HIGHWAY MAINTENANCE MANAGEMENT PLAN (HMMP)

Highways, Park & Countryside
Communities Directorate
Royal Borough of Windsor & Maidenhead
Town Hall
St Ives Road
Maidenhead
SL6 1RF

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</table>
Abbreviations

The following abbreviations are used in this plan:

- **HMMP**: Highway Maintenance Management Plan
- **NRSWA**: New Roads and Street Works Act
- **NSG**: National Street Gazetteer
- **PMS**: Pavement Management System
- **PROW**: Public Right of Way
- **SCANNER**: Surface Condition Assessment
- **HAMP**: Highway Asset Management Plan
- **TRMM**: BA 63/94 - may be obsolete referenced in Structures section page 36
- **UKPMS**: UK Pavement Management System
- **COP**: Well Maintained Highways - Code of Practice for Highways Maintenance Management
EXECUTIVE SUMMARY

The Royal Borough has a statutory duty to manage and maintain the (public) highway network within the Borough. The network is the single most important and valuable asset managed by the council. Well maintained highways are essential to residents and visitors alike. The network contributes to the delivery of the Council’s strategic objectives and the shared priorities of national and local government.

Efficient transport links are vital for a thriving population and economy, providing access to employment, education, healthcare, retail outlets, and leisure and to all the other services and supplies we rely upon to support our needs. Maintenance of the network is vital to ensure it can continue to provide the principal element of the overall transport network.

The Highways Maintenance Management Plan (HMMP) sets out the Royal Borough’s approach to providing guidance on the policies and procedures informing our highway maintenance practices. It is based upon the three Codes of Practice, listed below, published by the Roads Liaison Group with the support of the Department of Transport. The HMMP seeks to follow the framework and recommendations of the Codes of Practice whilst recognising the need for regular review and amendment to reflect local circumstances.

- Well-Managed Highway Infrastructure – Code of Practice published in October 2016

The HMMP recognizes that our highway maintenance cannot operate in isolation from the Council’s other functions and responsibilities. The underpinning strategy demands a logical and systematic approach to achieve value for money and continuous improvement. It encompasses our statutory duties, the wish to maintain and enhance the value of the network asset and the necessity to be responsive to the needs of the community.
Section 1: Introduction

1.1 Introduction

The highway network is a key and highly visible community asset supporting both the local and national economy and contributing to the character and environment of the Royal Borough. The importance of highway maintenance and its relevance to the management of the highway network for all transport users, whatever their mode, requires an increased emphasis on management and systems to support service delivery.

The HMMP describes the policies, strategies and processes which shape the way the Royal Borough will develop and deliver its highway network maintenance service. The Plan will be reviewed as necessary and certainly during the development of the Royal Borough's Highways Asset Management Plan.

The Codes of Practice identify three core objectives of highway maintenance;

- Network Safety
- Network Serviceability
- Network Sustainability

The aims of the HMMP may be summarised as:

- Maintaining safety for all users of the network;
- Supporting community safety and accessibility;
- Maintaining the value of the network asset;
- Ensuring consistent and appropriate maintenance standards throughout the network with regard to strategic importance and usage;
- Maintaining, so far as possible, safe and efficient traffic movement throughout the Royal Borough by coordinating works in the highway;
- Ensuring optimum use of available funds;
- Facilitating technical and financial monitoring to establish network condition trends and assessing performance against expenditure;
- Ensuring that all highway maintenance is carried out with due regard for the community served and the local environment;

- Implementing the recommendations and principles outlined in the Codes of Practice and continuing development of our current systems and practices;

- Promotion of the constant review of policies and standards to ensure continual development of network maintenance strategies;
• To provide a systematic approach to decision making within a consistent framework of policies, standards and procedures;
• To provide a uniform and common basis for assessing maintenance needs and resource requirements.

1.2 Sustainability

Highway maintenance and new construction has a direct effect on the four priority areas of sustainable consumption and production, climate change and energy, natural resource protection and environmental enhancement and sustainable communities in the following ways:

• They consume large quantities of aggregates and generate large quantities of waste;
• The extraction, processing and transporting of these materials is a significant source of greenhouse gas emissions, particularly in the production of cement and asphalt;
• The use of primary aggregates in preference to recycled or secondary aggregates results in depletion of irreplaceable natural resources and damage to the environment where the aggregates are located;
• The incorrect use of materials can result in pollution of the environment.

For highway maintenance and construction to be sustainable, there needs to be a focus on recycling materials from the existing road wherever possible, using imported recycled or secondary aggregates where appropriate, and choosing techniques that will reduce the level of carbon emissions.

Decisions made and the approach taken by the Royal Borough and its maintenance contractors are therefore crucial in contributing to achieving sustainability in highway maintenance and construction. Sustainability in highway maintenance and construction means living within our environmental limits whilst achieving a sustainable economy.

Highway maintenance has a significant role to play, and impact upon, the achievement of sustainable development. Where possible the following should be taken into account when undertaking major maintenance schemes:

• Does the scheme make use of opportunities to use local materials?
• Are all opportunities realised to minimise noise pollution?
• Does the design process encourage the use of re-used materials as the first option?
• Does the design process encourage the use of recycled materials as the second option?
1.3 Legal Framework

Much of highway maintenance activity is based upon statutory powers and duties contained in legislation and precedents developed over time as a result of claims and legal proceedings. The following Acts and Regulations place mandatory requirements on the Council (this is not an exhaustive list):

• Highways Act 1980
• Environmental Protection Act 1990
• New Roads and Street Works Act 1991
• Road Traffic Reduction Act 1997
• Road Traffic Reduction (National Targets) Act 1998
• Control of Pollution Act 1974
• Land Drainage Act 1976
• Health and Safety at Work Act 1974
• Traffic Signs Regulations and General Directions 1994 & 2002
• Environment Act 1995
• Countryside and Rights of Way Act 2000
• The Noxious Weeds Act 1959
• Road Traffic Act 2000
• The Transport Act 2000
• Rights of Way Act 1990
• Disability Discrimination Act 1995
• Human Rights Act 1998
• Freedom of Information Act 2000
• Management of Health and Safety at Work Regulations 1992
• Construction (Design and Management) Regulations 2007
• Railways and Transport Safety Act 2003
• Traffic Management act 2004
• Local Authorities (Transport Charges) Regulations 1998

Other guidance and advice on management and implementation of highway maintenance include:

• The Local Governments Associations’ Code of Practice on Highway Maintenance (LGACP)
• European and British Standards
• Pesticides Regulations
• European Noise Directive
• Department for Transport Design and Advice Notes
• The Woolf Reforms
• Well-Managed Highway and Infrastructure – Code of Practice for 2016
• Highway Risk and Liability Claims 2009
• Maintaining a Vital Asset 2013
• Highway Infrastructure Asset Management 2013
It is the statutory duty of the highway authority to maintain that part of the highway defined as being maintainable at public expense. This duty is consolidated in Section 41 of the Highways Act 1980. Under Section 56 of the Act any person may apply to the courts for an order requiring the highway authority to take remedial action in cases of alleged non-repair by that authority that may also face action for damages resulting from failure to maintain the highway. Section 58 of the Act provides that in the event of an action it shall be a defence to show that the road was kept in a reasonable state of repair having regard for the traffic using it, the standard of maintenance appropriate to its use and public safety.

Section 150 of the Act requires the highway authority to clear obstructions from the highway resulting from the accumulation of snow or from the falling down of banks on the side of the highway, or from any other cause. Section 41 of the Highways Act was amended to expressly include snow and ice in a Highway Authority’s statutory duty to maintain the highway. Section 41(1A) states ‘In particular, a highway authority are under a duty to ensure, as far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.’

The New Roads & Street Works Act 1991 (NRSWA) is an enabling Act setting out the duties of the Council as a Street Authority to co-ordinate and regulate works carried out in the highway by any organisation. Road openings in the highway executed by statutory undertakers under the provisions NRSWA are backfilled and maintained by the organisation making them. The role of the highway authority is mainly that of coordinating and controlling road works and designating traffic sensitive routes and structures of special engineering difficulty.

The Traffic Management Act 2004 introduces a number of provisions including, Local Authority duty for network management, increased control of utility works and increased civil enforcement of traffic offences.

The most important feature of the Act is Section 16(1) which establishes a duty for local traffic authorities ‘to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and the following objectives:

- Securing the expeditious movement of traffic on the authority’s road network;
- Facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority.

Section 31 of the Act specifically states that the term ‘traffic’ includes pedestrians, so the duty requires the authority to consider all road users. The duty is not limited to the actions of the Department responsible for traffic within an authority. Local authorities will need to consider the duty when exercising their powers under any legislation where this impacts on the operation of the network. ‘Authorities should therefore ensure that the whole organisation is aware of the duty and the implications for them.'
1.4 Claims Management

The Royal Borough aims to take timely and effective action to minimise the risk of the highway networks to users. However defects may nevertheless arise that present hazards or inconvenience to the public. Where these lead to a compensation claim against the council this will be fully investigated to establish the council’s liability position, with reference to the law on negligence and the appropriate statutes.

The Royal Borough records all safety inspections, service requests, complaints, claims and compliments received, together with any actions taken, so that the authority can seek to provide a robust defence against all claims where there is no legal liability.

Where appropriate claims should be submitted via the Claims Portal to The Royal Borough of Windsor and Maidenhead.

1.5 Network Inventory

The Highways Act 1980 requires the keeping of a register of roads that are maintainable at public expense. There is also a requirement under the New Roads and Street Works Act (NRSWA) 1991 to maintain information for the purpose of:

- Identifying streets described as traffic sensitive where work should be avoided at certain times of the day.
- Identifying structures under or over the street which need special consideration when work is planned.
- Identifying reinstatement categories used by Statutory Undertakers in the reinstatement of their street works.

This information is maintained and updated on a regular basis to take account of new developments and/or amendments to the network, all within the framework of the national Street Gazetteer (NSG). The information is in a format that can be electronically accessed by Statutory Undertakers.
1.6 Network Hierarchy

The network hierarchy is the foundation of a coherent, consistent and auditable maintenance strategy. The hierarchy adopted for the Royal Borough reflects the needs, priorities and actual use of each road in the network. It is also important that local hierarchy is dynamic and regularly reviewed to reflect changes in network characteristics and use.

The COP defines hierarchies for carriageways, footways and cycle ways as presented in the tables below.

### Carriageway Hierarchy

<table>
<thead>
<tr>
<th>Category</th>
<th>Hierarchy Description</th>
<th>Type of Road General Description</th>
<th>Detailed Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Motorway M4 A308(M)/A404(M)</td>
<td>Limited access motorway regulations apply</td>
<td>Routes for fast moving long distance traffic. Fully grade separated and restrictions on use. These are maintained by the Highways.</td>
</tr>
<tr>
<td>2</td>
<td>Strategic Route</td>
<td>Principal “A” roads between Primary Destinations</td>
<td>Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.</td>
</tr>
<tr>
<td>3a</td>
<td>Main Distributor</td>
<td>Major Urban Network and Inter–Primary Links. Short – medium distance Traffic</td>
<td>Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.</td>
</tr>
<tr>
<td>3b</td>
<td>Secondary Distributor</td>
<td>Classified (B &amp; C) Roads and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions</td>
<td>In rural areas these roads link the larger villages and HGV generators to the Strategic and Main Distributor Network. In built up areas these roads have 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On street parking is generally unrestricted except for safety reasons.</td>
</tr>
</tbody>
</table>
### Appendix C

#### Royal Borough of Windsor and Maidenhead

| 4a | Link Road | Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions | In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two-way traffic. In urban areas they are residential or industrial inter–connecting roads with 30 mph speed limits random pedestrian movements and uncontrolled parking. |
| 4b | Local Access Road | Roads serving limited numbers of properties carrying only access traffic | In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGV. In urban areas they are often residential loop roads or no through roads. |

### Footway Hierarchy

<table>
<thead>
<tr>
<th>Category</th>
<th>Category Name</th>
<th>Brief Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Prestige Walking Zone</td>
<td>Prestige areas in towns and cities with exceptionally high usage.</td>
</tr>
<tr>
<td>1</td>
<td>Primary Walking Route</td>
<td>Busy urban shopping and business areas and main pedestrian routes linking interchanges between different modes of transport such as railways and underground stations, bus stops etc.</td>
</tr>
<tr>
<td>2</td>
<td>Secondary Walking Route</td>
<td>Medium usage routes through local areas feeding into primary routes, local shopping centres, large schools, industrial centres etc.</td>
</tr>
<tr>
<td>3</td>
<td>Link Footway</td>
<td>Linking local access footways through urban areas and busy rural footways.</td>
</tr>
<tr>
<td>4</td>
<td>Local Access Footway</td>
<td>Footways associated with low usage, short estate roads to the main routes and <em>cul de sacs</em>.</td>
</tr>
</tbody>
</table>
## Cycleway Hierarchy

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Cycle lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure point.</td>
</tr>
<tr>
<td>B</td>
<td>Cycle track, a route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or un-segregated.</td>
</tr>
<tr>
<td>C</td>
<td>Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the highway authority</td>
</tr>
</tbody>
</table>

These maintenance designations are not directly matched to the national classifications such as A, B, or C class roads and the required designations as stipulated by the New Roads and Street Works Act. It was never intended that these hierarchies be the same as they cover different aspects of network traffic and purpose. A reasonable correlation has been established, however, between these and other designations.
Section 2: Inspection, Assessment and Recording

2.1 Inspection Categories

It is recognised that an effective regime of inspection, assessment and recording is a crucial component of highway maintenance. The inspection, assessment and recording regime provides the basic information for addressing the core objectives of highway maintenance: network safety, network serviceability and network sustainability. It will also provide condition data for the development of programmes for maintenance as part of the wider HAMP.

The network inspection regime in Royal Borough consists of three types of inspection and surveys:

**Network Safety** – the inspection and assessment regime seeks to ensure that the network is in a safe condition and that 'safety-related' defects are dealt with at defined intervals and response times. Maintenance works are planned and supervised to ensure safety for all affected parties and appropriate treatments are designed to minimise risks and intervention throughout the lifecycle of the asset.

**Network Serviceability** – the availability of the network is maximised through effective co-ordination and by the allocation of appropriate resources. The maintenance regime is designed to keep to a minimum the occurrence of unplanned lane closures. Intervention treatments are designed to maintain or enhance the value of the asset. The activities of the statutory undertakers are regulated. The winter maintenance service deals with snow and ice.

**Network Sustainability** – the design of maintenance treatments considers whole life cost issues, the effect on the environment and accessibility for all.

2.2 Network Safety Inspections

Using a risk based approach the Council will use the following criteria to assess inspection frequency:

1. Category within the network hierarchy;
2. Traffic characteristics, and trends;
3. Incident, complaint and insurance claim history;
4. The number of orders being raised on inspection;
5. Special designation of routes e.g. safer routes to schools, temporary diversion routes.
6. Resurfacing history;
7. Surveys - skid resistance, traffic speed condition, “coarse visual” (see 2.5 Network Sustainability Surveys” for details).
This is not an exhaustive list. To ensure the inspection programme is dynamic and responsive to local conditions, the inspector also uses their discretion based on any additional local factors. The frequencies set out in the tables below should be regarded as a starting point which may be modified following consideration of the above. Carriageways adopted as publicly maintainable are to be inspected in accordance with the following frequencies:

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Category</th>
<th>Inspection Frequency</th>
<th>Method of Inspection</th>
<th>Maximum Interval Between Inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Route</td>
<td>2</td>
<td>1 month</td>
<td>Driven</td>
<td>6 weeks</td>
</tr>
<tr>
<td>Main Distributor</td>
<td>3(a)</td>
<td>1 month</td>
<td>Driven</td>
<td>6 weeks</td>
</tr>
<tr>
<td>Secondary Distributor</td>
<td>3(b)</td>
<td>3 month</td>
<td>Driven</td>
<td>16 weeks</td>
</tr>
<tr>
<td>Link Road</td>
<td>4(a)</td>
<td>6 months</td>
<td>Driven</td>
<td>30 weeks</td>
</tr>
<tr>
<td>Local Access</td>
<td>4(b)</td>
<td>12 months</td>
<td>Driven</td>
<td>60 weeks</td>
</tr>
</tbody>
</table>

Footways and footpaths adopted as publicly maintainable are inspected in accordance with the following frequencies:

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Category</th>
<th>Inspection Frequency</th>
<th>Method of Inspection</th>
<th>Maximum Interval Between Inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prestige Walking Zone</td>
<td>1a</td>
<td>2 week</td>
<td>Walked</td>
<td>4 weeks</td>
</tr>
<tr>
<td>Primary Walking Route</td>
<td>1</td>
<td>1 month</td>
<td>Walked</td>
<td>6 weeks</td>
</tr>
<tr>
<td>Secondary Walking Route</td>
<td>2</td>
<td>3 months</td>
<td>Walked</td>
<td>16 weeks</td>
</tr>
<tr>
<td>Link Footway</td>
<td>3</td>
<td>6 months</td>
<td>Walked</td>
<td>30 weeks</td>
</tr>
<tr>
<td>Local Access Footway</td>
<td>4</td>
<td>12 months</td>
<td>Walked</td>
<td>60 weeks</td>
</tr>
</tbody>
</table>

Cycleways adopted as publicly maintainable will be inspected, in accordance with the following frequencies:

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Category</th>
<th>Inspection Frequency</th>
<th>Method of Inspection</th>
<th>Maximum Interval Between Inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of Carriageway</td>
<td>A</td>
<td>As for Roads</td>
<td>Driven</td>
<td>Same as adjacent carriageway</td>
</tr>
<tr>
<td>Shared footways and cycleways</td>
<td>B</td>
<td>As per footways</td>
<td>Cycled or Walked</td>
<td>30 weeks</td>
</tr>
</tbody>
</table>
Highway items such as traffic signs, road markings, reflective studs, roadside trees, gully and manhole covers etc. will be inspected for safety during the routine inspection.

Frequencies should be regarded as minimum values, with enhanced frequencies being determined by a simple risk assessment of these factors, carried out by an inspector in consultation with the senior Streetcare officer as per the below.

<table>
<thead>
<tr>
<th>Risk assessment for variation in inspection frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road no.</td>
</tr>
<tr>
<td>From:        To:</td>
</tr>
<tr>
<td>Circumstances giving rise to the need to vary the inspection frequency:</td>
</tr>
<tr>
<td>Existing inspection frequency:</td>
</tr>
<tr>
<td>Proposed inspection frequency:</td>
</tr>
<tr>
<td>Period of varied inspection frequency:</td>
</tr>
<tr>
<td>Completed by: Date:</td>
</tr>
<tr>
<td>Endorsed by: Date:</td>
</tr>
</tbody>
</table>

The maximum intervals shown in the table are applied to take account of variations in the available resources due to national holidays, standard leave entitlements, absence due to sickness and the demands of any adverse weather. If the interval is exceeded, a record of the reasons and the mitigation measures taken will be kept.

**Safety Inspection of Trees and Landscaped Areas**

Trees are important for amenity and nature conservation reasons and should be preserved but they can present risks to the highway users and adjoining land users if they are dead, diseased, damaged or have become unstable. The highway authority is responsible for ensuring that trees outside the highway boundary are made ‘safe’ if due to their condition they are likely to cause danger by any part of them falling on the highway. All trees within falling distance are collectively termed ‘highway trees’. Section 154 of the Highways Act 1980 empowers the authority to deal by notice with hedges, trees and shrubs growing on adjacent land which overhang the highway or are a danger to it, and to recover costs.

Inspectors will take note of any encroachment or visibility obstruction and any obvious damage, obvious ill health or trip hazards and pass any relevant information to the arboricultural team. A programme of detailed tree inspections, for trees situated on the adopted highway, is undertaken by arboricultural advisors.
Information from all inspections, together with any immediate or programmed action, including nil returns, is accurately and promptly recorded, monitored, and utilised with other relevant information in regular reviews of maintenance strategy and practice. This is particularly relevant in the case of safety inspections.

Although maximum intervals are identified in the above tables between inspections, it should be noted that in periods of prolonged extreme weather, it may not be possible to achieve these on all occasions for all classes of inspection category.

### 2.3 Defect Categories and Priority Response Times

All observed defects that pose a risk to users are recorded and the level of response determined on the basis of inspector judgment. The degree of deficiency in highway elements will take account of particular circumstances. For example the degree of risk from a pothole depends upon not merely its depth but also its surface area and location.

It is the policy of the Royal Borough that all repairs are permanent but if this cannot be arranged within each timescale the defect will temporarily be made safe or signed / barriered off.

Defects are defined in two categories:

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

**Category 2** - All other categories

Category 2 defects are those which are deemed not to represent an immediate or imminent hazard or risk of short term structural deterioration. Such defects may have safety implications but are not required to be urgently rectified. Access requirements, other works on the road network, traffic levels, and the need to minimise traffic management, should be considered as part of the overall assessment regarding response time.

The priority of response that a defect is to be allocated is based upon a risk assessment which considers impact against probability.

Where a defect is identified a risk score is assessed. This is a value derived by considering the impact and probability of an event. This score identifies the overall seriousness of the risk and the appropriate speed of response to remedy the defect. Inspectors have full discretion to escalate the response if they consider it necessary given the character of the defect and its location.

The priority response time for dealing with the defect is determined by reference to the Risk Response matrix table:
### Risk Response matrix

<table>
<thead>
<tr>
<th>Risk score</th>
<th>Low</th>
<th>Low/Medium</th>
<th>Medium</th>
<th>Medium/High</th>
<th>High</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defect category</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Response category</td>
<td>P6</td>
<td>P5</td>
<td>P4</td>
<td>P3</td>
<td>P2</td>
<td>P1</td>
</tr>
<tr>
<td>Priority response</td>
<td>Within 3 months.</td>
<td>Works to be repaired within 28 calendar days</td>
<td>Up to 14 calendar days</td>
<td>Up to 7 calendar days</td>
<td>24 hours. Make safe or repair.</td>
<td>3 hours. Make safe or repair.</td>
</tr>
</tbody>
</table>

The Defect Assessment Risk Matrix below provides guidance to inspectors on the evaluation of particular defect types and locations.
<table>
<thead>
<tr>
<th>Recognised pedestrian areas, footways and marked cycle lanes.</th>
<th>Carriageway</th>
<th>Verge erosion</th>
<th>Depressions</th>
<th>Manholes, stopcocks covers. Gullies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of interaction with pedestrians (f/way)</td>
<td>&gt;= 25mm</td>
<td>Risk of interaction with vehicle (c/way)</td>
<td>&gt;= 40 mm</td>
<td>Road edge breaking away so as to be potentially hazardous.</td>
</tr>
<tr>
<td>Likelihood of worsening in short term e.g. advanced local crazing likely to pothole.</td>
<td>&lt; 25mm</td>
<td></td>
<td>&lt;40 mm</td>
<td>&gt;100 mm depth adjacent to f/way edge</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&gt;150 mm depth adjacent to c/way edge</td>
</tr>
<tr>
<td>Extreme. In a town centre or a main footfall area Cat 1a</td>
<td>P2</td>
<td>P4 Inspector discretion for repairs where there is evidence of short term deterioration.</td>
<td>P2</td>
<td>P3 Inspector discretion for repairs where there is evidence of short term deterioration.</td>
</tr>
<tr>
<td>Major. Adjacent to main areas of footfall in vulnerable areas. Cat 2</td>
<td>P2</td>
<td>P4</td>
<td>P2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Major. Adjacent to vehicle path in area of very high traffic flow. Cat 3(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate. Most other footway areas. Cat 3</td>
<td>P4</td>
<td>P5 Inspector discretion for repairs...</td>
<td>P3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate. Most other carriageway areas. Cat 3(b) and 4(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor. Negligible risk of interaction, particularly obscure or unused locations. Cat 4</td>
<td>P5</td>
<td>P6 Inspector discretion for repairs...</td>
<td>P4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minor. Negligible risk of interaction, particularly obscure or unused locations. Cat 4(b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defect Assessment Risk Matrix</td>
<td>Borough of Windsor and Maidenhead</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If not RBWM, these are referred to the utility companies with P1 and P3 made safe in the meantime.
2.4 Network Serviceability Inspections

Service inspections are primarily intended to identify deficiencies compromising the overall reliability, quality, comfort and ease of use of the network, from the users point of view. These mainly comprise more detailed inspections tailored to the requirements of particular highway elements to ensure that they meet requirements for serviceability. Service inspections for carriageways, footways and cycleways will generally be undertaken at less frequent intervals than safety inspections. These will be carried out as appropriate for the various functions as set out in Section 3 Policy and Standards.

2.5 Network Sustainability Surveys

A regime of condition assessment surveys has been developed in accordance with the UK Pavement Management System protocols to meet the following objectives;

To comply with national legislation and any National Indicators.

To establish an objective measure of the current condition of the highway pavement asset.

To aid development of planned maintenance programmes.

Survey methods to reflect the different requirements of the network include:

- Skidding resistance
- Traffic-speed condition (SCANNER)
- ‘Coarse Visual’ surveys

(i) A skid resistance survey will be carried on the principal roads (A roads) every 2 years (half of this class of road each year) with a reassessment of the Investigatory Level each time a road is surveyed. A detailed investigation will be undertaken where the skidding resistance of a site has fallen to, or is lower than the pre-determined Investigatory Level for that site. Treatment should be prioritised if the skidding resistance is significantly below this level, or if the number of accidents or proportion of accidents in wet conditions, or that involving skidding, is greater than normal.

(ii) A SCANNER (Surface Condition Assessment for the National Network of Roads) survey will be carried out on the principal roads (A roads) every year and the non-principal classified (B and C roads) every two years.

Note: SCANNER is a machine survey carried out at traffic-speed and includes the collection and processing of road surface cracking data in addition to GPS location referencing and detailed measurement of transverse profile as well as measurements of longitudinal profile, surface texture and road geometry.

(iii) Coarse Visual Inspections (CVIs) will be carried out on unclassified roads every four years (a quarter of the network each year).
Sustainable treatments are looked at on a scheme by scheme basis. Noise reducing materials are used on highly trafficked roads that are in residential areas for example SMA and all plainings are recycled.
Section 3: Policy and Standards

3.1 Carriageways

Policy

Haunching works are carried out to strengthen and repair the edges of the carriageway. Funds for haunching will be allocated on a priority basis following a site assessment and taking into account the category of road.

Kerbs and Channels the purpose of kerbs is to protect pedestrians, to provide a channel for surface water and to support the edge of the carriageway. Apart from urgent repairs undertaken for safety reasons, kerbs or channels will normally be replaced in association with other carriageway or footway works. In all such works provision should be made for dropped kerbs to assist people with mobility handicaps or disabilities in accordance with current codes of practice and opportunities for installing vehicular crossings should also be afforded to adjacent occupiers.

Joint Sealing the object is to optimise the life expectancy of a carriageway by sealing its joints against ingress of water. Joint sealing to be undertaken as funds permit with priority being given to category 2,3a and 3b roads.

- Highway defects once notified will be assessed. Any repairs identified as necessary will be programmed in accordance with the Royal Borough’s adopted priority response times.

Standards

- Haunching will not normally be undertaken on kerbed roads.

- Haunching in unkerbed category 2,3a and 3b roads will normally only be undertaken as part of a reconditioning programme.

- Localised haunching (50m in length or less) may be carried out as part of Basic Structural Maintenance where it is considered necessary for safety reasons.

- Joints and cracks in carriageways of flexible construction to be sealed as required subject to the road not being included in a reconditioning or improvement programme.

- Due regard must be taken of the NRSWA 1991 procedures in respect of those reinstatements that are within the guarantee period and are still the responsibility of the Undertaker.

- Existing trenches or reinstatements which have a level difference greater than that identified in the code of practice in relation to the surrounding carriageway to be repaired with the priority to be determined in relation to the nature of the defect and in accordance with the Royal Borough’s adopted priority response times.
• Minor Highway defects such as areas of minor crazing, fretting and isolated weak areas to be patched as a part of a patching programme, subject to the road not being included in a reconditioning or improvement programme.

• Resurfacing of category 2,3a and 3b roads will normally only be undertaken as part of a reconditioning programme.

• Resurfacing of category 4a and 4b roads should be considered where it is more economical to do so rather than undertake extensive patching or pothole repairs, subject to the road not being included in a reconditioning or improvement programme and subject to the budget available.

• It is not possible to set standards for when carriageway reconditioning and surface treatments will be undertaken as the inclusion of a scheme in the carriageway reconditioning programme will depend on its assessed priority and on the budget available.

• Any covers, gratings or boxes which have a level difference greater than 25mm in relation to the surrounding carriageway to be re-set with the priority to be determined in relation to the nature of the defect and will be programmed in accordance with the Royal Borough’s adopted priority response times.

• Manhole, inspection chamber, valve covers and the like which are defective in any way which are Utility Company apparatus to be reported to the responsible Utility company for action in accordance with approved procedures.

• If these are not made safe within 24 hours after the initial report the Council is to make safe the defect and recover its costs from the Utility Company concerned.

3.2 Footways and Cycleways

Policy
The object is to repair defective areas of footways and cycleways to provide a surface for pedestrians and cyclists which is free from hazardous defects. To ensure highway safety is maintained by undertaking continual programmes of pothole and patching repairs.

Accessibility Improvements the object is to provide dropped kerbs and tactile information where appropriate to ensure that the highway is accessible to all and that health and safety is maintained by providing tactile information.

Footway Reconditioning the object of reconditioning work is to restore the footway to its original standard. Schemes for inclusion in the annual reconditioning programme will be decided on a priority basis in accordance with the results of condition and usage assessments.

Standards
• Footway Reconditioning It is not possible to set standards for when footway reconditioning will be undertaken as the inclusion of a scheme in the footway
reconditioning programme will depend on its assessed priority and on the budget available.

• Due regard must be taken of the NRSWA 1991 procedures in respect of those reinstatements that are within the guarantee period and are still the responsibility of the Undertaker.

• Existing trenches or reinstatements which have a level difference greater than that identified in the code of practice in relation to the surrounding area to be repaired with the priority to be determined in relation to the nature of the defect and in accordance with the Royal Borough’s priority response times.

• Areas of minor crazing, fretting and bumps or depressions to be patched as part of a patching programme taking account of the reconditioning programmes.

• Footway Reconditioning Complete resurfacing should be considered where it is more economical to do so rather than undertake extensive patching or pothole repairs, subject to the footway or cycleway not being included in a reconditioning or improvement programme and subject to the budget available.

3.3 Public Rights of Way

All public rights of way in the Royal Borough are inspected on a three year rolling programme by the East Berks Ramblers on the Council’s behalf. These inspections cover the following:

• Signposting off the road in accordance with section 27 of the Countryside Act 1968 and to the extent necessary to allow users to follow the path;

• Free from unlawful obstructions or other interference (including overhanging vegetation);

• Surface and lawful barriers (e.g. stiles, gates etc) in reasonable repair.

Defects that are reported to the Council, either through routine inspections or by members of the public, will be investigated and where they are deemed to pose a safety hazard they will be repaired in accordance with the priorities set out in the Council’s Milestone Statement.

Maintenance and enforcement

• Obstruction to footways and footpaths shall not be permitted below 2.4m in height for the entire width of the footway/footpath;

• Obstruction to carriageways shall not be permitted between points 450mm beyond the kerb line and 5.3m above the highest point of the carriageway.

• Where necessary formal notice will be served on land owners under the appropriate statute should there be an obstruction adversely affecting a right of way.
• If they fail to respond the obstruction shall be removed and the costs incurred recovered. Prosecution under Section 137 of the Highways Act 1980 will also be considered, particularly for persistent offenders.

• When a bridge crossed by a right of way requires maintenance the Council’s bridge specialists should be consulted to specify the works.

• Maintenance of and requests for new gates and stiles on public paths is dealt with under Section 146 and 147 of the Highways Act 1980. Gates should be capable of being opened from a mounted horse. New stiles or gates can be authorised where the land is to be used for agriculture or forestry and to prevent the ingress or egress of animals on both footpaths and bridleways. Barriers, rails and fences may also be provided to safeguard people using footpaths (Section 66(3) of the Highways Act 1980).

• All other powers open to the Highway Authority in relation to rights of way should be considered as necessary.

• All works carried out on behalf of the Highway Authority (including those undertaken by authorised volunteers) should comply with the Council’s Rights of Way Practice Advice Notes applicable at the time.

• Improvements sought solely by owners of property served by rights of way can be authorised on the understanding that they carry out the works to an agreed specification at their own cost, and any maintenance thereafter to that improved standard would continue to fall on them.

• Maintenance of rights of way over and above the standards required for the level of public use where these rights of way are for example over ‘private streets’ or ‘unadopted highways’ shall be at the expense of the adjacent property owners.

3.4 Highway Drainage

Policy

Drainage and Ironware the object of highway drainage is to ensure that water is removed from the highway as quickly as possible and is not allowed to pond or penetrate to the foundations of the road.
To undertake any necessary minor works to ensure that existing drainage systems continue to function to their full capacity and where funds are available to assess more major schemes individually for inclusion in a drainage maintenance/improvement programme.

Drainage Cleansing the object is to ensure that surface water is removed from the carriageway as quickly as possible by ensuring that all highway drainage is functioning efficiently.
To undertake the appropriate amount of drainage cleansing commensurate with achieving this objective.
Accumulations of water on carriageways, footways and cycleways can increase risks to the safety of highway users, or frontagers, particularly on high speed roads and when standing water exists in freezing conditions. Displaced covers and frames can be a hazard to pedestrians and a potential hazard to drivers and cyclists. Damaged covers may collapse leaving a void in the highway.

An effective well maintained drainage system will meet the authorities’ duty to prevent nuisance to adjoining landowners by flooding. Pollution of roadside watercourses can occur due to contaminated run off from carriageways.

**Standards**

- Drainage defects such as collapsed, damaged or missing manholes, catchpits and gullies once notified will be assessed in accordance with approved procedures. Any repairs identified as necessary will be programmed in accordance with the Royal Borough’s adopted priority response times.

- Drainage defects such as damaged, broken, or missing gratings and frames which could constitute a hazard to users of the highway once notified will be assessed in accordance with approved procedures and made safe. Any repairs identified as necessary will be programmed in accordance with the Royal Borough’s adopted priority response times.

- All gullies, kerb weirs and other drainage channels on highways to be cleansed at least once per annum and other drainage channels as necessary

Highway drainage systems are installed to capture surface water run-off to reduce flooding and protect the fabric of the road.

- Blocked or broken pipework to be remedied when a problem is identified.

- Additional gully cleansing to deal with problem areas to be undertaken as required subject to available budget and other drainage channels as necessary

- Any highway drains which are not discharging to be jetted to attempt to remove the blockage.

- Where blockages are not resolved by jetting these shall be investigated and remedied as required subject to available budget.

- Culverts, manholes and catchpits to be cleansed regularly on a priority basis.

- Soakaways to be checked and cleansed as necessary at least every 5 years.

- Grips to be inspected and cleansed or recut as necessary.

- Highway ditches to be cleansed regularly to ensure the efficient functioning of highway drainage systems and to prevent structural deterioration occurring to the fabric of the highway.
3.5 Embankments and Cuttings

Policy
The object is to preserve the stability of slopes in embankments and cuttings which are part of the highway, including where appropriate, deep ditches. To implement any measures necessary to maintain highway safety in the event of a problem arising with regard to the stability of a slope.

Standards
• Repairs to slopes to be undertaken on a priority basis as necessary following geotechnical investigations into the cause of the problem.

• Where slopes, etc. in private ownership represent a hazard to the adjacent highway emergency action is to be arranged to make the site safe in accordance with the Royal Borough’s priority response times, followed by full repair as part of a works programme following consultation with the owner of the adjacent land.

• Significant embankments and cuttings will be subject to a visual inspection at least every two years. A more detailed specialist geotechnical survey will be arranged if necessary.

• Damage or loss of habitat;

• Interruption or pollution of watercourse

• Extent of damage and reduced life.

• Significant embankments and cuttings will be subject to a visual inspection at least every two years. A more detailed specialist geotechnical survey will be arranged if necessary.

3.6 Landscaped areas and Trees

Policy
The object is to maintain safety, to prevent highway trees from obstructing sight lines, traffic signs and street lights and to prevent encroachment onto both footways and carriageways and prevent damage to third party property. To promote the safe and healthy growth of highway trees whilst achieving this objective and to ensure that adjoining landowners deal with all matters that are their responsibility, which may affect the highway.

• To prevent damage or injury occurring from failure of a tree or part of it;

• To prevent encroachment onto footways, cycleways and carriageways;

• To prevent highways trees from obstructing sight lines, traffic signals, traffic signs and street lights;
Standards
• All trees on the adopted highway or on land maintained by the Highway Authority should be inspected by an arboriculturist once every five years. This is a default period, which may be reduced on the advice of an arboriculturist. All ‘highway trees’ to be inspected annually taking note of any encroachment or visibility obstructions and any obvious damage, obvious ill health or trip hazards. Where a problem is identified, the advice of an arboriculturist may be sought. Problems identified to be dealt with as necessary, either by the Council or referring the problem to the landowner where appropriate.

• Trees, hedges, and shrubs which are the responsibility of the Highway Authority are only to be felled or pruned when necessary to abate, an actionable nuisance, to comply with a statutory obligation or for health and safety reasons. Further details can be found in the ‘Tree Management Guidelines’ in the Royal Borough’s ‘Tree and Woodland Strategy 2010-2020’.

• Owners of private hedges and trees to be required to control hedge and tree growth to prevent obstruction on footways and carriageways and ensure appropriate visibility is maintained;

• Obstruction to footways and footpaths shall not be permitted below 2.4m in height for the entire width of the footway/footpath.

• Obstruction to carriageways shall not be permitted between points 450mm beyond the kerb line and within 5.3m above the highest point of the carriageway.

• Ensure that adjoining land owners deal with all matters that are their responsibility, which may affect the highway.

• In cases where an important amenity tree is within clearance distances, the wider environmental considerations shall be assessed against the risk as to whether a minor encroachment can be allowed. This will particularly be the case where tree stems are within 450mm of the kerb line;

• Trees removed shall be replaced where feasible;

• Alterations to the highway will seek to avoid impact on trees/landscape where possible and include mitigation where necessary. In the case of new schemes, the advice of an arboriculturist shall be sought.

3.7 Grass Cutting

Policy
Urban Grass Cutting the object is to ensure that the length of the grass on areas of highway does not become such that it obstructs, sight lines and traffic signs. To undertake the minimum number of cuts commensurate with maintaining the grass height between 25mm and 75mm.
Rural Grass Cutting  the object is to maintain safety, to prevent obstruction of sight lines and traffic signs, to inhibit the growth of injurious weeds and to conserve the wildlife.
To undertake the minimum amount of cutting consistent with maintaining highway safety and to conserve fauna and flora at sites of special scientific interest, cutting the grass to between 75mm and 100mm high.

To manage other areas of verge where appropriate to encourage the growth and survival of local fauna and flora.

Grass is cut for safety purposes to maintain visibility for highway users and to ensure that road and footway widths are not reduced by overgrowing vegetation. In areas where no footway exists there may be a need to provide a safe refuge on the highway verge for pedestrians, particularly on busy roads.

Standards
• Visibility splays and lines of sight to receive additional cuts as necessary to ensure these give maximum visibility at all times.

Grass cutting in urban areas, and on housing estates, is carried to condition standards specified for safety, but additional cuts are carried out for amenity purposes.

• The whole width of all adopted highway verges to be cut a maximum 15 times per year.

• Grass cuttings to be cleared from adjoining hard surfaces, kerblines, channels and mowing margins after mowing.

• Verges divided by a footway will have the whole of the verge between the footway and the kerb cut plus a single swathe width beyond the footway.

• To undertake the minimum amount of cutting consistent with maintaining highway safety and to conserve fauna and flora at sites of special scientific interest, cutting the grass to between 75mm and 100mm high.

• A single swathe width to be cut a minimum of three times per year on all rural verges except at sites of special scientific interest.

• Sites of special scientific interest and other verges which are naturalised to be cut at times when appropriate to do so (i.e. when local flora has flowered and set seed).

3.8 Weed Control

Policy
The object is to inhibit the growth of various plants (as listed in the Injurious Weeds Act 1959) on the highway and to eradicate all plant growth on paved areas to prevent structural damage to the fabric of the highway.
To achieve this objective with the minimum use of chemicals and using only pesticides approved by the Ministry of Agriculture, Fisheries and Food and the Environment Agency for highway maintenance purposes.

Weed growth can impair safety for highway users by reducing available road and footway widths. The Weeds Act 1959 lists a number of weeds which can be injurious to human and animal health. It places a duty on controllers of land to eliminate the following scheduled weeds from their land to prevent seeds contaminating their neighbour’s land:
  • Spear thistle;
  • Creeping or field thistle;
  • Curled dock;
  • Broad leaf dock;
  • Common ragwort.

The Wildlife and Countryside Act 1981 specifies control of certain plants such as giant hogweed or Japanese knotweed. The Ragwort Act 2003 and associated code of practice gives further information on treating the growth of this weed.

The following legislation controls the use of herbicides:
  • Food and Environment Protection Act 1985
  • Control of Pesticide Regulations 1986
  • Health and Safety at Work Act 1974
  • Control of Substances Hazardous to Health Regulations 1988

**Standards**

  • Weeds can cause structural damage to the fabric of the highway, disrupt drainage, obstruct pedestrians and look unsightly.

Additional treatments of weed growth for amenity purposes may be undertaken subject to the above policy, and the budget available.

  • Weed growth on paved areas to be treated twice per annum using nonresidual weed killers.

  • Noxious weeds to be dealt with as necessary on an ad-hoc basis.
3.9 Safety Fences, Edge Markers and Boundary Fences

Policy

Safety Fences, Edge Markers
The object is to maintain safety fences and edge markers in a sufficiently sound structural condition to serve their function and not be dangerous to road users or pedestrians. Safety fences, barriers and edge markers provide separation for traffic and vulnerable road users from each other and other hazards such as watercourses and the edge of the carriageway.
To undertake the minimum amount of maintenance commensurate with achieving this objective.

Boundary Fences
The object of boundary fences which are a highway authority responsibility is to define the highway boundary to define the tops of embankments and to prevent animals etc. from straying on to the highway.
To only undertake maintenance when necessary to maintain highway safety.

Standards

Safety fences
Tensioned safety fences to be inspected whenever repairs are carried out, with regard to loose tensioning bolts. Safety fences and guard rails on category 2 and 3 roads to be cleaned where they are being used in lieu of chevron warning signs where necessary in the interests of road safety.

Damaged safety fences should be made safe within 3 hours of being notified. A full repair to be undertaken following procurement of the appropriate barriers with a timescale to be determined in relation to the nature of the defect.

Safety fences are to be painted as necessary on a priority basis.

Pedestrian barriers
Damaged pedestrian barriers should be made safe as necessary. A full repair to be undertaken following procurement of the appropriate barriers with a timescale to be determined in relation to the nature of the defect.

Pedestrian barriers within Town Centres and other high amenity areas to be inspected annually for condition and appearance.

Guard rails within Town Centres and other high amenity areas to be ‘touched in’ or repainted. Pedestrian barriers are to be painted as necessary on a priority basis.

Other fences including boundary fences
In most cases this fencing will be owned by the adjacent property owner. The owner will be contacted where possible and be requested to make the fence safe. If the owner cannot be contacted will be made safe on an ad-hoc basis to achieve the aim of the adopted policy.
Safety fences, barriers and edge markers need to be kept in a sufficiently sound structural condition to serve their function and not be dangerous to road users or pedestrians.

Fences and barriers in poor repair may be detrimental to the appearance of environmentally sensitive areas. Appropriate designs of barriers should be used in such areas. Breaches in boundary fencing may lead to the risk of stock escaping onto the highway.

**Edge Markers**
Edge markers to be cleaned as necessary in the interest of road safety. Damaged edge markers should be made safe as necessary. A full repair to be undertaken following procurement of the appropriate barriers with a timescale to be determined in relation to the nature of the defect.

### 3.10 Road Markings and Studs

#### Policy

**Road Markings** The object is to ensure that the information given by carriageway markings is clearly visible by day and night particularly in respect of mandatory and warning markings.
To undertake all necessary maintenance to achieve this objective as the provision of adequate road markings is an essential part of the campaign to reduce the number of road traffic accidents.

**Road Studs** The object is to assist motorists by defining carriageway lanes and edges at night and in conditions of poor visibility.
To maintain all existing reflective road studs to a standard commensurate with this objective.

Road markings and studs assist in defining carriageway markings, lanes and edges in darkness and in conditions of poor visibility, particularly in respect of mandatory and warning markings. Loose road studs can present a hazard to road users. Edge markings can reduce damage to carriageway edges.

**Standards**
Mandatory markings and junction markings to be inspected at the same frequencies as the safety inspection system.

Road markings on category 2,3a and 3b roads to be inspected every year during the hours of darkness.

On category 4a and 4b roads non-mandatory longitudinal warning lines to be renewed when more than approximately 50% of their area becomes ineffective or worn away.

All road markings other than those listed above to be renewed on all categories of road when more than approximately 50% of their area becomes ineffective or worn away.
Road studs should be inspected every 2 years during the hours of darkness.

Road studs to be replaced when more than approximately 20% of those within a driver's vision are defective or missing, subject to the road not being included in a reconditioning or surface dressing programme.
3.11 Traffic Signals, Pedestrian and Cycle Crossings

Policy

Traffic Signals, Pedestrian and Cycle Crossings The object is to keep the signals in correct and efficient operation at all times. To provide appropriate tactile information that is essential for pedestrian safety. To undertake all necessary works to achieve this objective as it is essential for road and pedestrian safety.

Zebra Crossings To undertake all necessary works to achieve this objective as it is essential for road and pedestrian safety. To provide appropriate tactile information that is essential for pedestrian safety.

Standards

Traffic Signals, Pedestrian and Cycle Crossings

- Urgent faults to be attended to within 3 hours of being notified, full repairs being made within 48 hours.
- Individual lamp failures to be replaced within 48 hours of being notified
- External inspection for alignment of heads, cleansing of lenses and examination for damage to be undertaken every 12 months.
- All lamps to be bulk changed every 12 months.
- A detailed functional check and electrical examination, including phasing, to be undertaken annually in line with periodic inspection schedule or when a fault is suspected.
- Full electrical insulation and earth impedance tests to be undertaken every 5 years, or in line with the latest Industry standards should they change.
- Non-urgent faults to be attended to within 48 hours of being notified, full repairs being made within 72 hours.

Zebra Crossings

- Pedestrian crossings to be inspected for illumination every month.
- Individual lamp failures to be attended to within 24 contract hours of being notified and made safe.
- All lamps to be bulk changed every 3 months.
- A detailed functional check, including beacon control mechanism, and electrical examination to be undertaken annually or when a fault is suspected.
- Full electrical insulation and earth impedance tests to be undertaken every 3 years.
- Electrical faults to be repaired with the priority to be determined in relation to the nature of the defect but in any case within 5 working days.
3.12 Non-illuminated Traffic Signs and Bollards

Policy
The object is to keep all traffic signs legible and visible from as far as possible at all times in relation to the road use and traffic speeds.

To undertake all necessary maintenance to achieve this objective as the provision of adequate signing is an essential part of the campaign to reduce the number of road traffic accidents.

- Identification of risk to users;
- Indication of mandatory and statutory manoeuvres and restrictions;
- Separation of potential traffic conflicts;
- Heavy traffic routing can optimise highway maintenance;
- Can contribute to the local economy;
- Support of sustainable transport modes.

Standards
- Sign cleaning on category 2,3a and 3b roads only to be undertaken when necessary in the interests of road safety.
- All signs to be inspected for general condition once per annum.
- Signs on category 2,3a and 3b roads to be inspected every year during the hours of darkness.
- Signs on category 4a and 4b roads to be inspected every 2 years during the hours of darkness.
- Damaged or missing signs to be repaired or replaced with the priority to be determined in relation to the nature of the defect.

3.13 Street Lighting, illuminated Traffic Signs and Bollards

Policy
Street Lighting The object is to maintain an appropriate level of illumination keeping energy consumption to a minimum and to protect the capital investment in street lighting equipment. To undertake the minimum amount of maintenance commensurate with achieving this objective, using the most energy efficient lamps and equipment.

Traffic Signs and Bollards (Illuminated) The object is to ensure that all illuminated signs and bollards are legible by day and night. To undertake all necessary
maintenance to achieve this objective as the provision of adequate signing is an essential part of the campaign to reduce the number of road traffic accidents.

Street lighting is provided to meet the duty of care role the authority has to provide road safety benefits to all users, support the integrated transport network agenda, public amenity and crime reduction.

Street lighting needs to be kept in good operating order and sound structural condition to serve their function and not be dangerous to road users or pedestrians.

Cyclical maintenance intervals for lighting installations should be determined to ensure the installation’s correct operation and light output, minimize failures and maximize life.

Street lighting in poor repair may be detrimental to the appearance of environmentally sensitive areas. Use of appropriate columns should be used in such areas.

**Standards**

- Defects which could be dangerous to be attended to within 3 hours of being notified and made safe.
- Electrical faults to be repaired in line with those stated in the contract with the priority to be determined in relation to the nature of the defect.
- Damaged columns to be replaced in line with those stated in the contract with the priority to be determined in relation to the nature of the defect.
- A detailed electrical check to be undertaken annually or when a fault is suspected.
- Full electrical insulation and earth impedance tests to be undertaken every 3 years.
- Lamp columns to be checked for structural integrity and condition every 5 years.
- Street lights to be inspected for illumination monthly during the hours of darkness.
- All lamps to be bulk changed at regular intervals according to lamp life characteristics.
- Generally metal lamp columns to be ‘touched in’ or repainted as necessary when required.
- Metal lamp columns in high amenity areas to be ‘touched in’ or repainted as necessary annually in the spring.
3.14 Bridges and other Highway Structures

Policy

Bridges and other Highway Structures Bridges and highway structures need to be maintained to such a standard that structural inadequacy does not affect the use of the highway network, the safety of all users of the highway is reasonably assured and the condition of the structure does not compromise the amenity of the area in which it is located.

Bridge Inspections The purpose of regular bridge inspections is to check the condition of all structures and identify any deficiencies that require attention. To ensure that all defects of a safety nature or that put the structural integrity of the structure at risk are repaired or made safe as soon as is reasonably practicable.

General inspections of all elemental:

Minor Structural Maintenance The object is to ensure that all structures are maintained so that their continued performance in service without loss of safety and efficiency is assured.

To undertake all necessary works to achieve this objective, unless the bridge or culvert is programmed for renewal or strengthening wizen only the minimum of maintenance consistent with safety will be carried out.

Major Structural Maintenance (Strengthening) The object is to accommodate 40 tonne vehicles on all strategic routes and all local routes which serve the particular needs of local industry.

To assess existing bridges to identify the need for strengthening and replacement in order to meet this objective and to undertake a rolling programme of bridge strengthening and replacement in order of priority.

Standards

Special inspections to be carried out as follows:

• When necessary to investigate a specific problem or if a particular problem has been identified on other similar structures;

• When a structure has to carry an abnormal heavy load if assessment calculations indicate that the margin of safety is below that which would be required for a design to current standards or if similar loads are not known to have been carried before. Inspections should be undertaken before, during and after the passage of the load;

• If unexpected settlement is observed;

• To check river bridge foundations during principle inspections. Where probing indicates the possibility of scour, further underwater inspections should be carried out;
• To investigate possible structural damage after major accidents or fires adjacent to structures.

• Defects which cause a hazard to users of the highway to be made safe within 3 hours of being notified followed by repair as soon as reasonable practicable.

• Principal inspections for all structures to be carried out at intervals not exceeding nine years.

• Iron and steel work of structures to be painted in a periodic works programme, the frequency of which will be determined by local conditions and the results of inspections.

• All bridges to be assessed with assessments being carried out in road category order.

Special inspections to be carried out as follows:
• To investigate possible structural damage after major accidents or fires adjacent to structures.

• Non-urgent minor structural maintenance to be assessed on a priority basis taking account of the road category, the structural importance of the element of the bridge that is affected and the severity of the defect. The inclusion of works in the minor maintenance programme will depend on their assessed priority and the budget available.

• The bridge strengthening and replacement programme to prioritised taking account of the road category, the availability and suitability of alternative routes and the carrying capacity, condition, estimated future life span and maintenance costs of the bridge.

• The inclusion of a structure in the bridge strengthening programme will depend on its assessed priority and on the budget available.

3.15 Sweeping and Street Cleansing

Policy
There are four main purposes of sweeping and street cleansing:

• To remove debris from the channels in order to prevent surface water ponding, and an excess of detritus being washed into gullies.
• To remove loose material or deposits that could present a hazard to highway users. To remove or treat moss where it is identified as a safety hazard on the footway
• To maintain a clean and tidy environment and ensure the general cleanliness of the highway network.

The first and third objectives should be achieved in order to meet statutory requirements under the Environmental Protection Act, and the second to maintain highway safety, when necessary on an emergency basis only.
Standards

- Emergency sweeping and cleansing to be undertaken only when immediate action is required to remove deposits or spillages to maintain public safety.

- Footways and adjacent areas at shopping parades to be cleaned and litter removed at least once a week.

- All outer urban roads and rural roads will be swept and litter removed at least 8 times a year.

- Fly-tipping to be removed from the highway as soon as practicably possible.

- Litter complaints to be responded to promptly in accordance with the corporate policy.

- Within these designated Category 1 areas, the Contractor shall Sweep and De-Litter so as to achieve Grade A standard by 08:30hrs each morning."

- In the event that roads within these areas fall to grade "B" or below, they shall be restored to Grade "A" within one (1) hour, and thereafter maintain a standard better than Grade "B" at all other times, until 20:00hrs in Windsor town centre and until 19:00.

- Litter bins will be emptied as necessary to prevent them overflowing in Windsor and Maidenhead town centres. All other bins will be emptied at least once a month.
3.16 Verge Maintenance

Policy
The object is to maintain verges to facilitate grass cutting, to provide a safe refuge for pedestrians where there are no footways, to prevent the encroachment of verge soil and growth onto paved areas and so far as possible to minimise damage caused by improper use, particularly by vehicles.

To undertake the works necessary commensurate with achieving this objective, taking into consideration the likely cause of the need for maintenance.

Standards
- Verge repairs should only be carried out on a priority basis as determined by a site inspection and may include minor measures to prevent reoccurrence of damage where appropriate.
- Siding of footways and cycleways should be carried out where required to maintain their width.
- Carriageway siding of unkerbed roads should be undertaken where necessary and prior to renewal of edge of carriageway markings.

3.17 Pumping Stations

Policy
The object is to ensure that the highway does not flood by pumping surface water to a suitable outfall in places where there is no natural point of discharge. To undertake all necessary maintenance commensurate with achieving this objective.

Standards
- Defects which could be dangerous to be attended to within 4 hours of being notified and made safe.
- Faults to be repaired with the priority to be determined in relation to the nature of the defect but in any case within 20 working days (4 weeks).
- A general inspection to be undertaken monthly to ensure continued satisfactory operation of pumping stations.
- A detailed electrical and mechanical check to be undertaken annually or when a fault is suspected.
3.18 Highway Encroachments And Obstructions

The Council has a responsibility to keep public highways open and remove obstructions and encroachments which may affect the use and safety of the highway.

This policy covers the regulatory matters relevant to this responsibility, which include issues such as obstructions, encroachments, highway obstructions and licences related to permitted activities on the highway.

Policy

The Council shall take any necessary measures to ensure that the public maintained highway is safe to use and be enjoyed by the public.

Encroachments on the Highway

Any encroachment on the public highway is preventing the legitimate use of the highway and whenever an encroachment has taken place on the public highway measures shall be taken by the Authority to remove the encroachment. (Or if appropriate and the land is considered surplus to highway requirements the extinguishments of Highway Rights may be pursued under Section 116 of the Highways Act 1980.)

Whenever an encroachment is suspected on the public highway, the Authority shall carry out a status check to determine the exact limits of the highway thereby establishing whether an encroachment has occurred.

Removal of obstructions

Obstructions on or over the highway prevent the legitimate use of the highway and are a potential safety hazard for road users and measures shall be taken by the Authority for the removal of the obstruction.

Obstructions on the highway take various forms and the most commonly encountered occurrences are as follows.

Items placed on the highway causing an obstruction (unauthorised signs, erections, materials or trading booths).

The Council shall serve notice under the appropriate section of the Highways Act to deal with the removal of the obstruction.

Overhanging trees and hedges

The Council shall serve a notice under Section 154 of the Highways Act 1980 on the owners of overhanging hedges and trees requiring that they are cut back to provide the necessary clearance and abate any nuisance.

Unauthorised Signs on the Highway

It is necessary to place signs on the highway to give information and direction to the road user in the interests of road safety and mobility. These signs, for highway purposes, are placed under statutory powers and regulations are in place in relation to the type and positioning of these signs.
Policy
The Council has no power to authorise any signs placed on the highway other than for highway purposes and shall invoke its powers under section 132, 137 and 143 of the Highways Act 1980 to remove unauthorised signs.