monitoring	Reference	Method of Inspection (as appropriate)
Carriageway	Strategic Route	Monthly	2	Walked/ Driven
	Main Distributor	Monthly	3a	Walked/ Driven
	Secondary Distributor	Monthly	3b	Walked/ Driven
	Link Roads	3 monthly	4a	Walked
	Local Access Roads	yearly	4b	Walked
	Minor Roads	yearly	4b	Walked
Pedestrian	Prestige	Monthly	1a	Walked
	High Usage/ primary	Monthly	1	Walked / Driven
	Medium Usage/ secondary	3 monthly	2	Walked / Driven
	Low usage/link	6 monthly	3	Walked

	Local Access/minor	yearly	4	Walked
Cyclist (Both on and off road routes including shared paths and roads with high usage but limited or no specialist facilities)	Cycle Strategic Route	Monthly	2	Walked/ Driven/Ridden
	Cycle Main Distributor	Monthly	3a	Walked/ Driven/Ridden
	Cycle Secondary Distributor	3 monthly	4a	Walked/ Driven/Ridden
	Cycle Link Route	6 monthly	3	Walked/Ridden
	Cycle Local Access route	Yearly	4b	Walked/Ridden
	Minor Cycle Link	Yearly	4b	Walked/Ridden

Table 1

4.16. Table 1 above outlines the route hierarchy and frequency of safety inspections on the adopted highway network. The categories being as identified in the functional network hierarchy. Where appropriate the following considerations, as identified in the Greater Manchester Combined Authority Code of Practice for Highway Safety Inspection, have also been taken into account: -

Road classification	Strategic network, A,B,C, unclassified network
Traffic use	Traffic flow data, footfall data
Characteristics of street	Schools, shops, hospitals, areas of large employment located adjacent to the highway
Characteristics of adjoining network elements	Hierarchy of adjoining streets
Condition data	Walked / Video survey data, SCRIM, SCANNER, Structural Maintenance Visual Assessments (CVI or DVI), Defect numbers including minor repairs
Insurance claims data	Claim statistics recorded on street, numbers and trends derived from claims
Wider policy or operational considerations.	Enquiries, complaints data

Table 2: GMCA Code of Practice for Highway Safety Inspection

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

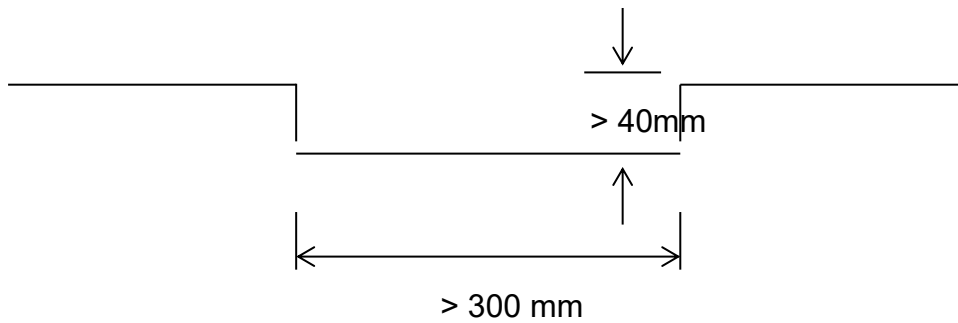
- 4.18. All routes will be inspected in line with Table 1 above.
- 4.19. Safety Inspections are designed to identify all defects with potential to create danger or serious inconvenience (these are those identified as being at investigation level) to the users of the network or the wider community. The risk of danger is assessed on site and the defect is categorised as one of the 6 priority categories and the appropriate response time is allocated based on the guidelines in Table 3.
- 4.20. Carriageway frequencies of inspection are combined with Cycleway/footway inspections to provide a cost effective service. Also, in line with the recommendation of the WMHI metalled surfaced PROW within the urban area will be inspected in line with other pedestrian / cycle routes to meet the need of the public for consistency irrespective of designation. This will not change their status as a PROW with the relevant maintenance expected for them.
- 4.21. Defects that are reported by the public will be reviewed during the safety inspection on that route or on a reactive basis by the Highway Inspector.
- Examples of reactive inspection are as follows:-
 - Obstruction of the highway
 - Carriageway or footway collapse
 - Flooding incidents
 - Missing ironwork
 - Damaged safety fencing
- 4.22. Public will be encouraged to report issues online as well as being able to do so by phone.
- 4.23. ***Additional Inspections and Exceptional Circumstances***
- 4.24. Additional inspections may be necessary in response to user or community concern. These reports will be prioritised by the Contact Centre or by Management / Senior Officer (depending on the route of the enquiry) as follows:
A, Report requires a Category 1 response and to be passed to a maintenance crew for action (refer to section 6 for category designation).
B, Report does not provide enough detail to make a decision, an inspection of the site will be carried out within 10 days and dealt with according to findings of the inspection.

5. Investigation Levels

- 5.1. Inspectors can utilise their training to apply the risk based approach to any defect which they consider may pose a danger to the public.

The minimum investigation levels for defects identified during safety inspections are as indicated below:-

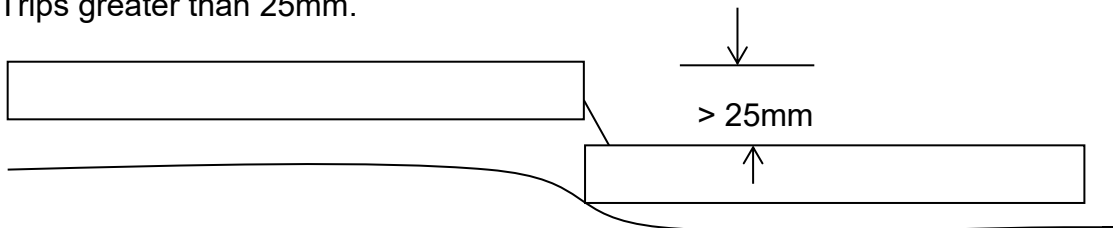
- 5.2. Carriageways - A sharp edged depression or pot hole greater in depth than 40mm and extending in any one direction greater than 300mm may constitute a safety hazard and should be responded to as outlined in this Plan.



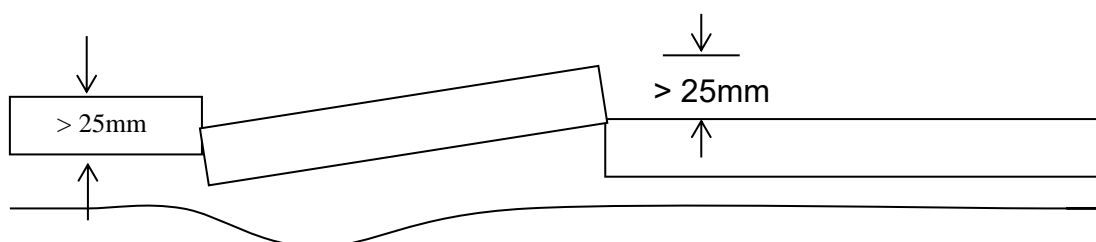
- 5.3. Footways/ formal pedestrian crossing points – Defects in line with the investigation level indicated below could create a safety hazard for pedestrians:

Trips more than 25mm
Rocking flags greater than 25mm
Rapid change of footway profile greater than 25mm and extending in plan dimension less than 600mm should be investigated in accordance with the response timescales outlined in this Plan.

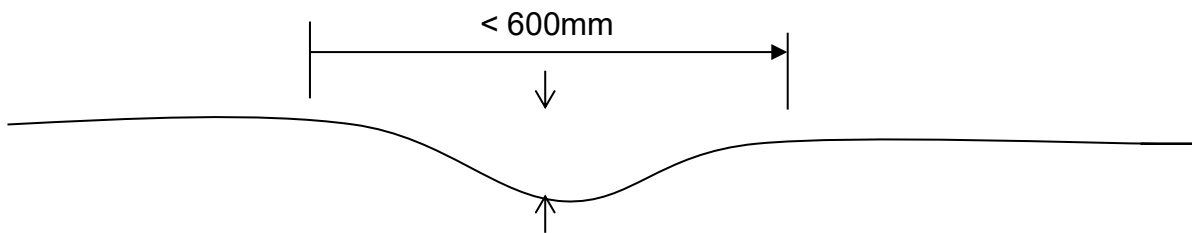
Trips greater than 25mm.



Rocking flags greater than 25mm



A depression in the footway greater than 25mm and extending in plan direction less than 600mm



- 5.4. Off-road cycle routes and formal crossing points to be treated in line with footways.
- 5.5. Kerb Defects with 50mm or over horizontal displacement are also at investigation level.
- 5.6. The danger of the defect can increase due to the placement of the defect within the highway, the level of traffic and the nature of nearby facilities.

6. **Categorising defects & Response times**

6.1. In line with the Greater Manchester Highway Inspection Framework defects that are identified as requiring action will be defined in to 2 basic categories, which are;

- **Category 1** - those that require prompt attention because they represent an immediate hazard; and
- **Category 2** - all other defects.

6.2. **Category 1**

6.3. These defects will be corrected or made safe at the time of the inspection, if reasonably practicable. In this context, making safe may constitute displaying warning notices, coning-off or fencing-off to protect the public from the defect or other suitable action. If the inspection team cannot make safe the defect at the time of inspection then they will instigate the relevant emergency call procedures to ensure appropriate resources are mobilised to make the defect safe. Precise measures will be identified by the inspector in attendance. These procedures aim to ensure initial attendance to the defect within 2 hours of the defect being identified.

6.4. **Category 2**

6.5. These defects are those which are deemed not to represent an immediate hazard and which can be repaired within longer timescales.

Priority	Response time
1	2Hr (Category 1)
2	72Hr
3	14 Days
4	28 Days (Main Roads 2,3a,3b,4a) (PROW 2 and 3) 56 Days (Local Access & Minor Roads 4b) (PROW 4)
5	Considered For Planned Maintenance
6	Review At Next Inspection

Table 3

- 6.6. We are working towards the GMHI Framework during a transitional period and progress will be monitored as part of a highway service review. The responses will be updated as appropriate in line with 11.2 of the Highway Safety Inspection and Repairs Policy Statement 2018.
- 6.7. In line with the risk based approach that the WMHI code of practice advocates the action required will be judged based on the risk matrix in 6.11.
- 6.8. The risk is calculated by multiplying likelihood of risk by consequence. The risk is then used to identify the speed with which the risk should be addressed.
- 6.9. Likelihood of Event Occurring - This is the inspector's assessment of the likelihood of the defect affecting the safe passage of users along the highway, or affecting the structural integrity of the highway. It will be based on an assessment of the highway hierarchy, the location of the defect within the highway and other relevant factors.
- 6.10. Consequence of Event Occurring - This is the impact/severity and is quantified by assessing the extent of damage likely to be caused should the risk be realised. The main consideration of impact/severity is the magnitude or dimension of the defect. However, other variables such as road speed may also affect the likely impact.
- 6.11. The risk assessment matrix detailed below will be the prime document used by the Highway Inspectors during the course of their inspections. The matrix will be used to determine the defect categorisation and response.

Likelihood of Event Occurring	Consequence of Event Occurring				
	Negligible	Low	Medium	High	Severe
Negligible	1	2	3	4	5
Very Low	2	4	6	8	10
Low	3	6	9	12	15
Medium	4	8	12	16	20
High	5	10	15	20	25
Key to Risks					
Low		Medium		High	

Priority Responses defined by colour

Risk factor	Defect Category	Priority Response
25	1	1
15 to 25	1	2
9 to 12	2	3
5 to 8	2	4
2 to 4	2	5
1	2	6

6.12. The priority given to each item identified would depend on the following:-

- 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 of the facility, such as defects in traffic lanes, dropped kerb defects, or wheel tracks. Vulnerable users such as cyclists or mobility scooter/ wheelchair user needs should be especially considered.

- The nature and extent of interaction with other defects
- Forecast weather conditions, especially potential for freezing of surface water

7. Recording Defects

7.1. Record Keeping

7.2. Permanent records of safety inspections are to be maintained from the data logged on Confirm during the inspection and of the action taken to make safe/repair the defect also made on Confirm. Records must contain the following basic information:

- Date of inspection
- Unique Street Reference Number
- Road name
- Locality
- Location of defect
- Severity / category of defect
- Defect description
- Response category based on hierarchy of route
- Works order reference and date
- Date work carried out
- Inspector name and reference
- Details of work carried out
- Photo of defect at investigation level

7.3. Other records will also need to be available from those carrying out and supervising the work of making safe and repair. In summary, the requirement is to produce all the records that demonstrate that the highway authority fulfilled its duty of care in inspecting its highways for safety reasons to the specified frequencies and that all work necessary to make the highway safe was carried out to its requirements and that of the highway user.

8. Location and type of defect

8.1. To ensure that the repair team can quickly identify the precise defect the inspector will describe it using simple and easily understood language. Jargon and technical terms will be avoided and where possible the terminology set out in this plan will be used.

8.2. To locate a defect effectively, the repair team will be given three pieces of information:

- A location along the street
- The position of the defect on the highway
- Type of defect

8.3. Location on the Street

- 8.4. Will be a combination of the following:
- House number
 - Street lamp number
 - Building name
 - Road junction
- 8.5. Where no houses exist, Street lighting columns (PL) will be used.
- 8.6. Where neither houses nor street lighting columns exist, the defect will be marked with road marking paint.
- 8.7. Building names are often difficult to locate especially on long roads, and so will be used in combination with other information such as; "Fairhaven, between PL 21 and PL 23". An x/y co-ordinate will also be provided to assist with the repair.
- 8.8. Examples are as follows:
- O/s no.17
 - Opp jct of *****
 - Jct of *****
 - Adj PL 16
- 8.9. ***Position of the defect***
- 8.10. The position on the highway of the defect that requires a repair.
- 8.11. Examples are as follows:
- In c/way channel
 - At rear of footway
 - At front of footway
 - Kerbline
 - On ped crossing
 - On verge
 - On traffic island
 - On vehicle crossing
- 8.12. ***Type of defect***
- 8.13. Descriptions of defects will include all materials which are affected by the defect.
- 8.14. Examples are as follows:
- Flags uneven, kerbs damage, sunken ironwork.
- 8.15. Where there are items of defective street furniture the particular type of furniture will be noted.

9. Temporary Repairs and Making Safe

- 9.1. All temporary repairs should remain in place, and be able to perform satisfactorily until a permanent replacement repair, or other planned works can be completed.
- 9.2. All arrangements to make safe must be robust and secure and in accordance with current standards.
- 9.3. ***Repairs***
- 9.4. Operational staff will arrange for the works identified during the inspection to be undertaken to contract deadlines which will be closely monitored by the Network and Asset Maintenance Manager. The repairs will be undertaken by dedicated mobile repair teams.

10. Statutory Undertakers

- 10.1. ***Defective apparatus***
 - 10.2. Defects of statutory utilities apparatus will be reported to the utility to be dealt with under the requirements of the New Road & Streetworks Act 1991 (Section 81) and associated code of practice. Where necessary actions to make the site safe, while the statutory utilities respond, may be undertaken by the Council.
- 10.3. ***Defective reinstatements***
- 10.4. Defective reinstatement belonging to a Statutory Undertaker will be recorded, stating where possible the Undertaker concerned by the Highway Inspector. The Council will serve the Undertaker with a defect notice requiring them to take remedial action. Where necessary actions to make the site safe, while the statutory utilities respond, may be undertaken by the Council.
- 10.5. ***Unknown parties***
- 10.6. Defects identified where the owner is unknown may be recorded and action taken to make safe the defect where this is considered necessary. In these cases investigations will be undertaken to locate the responsible party and costs of work recovered where appropriate. This is a discretionary power and so not all issues will be identified and addressed.