

Thurrock Council
HIGHWAYS MAINTENANCE STRATEGY
OCTOBER 2018

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PART A – THE SAFETY INSPECTION REGIME

1. Introduction

1.1. What is a Safety Inspection?

Thurrock Council (Thurrock) undertakes a system of regular highway safety inspections of all its adopted highways in order to comply with its statutory duty to maintain highways in accordance with Section 41 of the Highways Act 1980, and to provide a special defence under Section 58 of the Act (see Section 1.2.1). This shows evidence that there is an efficient and effective highway inspection regime and that thorough and detailed inspection records are kept plus that there is a reasonable system for repair and maintenance.

Safety inspections are designed to identify all defects likely to create a danger or serious issue to users of the network or the wider community. The risk of danger is identified by a highways inspector on site, and the defect categorised in terms of an appropriate priority response. The establishment of an effective regime of inspection, assessment and recording is a key component of highway maintenance. This regime also provides basic condition data, feeding into a broader informed maintenance programme.

An effective safety inspection regime has clearly defined:

- Inspection frequencies;
- Items to be recorded;
- Degree of defect;
- Assessment of risk;
- Nature of response.

These will be covered in turn in the following sections.

1.2. Links to Code of Practice and Guidance

In preparing the safety inspection regime Thurrock has given due consideration to the following documents;

- Well Managed Highway Infrastructure: A Code of Practice (UKRLG 2016)
- Well Managed Highway Liability and Risk Guidance (IHE 2017)

In developing the regime due consideration has been given to the Highways Act 1980.

Thurrock is working towards an asset management framework, within which the Safety Inspection Regime sits.



2. Competency and Training (General)

2.1. Ensuring Appropriate Competencies and Training

Thurrock will ensure the staff engaged in the safety inspection regime are suitably competent, experienced and trained to undertake their role. The IHE Well Managed Highway Liability Risk Guidance (March 2017) provides an outline of training suitable for the officers engaged in the regime, Thurrock specific approach to competencies and training is defined in Part B, 1.

Only officers with the appropriate training, competency and experience will be engaged in the safety inspection activity.

3. Risk Based Approach (General)

3.1. Adoption of a Risk Based Approach

Thurrock understand risk is based on the usage of the network and location of the defect. For example, a defect under a bench does not pose the same risk as a defect in the wheel path of a bicycle on the carriageway.

Officers will be trained, competent and experienced in understanding the risk based approach of the authority with the primary driver of reasonably ensuring a safe highway.

This may mean different responses to similar defects are given where the risk associated with the location differs.

Thurrock will use investigatory levels to identify when a defect may pose a risk. Then a workflow approach will be adopted to decide if that defect needs to be repaired and on what time scale. Defect size, management hierarchy and location will all inform part of the decision process.

4. Management Hierarchy

4.1. What is a Management Hierarchy?

Functionality factors are used to categorise network sections based on usage. By considering usage, or functionality, at the hierarchy development stage, risk becomes ingrained into subsequent decision making such as safety inspection frequencies and maintenance strategies. The functionality factors used in determining the hierarchy are;

- Hospitals
- Schools
- HGV Routes
- Industrial Estates
- Areas of high footfall
- Insurance claim trends

4.2. Basis for the Management Hierarchy

The management hierarchy will be used as the base point for multiple activities that are key recommendations of the Code, they are not exclusive to:

- Safety inspection regimes;
- Defect investigatory levels;
- Maintenance approaches;
- Treatment options.

4.3. Thurrock Council's Management Hierarchy

Thurrock Council uses a bespoke management hierarchy as opposed to the UKPMS standard to meet the unique needs of the borough. Standard hierarchies however are retained for the purpose of national indicator reporting.

Carriageway Hierarchy

Description	Category
Strategic Routes	C1
Main Bus Routes	C2
All other routes	C3

Footway Hierarchy

Description	Category
Town Centres	F1
Small retail hubs	F2
All other footways	F3

Cycleway Hierarchy

Description	Category
On carriageway	As carriageway
On footway	As footway
Segregated	YT1

4.4. Maintaining the Management Hierarchy

The Management Hierarchy should be reviewed biennially. Where new developments have taken place then the hierarchy should be reconsidered.

All stakeholders are invited to recommend a change in Management Hierarchy due to change in function to support the activity influenced by the Management Hierarchy

5. Safety Inspections

5.1. Inspection Frequency

From the Management Hierarchy we understand how the asset is used and the risk presented by the identification of the hierarchy level. This is then translated into the frequency of inspection for a homogenous hierarchy level.

5.1.1. Carriageways

The frequency of safety inspections on carriageways shall be carried out in accordance with Table 1 below.

Table 1 Minimum numbers of safety inspections on carriageways

Description		Category	Inspections per year	Length (km)
Level 1	Strategic routes	C1	6	271
	Main bus routes	C2	6	
Level 2	All other routes	C3	1	502

5.1.2. Footways

The frequency of safety inspections on footways shall be carried out in accordance with Table 2 below

Table 2 Minimum numbers of safety inspections on footways

Description		Category	Inspections per year	Length (km)
Town Centres		F1	6	24
Key shops & parades		F2	6	
All other footways		F3	1	519

5.1.3. Cycleways / core cycle routes

The frequency of safety inspections on cycleways shall be carried out in accordance with Table 3 below.

Table 3 Minimum frequency of safety inspections on cycleways

Description	Category	Inspections per year
On carriageway		With associated carriageways
On footway		With associated footways
Segregated	YT1	1

5.1.4. Additional Inspections

For Tables 1 to 3, additional safety inspections shall be carried out in response to:

- Reports or complaints from Essex Police and other organisations;
- Community concern, namely reports or complaints from members of the public/member enquiries;
- Minor incidents;
- Extreme weather conditions.

All claims, incident data and Road Traffic Accident data should be used to aid the decision-making process on inspection frequencies to improve targeting of resources.

Furthermore, inspection frequencies may be increased on certain routes if there is a demonstrable need. This could apply to the following types of routes:

- Access routes (carriageway, cycle routes and footways) to hospitals/ schools;
- Winter service routes;
- Bus routes under route specific Quality Bus Partnerships or similar partnership agreements.

5.2. Investigatory Levels

Highway defects will be managed on the basis of risk. Any potential defect for which the investigatory level is reached or exceeded is to be identified as a risk that needs to be investigated further. The list of highway inventory to be observed for possible defects and the defect investigatory levels are shown in tables 4-13. Appendix A provides the necessary asset risk assessments.

Table 4 Carriageway (including on/over structures) investigatory levels

Item No.	Defect Description	Investigatory Level(s)
1	Pothole / spiralling	50mm vertical face depth AND 75mm across in any horizontal direction
2	Faded / worn road markings	Approximately less than 70% of surface area remains effective
3	Missing road studs and hole left	Defect present or not

Table 5 Cycle route (including on/over structures) investigatory levels

Item No.	Defect Description	Investigatory Level(s)
4	Trip / pothole / sunken cover (separate from carriageway)	25mm vertical face depth AND 75mm across in any horizontal direction
	Trip / pothole / sunken cover (in carriageway)	50mm vertical face depth AND 75mm across in any horizontal direction

Table 6 Footways, kerb and verge (including on/over structures) investigatory levels

Item No.	Defect Description	Investigatory Level(s)
5	Footway trip / pothole / sunken cover	25mm vertical face depth AND 75mm across in any horizontal direction
6	Misaligned / chipped / cracked kerbs	50mm horizontally
	Loose / rocking kerbs	25mm vertically
7	Sunken verge area adjacent to / parallel with carriageway edge (no footway present)	Depth 150mm
	Sunken verge area adjacent to / parallel with footway edge (>1.5m footway width)	Depth 150mm
	Sunken area adjacent to and running parallel with footway edge (<=1.5m footway width)	Depth 100mm

Table 7 Ironwork (including manholes, catchpits, gullies, kerb outlets & utility cover) investigatory levels

Item No.	Defect Description	Investigatory Level(s)
8	Gaps within framework (other than designed by manufacturer)	50mm carriageway 25mm footway 25mm cycleway
	Level difference	50mm carriageway 25mm footway 25mm cycleway
	Cracked / broken covers	Defect present or not
	Worn / polished covers	Defect present or not
	Missing covers	Defect present or not

Table 8 Flooding (including structures)

Item No.	Defect Description	Investigatory Level(s)
9	Standing water 2.5 hours after rainfall ceased, 1.5m from edge of carriageway	Defect present or not
	Substantial running water across carriageway likely to adversely affect the safety of users	Defect present or not
	Substantial running water across footway likely to adversely affect the safety of users	Defect present or not
	Property inundation	Defect present or not

Table 9 Drainage assets (culverts, highway ditches, filter drains, grips, gullies and piped grips / kerb inlets)

Item No.	Defect Description	Investigatory Level(s)
10	Substantial standing water adjacent to the edge of carriageway likely to adversely affect the safety of users	Defect present or not

Table 10 Street furniture, street lighting & traffic signals

Item No.	Defect Description	Investigatory Level(s)
11	Damaged or misaligned item causing a hazard	Defect present or not
	Missing item causing hazard	Defect present or not
	Lights / signals not operating	Defect present or not
	Signals pointing the wrong way	Defect present or not
	Signal lamp failure	Defect present or not
	Exposed wiring or damage which could result in exposed cables	Defect present or not
	Missing door to lamp column	Defect present or not
	Item obscured / dirty / faded	Defect present or not

Table 11 Safety fences & barriers

Item No.	Defect Description	Investigatory Level(s)
12	Item damaged or misaligned causing a hazard	Defect present or not
	Unstable item or section	Defect present or not

Table 12 Hedges & trees

Item No.	Defect Description	Investigatory Level(s)
13	Unstable tree causing danger of collapse onto highway	Defect present or not
	Overhanging tree leading to loss of height clearance over carriageway, footway or cycleway	<2.1m over footways <2.4m over cycleways <5.1m over carriageways

Table 13 General risks & hazards

Item No.	Defect Description	Investigatory Level(s)
14	Street furniture missing / damaged likely to cause a hazard	Defect present or not
	Oil / debris / mud / stones & gravel likely to cause a hazard	Defect present or not
	Obstruction in the highway	Defect present or not
	Obstructed sight lines	Defect present or not
	Ramps in carriageway to aid vehicular movement	Defect present or not
	Footway damage caused by vehicular access where no vehicular crossing	Defect present or not
	Scaffolding likely to cause a hazard	Defect present or not
	Skips likely to cause a hazard	Defect present or not
	Unprotected building materials on the highway	Defect present or not
15	Other dangers to the public (anything else considered dangerous)	Dangerous item present or not

5.3. Defect Response Times

Once a defect has been identified and recorded, the risk it presents needs to be established. This document is for guidance only and the risks contained in the register are based on the highest assumed risk attributable to the type of defect, position and assessed type of usage. Local knowledge could assess the risk differently. The position of the defect on the carriageway is also of significance and will contribute to the assessment.

Risk Factor Category	Response
Priority 1	Make safe or repair 2 hours, but not greater than 24 hours
Priority 2	Repair within 5 days (unless a pothole defect 50mm or then it is classed as 72 hour repairs)
Priority 3	Repair within 28 days
Priority 4	Repair within 90 days

6. Defect Reporting from the Public

6.1. Methods of Reporting

The general public can report defects to the council in a number of ways including, telephone, email, via councillors or the 'report it' feature on the council website.

The information regarding defects reported by the public is processed through the council's customer service system. This system, and how the reports are dealt with, is described in Part B, Section 4.

7. Managing Change (General)

7.1. Triggers for Updates

The safety inspection regime should be reviewed biennially. Interim updates to the safety inspection regime may be triggered if:

- The total number of defects recorded increases significantly, an increase in the frequency of inspection needs to be considered.
- Repudiation levels fall significantly, in which case the consistency and training of officers needs to be considered alongside a full review of the process.
- The usage of the network changes significantly, in which case a review of the hierarchy should be considered.
- Legislation changes or precedent is set through case law, in which case the process should be reviewed.

7.2. Data Driven Decisions

As stated in section 7.1 decisions are made using a variety of data sources. As part of the review/update process these data sources should be analysed as necessary amongst other sources of new/more accurate data.

For example, upon analysis of claims data it was determined that 39% of claims between April 2015 and August 2018 were made on modular footways, despite the network composition being only 13% modular paving. This analysis has driven the way we work and make decisions by replacing modular footways in non-prestige areas with bituminous materials.

7.3. How Updates are Managed

A biennial review of the overall process will be undertaken and recorded. This will enable all officers involved in the management of maintenance of the highway network to review information and update the process.

The information to assess will include;

- Claims – volume, type, asset, repudiation
- Defects – volume, type, asset, expenditure
- Management Hierarchy parameters
- Inspector competency (audit of inspectors)

A biennial review of the competencies and training requirements of staff will be conducted. This may be done more frequently where notable change has occurred or performance needs addressing.

PART B – IMPLEMENTING THE SAFETY INSPECTION REGIME

1. Competency and Training (Specific)

1.1. Competencies

Thurrock's staff involved in maintaining a safe highway are suitably trained and competent. The following table demonstrates the competencies and training that are required. The source is the IHE Well Managed Highway Liability Risk guidance (March 2017) Part B. The table below details the training Thurrock undertake to achieve this.

Policy and Decision Makers	Allocation of resources and management of corporate risk	Understanding duty to maintain Legal and financial liabilities from the duty
Highway Asset Managers	Managing the asset with consideration of risk, liability and financial elements	Application of strategic risk management, ISO31000 Implementation of risk based approach and how it might be challenged in court Legal and financial liabilities from the risk Role of claims in informing risk Forward planning to enable mitigation of risk and longevity of assets
Highway Engineers	To develop appropriate policies and procedures to support a risk based approach	Significant experience in managing and maintaining Highway Assets Knowledge and experience in implementing and managing a risk based approach to Highway Assets Highway Law and Administration Measurement and materials recognition
Highway Inspectors	To undertake inspections of the highway asset to ensure they are safe	Knowledge of the authority's risk based approach Well Maintained Roads – Code of Practice for Highway Maintenance Local inspection policy procedures and guidelines Safety at Street and Road Works: A code of practice Defect recognition Claims investigation Court proceedings Tree condition awareness
Customer Service Advisors	Routinely receiving calls from the public to report a highway defect	Training requirements of the call centre

1.2. Competence

The competence required to deliver the work will be retained and developed through:

- Structured learning / classroom based with approved supplier
- Experience of doing the role
- Learning from peers through Continuing Professional Development

Thurrock will undertake an annual refresher session of the Safety Inspectors to ensure consistency of inspections. This update will also provide a point in time to optimise the inspection process, adapt to any lessons learned and ensure continuous improvement.

Annual staff appraisals will ensure training is appropriate and up to date.

2. Inspectors Duties

2.1. Inspectors Duties

List of duties, not exhaustive

- To ensure scheduled and ad-hoc inspections of the highway are carried out, recorded and defects processed in accordance with Highways Inspection Regime.
- To ensure inspections of new vehicle crossing applications, statutory licences and road openings in accordance with Council Policy.
- To contribute to the management of Thurrock highways asset and traffic network management as part of the integrated highways team
- To support the discharge of Thurrock statutory obligations under the Highways 1980 Act and Traffic Management 2004 Act

3. Conducting Inspections

3.1. Method of Inspection

Highway safety inspections comprise of: -

Walked Inspections - Walked visual surface assessments carried out on both the carriageway and the adjacent footways. If present adopted footpaths and cycle tracks will be inspected at the same time. Both sides of the road will be walked where there is a footway.

Driven Inspections – Driven visual surface assessments shall be carried out at appropriate safe speed.

3.2. When to Inspect

Frequency of inspections is based on the management hierarchy of the road section. The inspection due date is automatically calculated based on the frequency of inspection for a given road and the last inspection date. Symology® will automatically assign the inspection due dates for each road section and footpath depending on its inspection frequency.

3.3. Items to be Inspected

- Kerbs
- Edgings
- Channels
- Verge
- Culverts
- Highway Ditches
- Filter Drains
- Grips
- Gullies
- Piped grips and Kerb inlets
- Road markings
- Road Studs
- Signs
- Bollards
- Illuminated signs
- Pedestrian crossing lights
- Lighting columns
- Wall mounted street lighting
- All other lighting units
- Traffic signals
- Traffic signal installation
- Traffic signal furniture
- Fences and barriers
- Pedestrian guardrails
- Safety fencing
- Boundary walls and fences
- Hedges and Trees

Other highway assets such as street furniture and third-party assets on the highway.

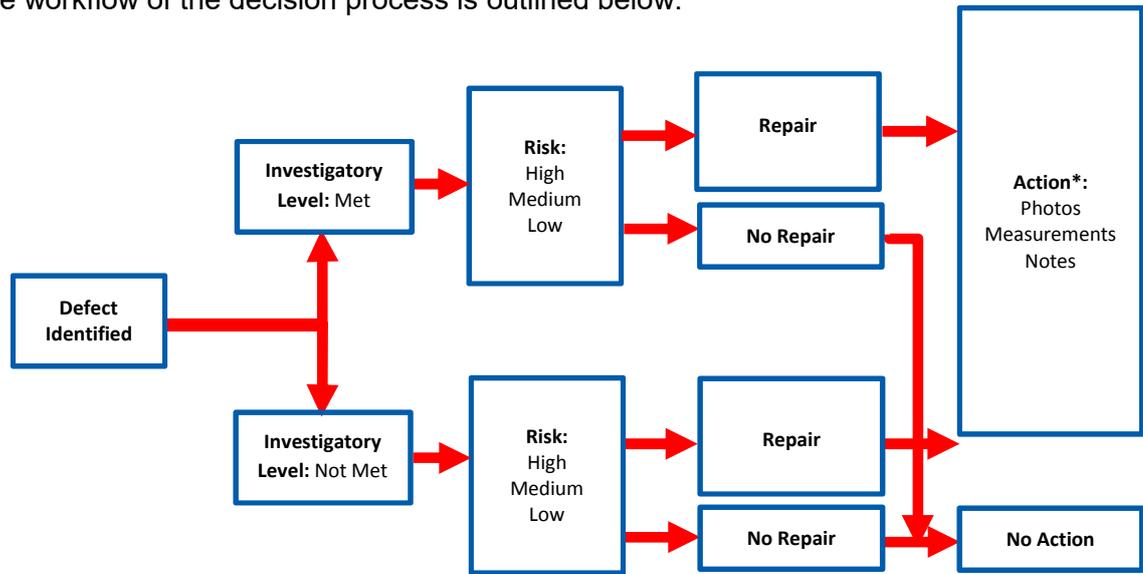
3.4. Inspections in passing

Were a defect is noted in passing it will follow the same process as set out in 4.0 & 4.1 Customer Queries.

3.5. Risk Based Approach

Deciding if a defect requires treatment is based on the safety of the travelling public whether by vehicle, on foot, bike, or other mode of transport. Considering risk will, as far as is reasonably practical, follow the workflow, risk matrices below. But in some circumstances a defect identified may require more urgent attention or, if risk is deemed low, may be assessed for future treatment – in all cases of departure, suitable records must be made through notes, photographs or other supporting information.

The workflow of the decision process is outlined below.



*note: where deemed unsafe to take photos or accurate measurements on a driven inspection an estimated depth assessment will be undertaken.

The level of risk is the relationship between likelihood and severity. Where a defect is meets investigatory level through the risk process the following tables will determine the appropriate response for that defect. In all cases the response to the defect will be determined by the Safety Inspector dependent on location and risk to the public.

The response times will be guided as follows, the safety inspector can select a response time that better suits the defect if required.

Impact	Probability			
	Very low (1)	Low (2)	Medium (3)	High (4)
Little or negligible (1)	1	2	3	4
Minor or low (2)	2	4	6	8
Noticeable (3)	3	6	9	12
High (4)	4	8	12	16
Response category	P4	P3	P2	P1

Priority	Response Time	Definition	Notes
P1	2-hour response	Attend to and repair within 2 hours, or make safe within the hour and complete the works within 24 hours.	Defects must be phoned in on identification and then be backed up by a retrospective task order stating confirmation of the telephone call, date and time it was reported.
5P2	5-day response	Attend to and repair within 5 days (unless a pothole defect 50mm or then it is classed as 72 hour repairs)	
P3	28-day response	Attend to and repair within 28 days.	
P4	Works programme	Attend to and repair within 90 days or next planned maintenance programme	

3.6. Measuring, Marking & Photographs

3.6.1. Measuring

Where a defect is identified the area will be measured. The area will be measured appropriately, with consideration for personal safety, to provide sufficient information for the works to be efficiently executed.

3.6.2. Marking

Defects should be clearly marked to enable the highway Maintenance Team to identify the area to be rectified. If carriageways could not be marked due to heavy traffic, the inspectors should mark the start and end of the defect with arrows on the kerb.

3.6.3. Photographs

Sufficient photographs of each defective area should be taken when feasible and safe. The photographs should provide sufficient information to highlight the scale of the defect and its location.

Photographs and marking up of defects will not be undertaken where it is deemed to be unsafe to do so.

3.7. Raising Defect Notifications

Defect notifications will be raised on Symology® using the electronic hand-held devices as soon as a defect is identified. All the necessary fields on the defect notification sheet within the hand-held should be completed outlining the defect identified, its location, remedial work necessary. A brief description of the defect identified should also be included in the respective field. Suitable photographs, (Part A, 3.5), will also be recorded.

3.8. Works Ordering

Works orders are issued every week day in batches by Highways Engineers to allow review and vetting. Only the P1 responses are issued straightaway.

The response time is triggered by the placement of the order to the Contractor.

3.9. Other Inspections

In addition to the safety inspections listed above Thurrock will undertake service inspections of the carriageway and footway assets in line with national guidance. The surveys undertaken are as follows:

- SCANNER (Surface Condition Assessment of the National Network of Roads) for carriageways on the Classified Road Network [A, B & C]
- CVI (Course Visual Inspections) for carriageway on the unclassified Road Network [U]
- FNS (Footway Network Survey) for all footways
- SCRIM (Sideways Coefficient Routine Inspection Machine) Survey for carriageways classified as A Roads

During the visual inspections (CVI & FNS); albeit annual inspections; the inspectors will also report any hazards on the highway.

3.10. NRSWA Section 81 Defects

As the inspectors carrying out their inspections they may discover statutory utility defects such as; trips, polished covers, or cracked, broken, missing or damaged covers. Inspectors are to log these issues as external defects and call through immediately to the relevant utility company with an urgent response request. The process of raising defects to utility undertakers is further described in Appendix A

3.11. Assets Beyond Reactive Repair

Defects collected within a week prior to planned works being carried out will not be instructed and will be included as part of the planned works unless they pose an immediate danger. Defects not falling within this time threshold will be repaired as per the timescales listed in this document.

3.12. Road Works During Inspections

Thurrock will set out a Detailed Local Operating Agreements (DLOA), as presented in Appendix B, highlighting arrangements for the safety inspection regime for sites where long-term roadworks for road alterations are being carried out by a third party. Thurrock may choose one of the following arrangements: -

- Thurrock to continue inspecting and rectifying defects as per this document
- Thurrock to continue to inspect but to pass rectification to the maintenance team on site
- Thurrock to hand over the inspection and defect rectification to the third party

Where short-term road works impede inspections, these will be deferred to the next available date

3.13. Bad Weather

During bad weather such as snow days and heavy rainfall, it is not possible to inspect the carriageways and footways. Therefore, on such days, the inspectors are to record the fact that they are unable to inspect on their electronic hand-held device using the “unable to inspect” defect type. This should also be accompanied by the reason why in the description field. Roads which cannot be inspected due to bad weather, must be inspected as soon as the weather permits, in addition to the other inspections that are due.

3.14. Recharging Third Parties

In some instances, inspectors might discover defects that are either on third party property or have been caused by third parties (e.g. damaged footway due to third party refuse skips). In such cases, the inspectors should raise a defect notification on Symology® highlighting the identified defect and notify the council’s Insurance team of the defect notification relating to third party damages through an email. This will then be followed-up by the relevant team to reclaim any rectification costs incurred by the council.

For any other Road Traffic Collision (RTC) damage the Highways Recovery Process in Appendix C should be followed,

A flowchart portraying the process for the highway inspectors is shown in Appendix C.

4. Customer Queries

4.1. Investigating Customer Services Queries

Thurrock receives enquiries by members of the public in many forms including telephone, email, via councillors or the web site Highways Report It app.

All enquiries related to the Highway are logged into Symology®. When a highway-related enquiry meets the conditions/scenarios highlighted in Part A, 5.2 - Investigatory Levels.

The enquiries not classified as emergency are assigned to the highway inspector for the area in which the enquiry was raised in and are inspected by end of the next working day.

4.2. Emergency Out-of-Hours

Between the hours of 5pm and 8am Monday to Friday, all day Saturday and Sunday including bank holidays, Council’s appointed Out-of-Hours call handlers, will handle these calls. In the event that an urgent enquiry is rang through the Contact Centre during out-of-hours, the Out-of-Hours call handlers will attend to these enquiries and will action as necessary. Out-of-Hours call outs with the update are then reported into the Highway Team on the next working day for either follow up action and/or respective works ticket.

5. Audit

5.1. Internal Audit Process

To ensure consistency in highway safety inspections and customer enquiries, regular auditing by the Senior Inspector will be carried out. This will cross-check uniformity in the type of defects that are being raised and the way they are reported between the various inspectors.

Thurrock Council will also carry out an annual “Inspections Workshop” where all inspectors will go through a set of images collected over the previous years and work together through their assessment with the aim of achieving a common approach to risk rating.

6. Changes in Network Use

6.1. Identifying Need for Change

The Highways Team will periodically liaise with Thurrock council’s Planning Team to assess any future changes to the network especially with regards to third party developments. This will in turn inform the need to change network hierarchies and inspection regimes once the newly built highway becomes adopted.

6.2. Making Changes

Any changes to the network affecting its hierarchy and inspection regimes set in this document will be carried out when new highway is adopted. This document will be checked (and amended as appropriate) on an annual basis in March to confirm that it still meets Thurrock’s requirements.

Appendices

Appendix A – Risk Assessments

RISK ASSESSMENT		Date: October 2018	
CARRIAGEWAYS – DEFECT INVESTIGATORY LEVEL		Prepared By: xx	
		Approved By: xx	
Scope: To determine the appropriate investigatory level for carriageway defects.			
Supporting Information:			
	2015	2016	2017
Defect (No.)			
Claims (No.)			
Repudiation (%)			
<p>On analysis of the number of defects, claims and repudiation rates Thurrock are confident that there is no increased risk to the public in our current approach. All metrics have remained stable over the last 3 years.</p> <p>Therefore the risk level remains constant in informing the response times, investigatory levels and inspection frequency.</p>			
Consistency with neighbouring highway authorities:			
<p>Thurrock has liaised with Essex and similar unitary authorities; Southend-on-Sea and Medway. This has helped provide an understanding of the approaches adopted by neighbouring and similar highway authorities</p> <p>Response times xx.</p> <p>Investigatory Level xx.</p> <p>Inspection Frequency xx</p>			
Thurrock Action:			
<p>Investigatory Level 50mm will be the investigatory level at which point the Inspector decides the course of action based on risk of the defect. Defects that pose a risk but do not meet the investigatory levels should also be actioned.</p> <p>Inspection Frequency</p> <p>Hierarchy Level 1 Every 2 Months</p> <p>Hierarchy Level 2 Twice a year</p> <p>Hierarchy Level 3 Annually</p> <p style="text-align: center;">Thurrock action will be reviewed on an biennial basis</p>			

RISK ASSESSMENT		Date: October 2018							
FOOTWAYS – DEFECT INVESTIGATORY LEVEL		Prepared By: xx Approved By: xx							
Scope: To determine the appropriate investigatory level for footway defects.									
Supporting Information:									
	2015	2016	2017						
Defect (No.)									
Claims (No.)	20	22	11						
Repudiation (%)	85%	54%	9% (9 open)						
<p>On analysis of the number of defects, claims and repudiation rates Thurrock are confident that there is no increased risk to the public in our current approach. Claims volume has been reducing over the last 3 years.</p> <p>Therefore the risk level remains constant in informing the response times, investigatory levels and inspection frequency.</p>									
Consistency with neighbouring highway authorities:									
<p>Thurrock has liaised with Essex and similar unitary authorities; Southend-on-Sea and Medway. This has helped provide an understanding of the approaches adopted by neighbouring and similar highway authorities</p> <p>Response times xx.</p> <p>Investigatory Level xx.</p> <p>Inspection Frequency xx</p>									
Thurrock Action:									
<p>Investigatory Level 25mm will be the investigatory level at which point the Inspector decides the course of action based on risk of the defect. Defects that pose a risk but do not meet the investigatory levels should also be actioned.</p> <p>Inspection Frequency</p> <table> <tr> <td>Hierarchy 1</td> <td>Every 2 months</td> </tr> <tr> <td>Hierarchy 2</td> <td>Twice a year</td> </tr> <tr> <td>Hierarchy 3&4</td> <td>Annually</td> </tr> </table> <p style="text-align: center;">Thurrock action will be reviewed on an annual basis</p>				Hierarchy 1	Every 2 months	Hierarchy 2	Twice a year	Hierarchy 3&4	Annually
Hierarchy 1	Every 2 months								
Hierarchy 2	Twice a year								
Hierarchy 3&4	Annually								

<p>RISK ASSESSMENT CYCLEWAYS – DEFECT INVESTIGATORY LEVEL</p>	<p>Date: October 2018 Prepared By: xx Approved By: xx</p>																
<p>Scope: To determine the appropriate investigatory level for cycleway defects.</p>																	
<p>Supporting Information:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 15%;">2015</th> <th style="width: 15%;">2016</th> <th style="width: 15%;">2017</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Defect (No.)</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left;">Claims (No.)</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left;">Repudiation (%)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>On analysis of the number of defects, claims and repudiation rates Thurrock are confident that there is no increased risk to the public in our current approach. All metrics have remained stable over the last 3 years.</p> <p>Therefore the risk level remains constant in informing the response times, investigatory levels and inspection frequency.</p>			2015	2016	2017	Defect (No.)				Claims (No.)				Repudiation (%)			
	2015	2016	2017														
Defect (No.)																	
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<p>Thurrock Action:</p> <p>Investigatory Level 25mm will be the investigatory level at which point the Inspector decides the course of action based on risk of the defect. Defects that pose a risk but do not meet the investigatory levels should also be actioned.</p> <p>Inspection Frequency</p> <p style="margin-left: 40px;">Hierarchy C Annually</p> <p style="text-align: center;">Thurrock’s action will be reviewed on an annual basis</p>																	

Appendix A – NRSWA Section 81 Defects

Purpose

This document describes the process for Thurrock Council to undertake inspections to ensure any Undertakers that have apparatus in the street shall maintain said apparatus appropriately. This shall be done to the reasonable satisfaction of Thurrock as Highway Authority, and any other authority with regards to land, structure or apparatus of theirs. The safety and convenience of persons using the street, the structure of the street, and the integrity of apparatus of the authority in the street shall not be compromised in any way. This is in accordance with [New Roads and Street Works Act, Section 81](#)

Background / Scope

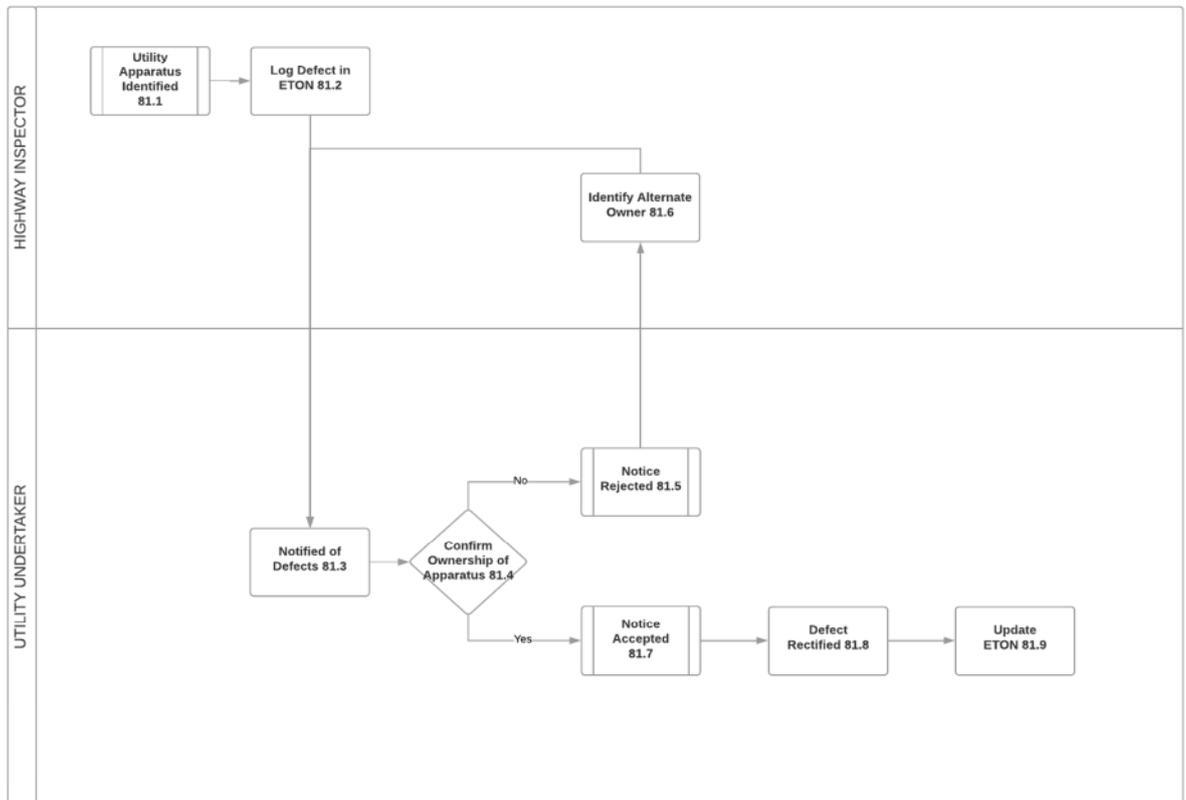
By reference to [Section 81 of the New Roads and Street Works Act 1991](#) (NRSWA), statutory Undertakers have a duty to maintain any apparatus in the street and they shall afford reasonable facilities to enable street authorities to ascertain if it is suitably maintained. If an Undertaker fails to afford such facilities, then the street authority, or any other authority with regards to land, structure or apparatus of theirs, may execute works to enable them to inspect the apparatus, including breaking up or opening of the road.

If the Undertaker fails to maintain the apparatus to the satisfaction of the relevant authorities, then they may undertake any emergency works needed as a consequence of the failure. Any works carried out to facilitate the inspection or emergency works as a consequence of a failure to maintain the apparatus shall be undertaken by a relevant authority as if they were executed by the Undertaker and the Undertaker shall indemnify the authority in respect of the costs reasonably incurred by them in executing the works.

For this purpose, maintenance means carrying out necessary works to keep the apparatus in efficient working condition (including periodic renewal where appropriate); and includes works rendered necessary by other works in the street, other than major highway, bridge or transport works.

Procedure Flow Diagram

THURROCK COUNCIL - SECTION 81



Procedure

81.1 – Utility Apparatus Identified

Defects can be identified via various means, either through the Highway Inspections, Service Inspections, or Customer Enquiries who have logged the defect on the Symology®. Once a defect is reported the owner (Utility Undertaker) of the apparatus is identified.

81.2 – Log Defects in ETON

The defect is logged on ETON system. The defect is raised on ETON as a Section 81 notice including details of the location, the apparatus owner and any photographs.

The defect could be classified as a high priority defect or a low priority defect. High priority defect must be made safe at the very least by the Undertaker within 2 hours of them being notified.

81.3 – Notified of Defect

The Undertaker is notified of the defect to their asset via ETON.

81.4 – Confirm Ownership of Apparatus

The Undertaker either accepts or rejects the Section 81 notice based on if the apparatus is theirs or not.

If the apparatus belongs to the Undertaker, please refer to process **81.7**.

If the apparatus does not belong to the Undertaker, please refer to process **81.5**.

81.5 – Notice Rejected

If the apparatus does not belong to the Undertaker, the Section 81 notice is rejected on EToN for the notice to be issued to a different Utility Undertaker

81.6 – Identify Alternate Owner

Thurrock council identifies an alternative owner of the apparatus and updates EToN accordingly.

81.7 – Notice Accepted

If the apparatus belongs to the Undertaker, the Section 81 notice is accepted on EToN.

81.8 – Defect Rectified

The defect is rectified by the Undertaker.

81.9 – Update ETON

Once the defect is rectified, the Undertaker updates EToN that maintenance works are complete.

Appendix B – Road Works During Inspections (Long-Term Works)

Purpose

The purpose of this procedure is to document roles and responsibilities for the performance of the statutory duty to maintain the highway when construction work is undertaken by any Contractor other than the routine maintenance Contractor.

Background / Scope

When construction work on the highway is undertaken by Contractors other than Thurrock's routine Maintenance Team it becomes important to clarify the respective roles and responsibilities of the various parties.

The New Roads and Streets Works Act 1991 ([Section 65](#)) requires any undertaker executing works on the highway to ensure the areas affected are adequately guarded and lit and that sufficient traffic signs are placed and maintained for guidance or direction of persons using the street.

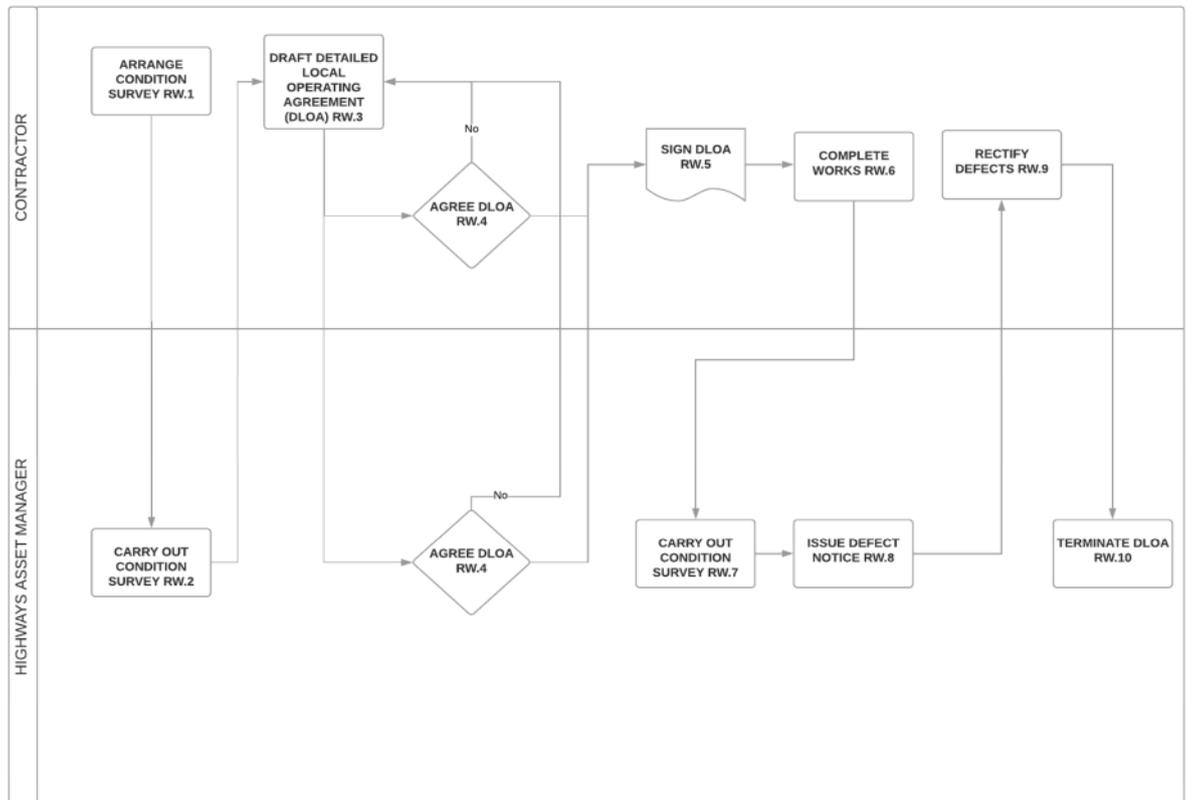
Upon completion of works, it is the duty of the undertaker to reinstate the street, either permanent or interim, to the required specification of materials to be used and the standards of workmanship to be observed, as stated by [Section 70](#) and [Section 71](#) of the Act. The highway authority may carry out inspections of the reinstatement works. If it was discovered that the undertaker has failed to comply with his duties with respect to reinstatement, he shall bear the cost of any reinstatement and any further inspections by the highway authority in accordance with [Section 72](#).

The responsibilities of maintaining the highway within the site must be clearly defined in the form of a Detailed Local Operating Agreement (DLOA) and agreed by the main stakeholders.

The hand back of the completed scheme must be formally completed and again agreed by the main stakeholders, a list of which can be found within the council's Highways Communication Strategy.

Procedure Flow Diagram

THURROCK COUNCIL - ROAD WORKS DURING INSPECTIONS (LONG TERM WORKS)



Procedure

RW.1 – Arrange Condition Survey

The Contractor arranges for a condition survey with the Highways Asset Manager to walk the site and identify the present issues

RW.2 – Carry Out Condition Survey

A senior engineer and the Principal Contractor attend a site inspection. The extent of works are also agreed at this meeting. The extent of the works includes traffic management areas and any adjacent area that is impacted by the redirected traffic. Any defects identified will be photographed with date stamps and included in the Detailed Local Operating Agreement (DLOA). The DLOA shall specify:

- The site extents
- The accountabilities for inspections, recording of defects and rectification
- Agree any preventative remedials that may be required

RW.3 – Draft Local Operating Agreement (DLOA)

The DLOA shall record all agreements with special focus on:

- Existing conditions of highway assets within the site;
- Local constraints;
- Site boundary and duration of the works;

- Phasing of works;
- Roles and responsibilities of all parties such as which party has responsibility for each asset at any particular point during the works;
- Arrangement in place to maintain any equipment that remains on the network during the construction works;
- Agreement on inspection schedule;
- Agreement on defect repair and reporting;
- Defects liability period for all assets;
- Handover arrangements, i.e. sectional or scheme handover
- Other pertinent agreements

There are three options regarding the arrangement of the highway maintenance duty:

- Option 1 (Preferred) – Thurrock council to maintain highway inspection duty, and the Principal Contractor implements the required works/repairs. Any area that are inaccessible on the day of the inspection will be recorded.
- Option 2 – Thurrock council discharges all highway maintenance duty to the Principal Contractor.
- Option 3 – Thurrock council to maintain highway inspections and implements the required works/repairs. Any area that are inaccessible on the day of the inspection will be recorded.

Once completed, the Principal Contractor issues the DLOA to the Highway Asset Manager.

RW.4 Sign DLOA

Do all parties accept the proposed DLOA? If not, then comments will be provided to the Principal Contractor.

If the answer is YES, refer to process **RW.5**.

If the answer is NO, refer to process **RW.3**.

RW.5 Sign DLOA

Once all amendments have been made and all parties accept the proposed DLOA, the Principal Contractor will sign the DLOA and issue it to all parties to sign.

RW.6 Complete Works

The Contractor completes the work. During the works the DLOA is the sole agreement relevant to the management of the highway.

RW.7 Carry Out Condition Survey

Once the works are complete (or at sectional handover) a senior engineer inspects the site and raises any residual defect notices to the Contractor

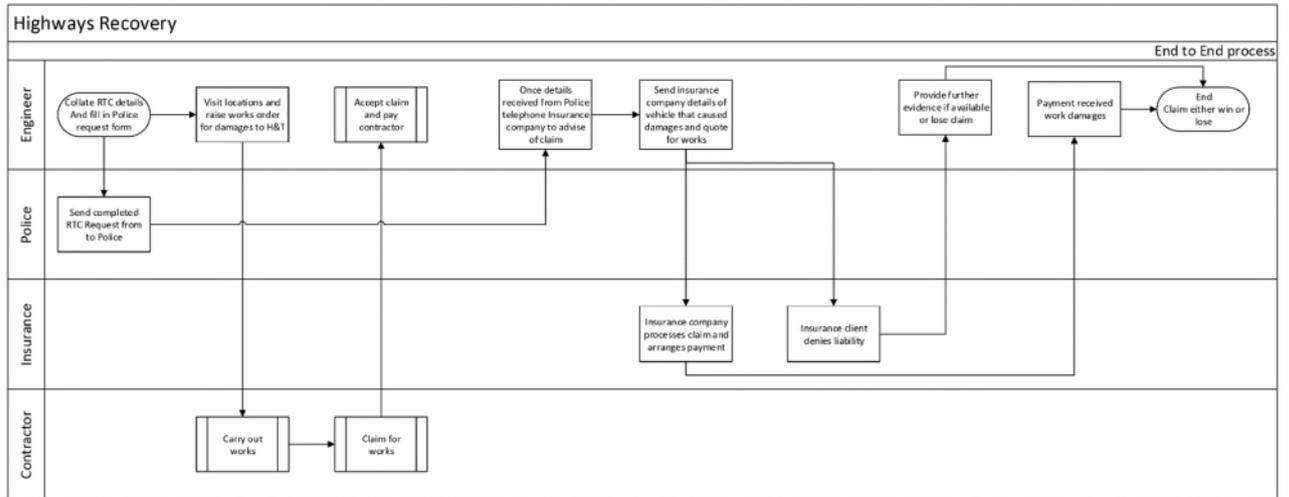
RW.8 Rectify Defects

The Contractor rectifies the defects raised and provides evidence and necessary as-builts etc.

RW.10 Terminate DLOA

The site is handed back and return to normal operation. The DLOA is therefore ended.

Appendix C – Highways Recovery (tbc)



Appendix D – Customer Enquiries

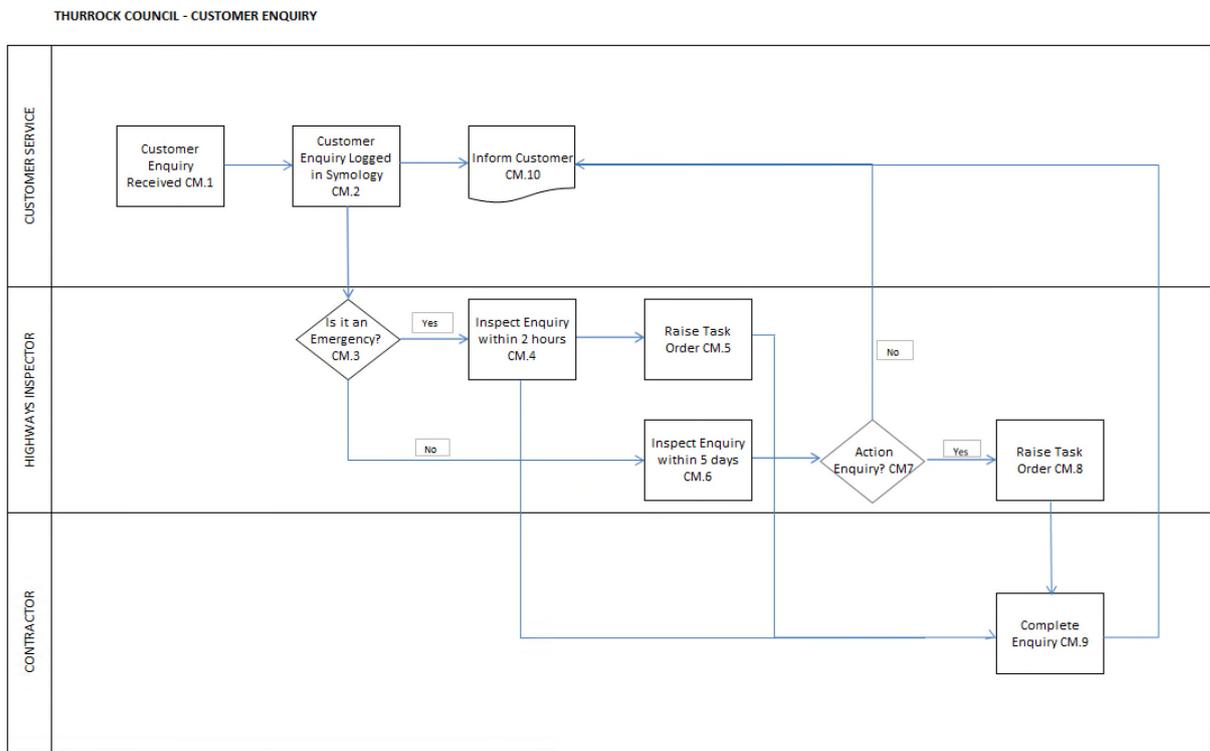
Purpose

This document describes the process for Thurrock Council to act upon highway related customer enquiries

Background / Scope

By reference to [Section 36 of the Highways Act of 1980](#), Thurrock council shall maintain the public highway at the public expense. As such Thurrock council shall treat customer enquiries relating to the highway as part of the day-to-day duties and shall act upon receipt of customer enquiries as described in this document.

Procedure Flow Diagram



Procedure

CM.1 – Customer Enquiry Received

A customer enquiry relating to highways is received through telephone call, email, councillor or through the web site (“Highways Report It”)

CM.2 – Enquiry Logged in Symology®

Customer Enquiry is Logged in Symology® and customer is informed

CM.3 – Is it an Emergency?

The customer enquiry handler assesses whether the enquiry is an emergency or not

If the enquiry is an emergency as specified below, then refer to process **CM.4**.

Item	Description
1	Road closure request following a Road Traffic Collision (RTC).
2	Road collapse.
3	Request from the Emergency services
4	Fallen item(s) on the public highway, causing an obstruction on the public highway
5	Dislodged paving slab or kerbstone
6	Diesel spillage on the public highway
7	Misplaced and/or fallen traffic management barriers
8	Severe flooding on the public highway
9	Misplaced and/or fallen traffic management barriers
10	Electrical danger (e.g. exposed wires from street lighting item)

If the enquiry is not an emergency, then refer to process **CM.6**.

CM.4 – Inspect Enquiry within 2 Hours

If the enquiry is deemed to be an emergency, site must be inspected within 2 hours from receipt

CM.5 – Raise Works Order

A task order is raised for the Maintenance Team to make safe within 2 hours

CM.6 – Inspect Enquiry within 1 Day

A task order is raised for the Maintenance Team to make safe within 5 days

CM.7 – Action Enquiry?

If the inspector deems the non-emergency inspection as actionable, refer to process CM.8

If the inspector deems the non-emergency inspection as non-actionable, refer to process CM.10

CM.8 – Raise Task Order

A task order is raised for the Maintenance Team to make safe within required timescales depending on enquiry priority

Priority	Response Time
P1	2-hour response
P2	7-day response
P3	28-day response
P4	Works programme

CM.9 – Complete Enquiry

The Maintenance Team completes the enquiry within set timescales

CM.10 – Inform Customer

The customer is informed of the resolution