Winter Service Policy
2014/2015

Housing, Public Protection and Environment Department
Winter Service Policy 2014 /15

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1.0 Winter Service Background

1.1 Section 41 of the Highways Act 1980 places a statutory duty on the Highway Authority to maintain the public highway as follows:

“In particular, a Highway Authority is under a duty to ensure, so far as is reasonably practicable, that a safe passage along a highway is not endangered by snow or ice”

1.2 The legislation does not impose an absolute duty but rather involves a balance between the degree of risk and the steps necessary to eliminate the risk.

1.3 In order to provide a statutory defence, a County Policy on winter service provision is required which should be reviewed on a regular basis.

1.4 The level of service applicable to the publicly maintained highway network is determined by elected members representing Wrexham County Borough Council. The policy is based on a risk assessment approach to safeguarding the general public whilst meeting stakeholders service expectations through the cost effective use of available funds and resources.

1.5 The Authority believes that the level of service meets the requirements of the current interpretation of “reasonably practical”, but will continue to review the policy to ensure that it satisfies the statutory requirements of the authority particularly in respect of any changes to legislation.

1.6 The section of highway forming the Trunk Road network currently managed by Wrexham County Borough Council as partnering agents acting on behalf of the Welsh Government is subject to the terms of this policy as approved by the North and Mid Wales Trunk Road Agency on behalf of the Welsh Government.

1.7 Revised winter service guidance, contained in Appendix H of Well Maintained Highways, was issued in September 2013. This guidance is considerably more detailed and onerous to implement and adhere to than the
previous update in 2011. Following comments and concerns by many Winter Service providers nationally a review is currently being undertaken by the National Winter Service Research Group (NWSRG), who developed the guidance. This is likely to result in a revision of the document within the next 12 months. As such, together with all other Welsh Authorities we do not intend to fully adopt this guidance until this review is complete. The Authority will contribute to the review via feedback submitted through the Welsh County Surveyors Society.
2.0 Executive Summary

2.1 The purpose of the policy is to demonstrate compliance with the statutory duties of the Highway Authority as stipulated in the Highways Act 1980, by the management and implementation of a documented cost effective approach to the provision of a winter maintenance service in the interest of public safety.

2.2 This approach to the management of the winter maintenance service enables the authority to provide a statutory defence against third party claims which may arise in respect of these statutory duties.

2.3 This policy is to inform and involve members in the procedures associated with the Winter Maintenance Service provision.
3.0 **Procedures**

3.1 **Weather Forecasts**

3.1.1 Daily weather forecasts are received throughout the winter period and are specific to Wrexham County Borough. The forecast is provided by MeteoGroup who are the largest private weather forecasting organisation in Europe. MeteoGroup utilise their experience at weather forecasting combined with information provided by Ice Prediction sensors situated on the A483 Trunk Road, Wrexham Town Centre, Bangor on Dee, Bwlchgwyn and Dolywern to predict the weather for a 24 hour period from 12 noon daily. The weather forecast provided through RoadCast forms the basis of the decision making process with regards to gritting actions taken in the interest of road safety over the succeeding 24 hours.

3.1.2 A cross boundary partnership approach is adopted throughout the North Wales Group of Authorities and neighbouring English Authorities/Agencies to ensure an effective and consistent service delivery.

3.1.3 A North Wales protocol for distributing daily weather forecasting information and proposed action details has been formally adopted which establishes improved communications between neighbouring Authorities and the North Wales Police.
3.2 **Priority of Roads**

3.2.1 Roads within the Authority have been prioritised for treatment into priority 1, 2 and 3 routes.

3.2.2 **Priority 1 routes** are roads carrying substantial volumes of traffic having characteristics, which require protection from frost throughout the night. These routes form the spinal road network of the Authority and merit high priority to sustain the free flowing movement of traffic. They include:

- Trunk Roads (50 kms)
- Class A Roads (110 kms)
- Class B Roads. (143kms)
- Strategic/ Important Bus Routes (8 bus services or more per hour)
- Main access roads to schools or establishments of higher education (where logistically practical)
- Town centre access and distributor roads
- Industrial Estate Roads
- Main Council maintained Car Parks

The 11 **Priority 1** precautionary gritting routes total 40% or 500kms of the total highways network.

3.2.3 **Priority 2 routes** are formed from Class C and Unclassified roads that form main distributor routes in urban areas. They include:

- Housing Estate Roads
- Access routes to smaller rural communities
- Access roads to schools – inaccessible by bulk gritter
- Remaining bus routes (4 service buses or more per hour)

**Priority 2** gritting routes will be treated upon satisfactory completion of the **Priority 1** routes providing the criteria set out in 3.2.4 are met and adequate resources are available.

**Note** - **Height above sea level and gradients are factors in distinguishing these routes from priority 3 routes.**
3.2.4 Priority 3 routes are all the remaining roads.

3.2.5 All priority 1 routes will be subject to precautionary gritting operations throughout the winter period at the discretion of the Senior Service Manager or his representative. The decision to undertake precautionary gritting actions is made daily between the period from 1 October to 30 April of the following year. Priority 2 routes will be treated following the satisfactory treatment of priority 1 routes following the onset of snow or prolonged icy conditions. The protocol for treatment during this period will be for a continued action on our priority 1 gritting routes as required with discretionary actions being taken on priority 2 routes in response to known or observed problem areas or in relation to requests that have been assessed and justified by Wrexham County Borough Council staff. Enhanced training will be undertaken by winter maintenance staff involved in this process with the intention of achieving a consistent approach. If temperatures remain below zero up to 12 noon, Area Supervisors will be informed of the prevailing weather conditions and instructed to continue inspections in liaison with the incident control staff for co-ordination purposes. The level of actions will be dictated by the available resources. Bulk gritting vehicles supported by demountable appliances and manual salting gangs will be deployed for this purpose. A discretionary decision to suspend further actions pending improving weather conditions may be taken.

3.2.6 During the onset of snow or prolonged icy conditions and the satisfactory treatment of the priority 1 routes, all available plant and resources will be deployed to clear snow within the priority 2 routes. During such operations the gritting appliances will be directed by Wrexham County Borough Council staff with priority being given to the treatment and ploughing of roads which will be subject to waste collection services the following day. Other priority 2 roads will be treated in conjunction with this process as resources dictate. This practice will be repeated on a daily basis throughout the period of snow or icy conditions.

3.2.7 Treatment of priority 3 routes will normally be dependent upon the availability of appropriate resources following the satisfactory attention to priority 1 and 2 routes.
3.2.8 Snow clearance may be carried out by either Wrexham County Borough Council workforce or by contractors retained on term contracts.

3.2.9 During periods of prolonged adverse weather conditions, consideration will be given to maintaining roads which assist rural business routes (subject to availability of resources).

3.3 **De-icing Materials**

3.3.1 Wrexham County Borough Council procures its de-icing materials through a national tendered procurement process. There are 2 materials utilised in the winter maintenance service:-

**6mm nominal size rocksalt**

This is the most commonly used material for general purpose gritting. It is spread at a rate specified in accordance with the North and Mid Wales Collaborative Precautionary Treatment Matrix. This is the preferred de-icing material for use during snow conditions.

**6mm nominal size coated rocksalt (SafeCote)**

This material is standard rocksalt with an applied coating which enhances its performance to treat ice at lower temperatures (conventional rocksalt has a reduced efficiency at temperatures below -6 degrees centigrade). It has a greater adhesion to the applied surface and is effective over a longer period. The enhanced cost of the coated rocksalt dictates a controlled use and this is made at the discretion of the Streetscene Services Manager or his representative in the interest of maintaining cost efficiency.

3.3.2 Rocksalt is mined from a non-renewable source and, in high concentration can be environmentally unfriendly and in certain situations can damage vegetation. It is therefore important that the material is only used when necessary and in the correct locations.

3.3.3 To effectively remove ice from the road surface the rock salt requires the action of traffic, which assists in the process of breaking down the salt granules into a saline solution. This rapidly melts the ice and prevents further ice forming for several hours.
3.3.4 Treatment times and effective duration of de-icing materials are calculated in accordance with the agreed North and Mid Wales collaborative Precautionary Treatment Matrix.

3.4 **Operational Practices**

3.4.1 The winter period is defined as between 1 October – 30 April. Winter service drivers are retained to deliver the service during a 22 week period which will apply between 1 November - 31 March. Outside of the standby period volunteers from the workforce will be utilised to provide the winter service.

3.4.2 Forecasts are received by 1.30 pm every day between the period 1 October to 30 April by staff at the operational depot or by Council representatives on call at weekends.

3.4.3 A decision on appropriate action will be made by the Senior Service Manager or his representative and the supervisory staff and standby workforce informed accordingly. Standby crews are available to respond to forecast changes and subsequent actions/decisions outside of normal working hours.

3.4.4 Priority 1 routes will be treated before the formation of ice. The average route treatment time of 2.5 hours will be taken into account in making the decision to ensure that all pre-cautionary priority1 routes are completed on time. Any changes to the pre-determined actions will be verified with the Senior Service Manager or his representative before notification of the duty operatives. The situation may be varied by weather conditions such as heavy rain immediately before a frost, which may restrict the time to carry out the work.

3.4.5 Depending on the forecast, further actions may be required to support the precautionary gritting decisions. Whilst every effort will be made to plan this action it may be considered necessary to receive updated forecast information from the weather forecaster prior to a decision being made. The weather forecast update will be carried out by the Senior Service Manager or his representative at any time to ensure that appropriate actions are carried out in the interest of public safety and to provide a cost efficient service.
3.4.6 In the event of a forecast of snow the priority 1 routes will be pre-treated prior to the event. Where this is not possible, for example when it starts as rain and turns to snow, a decision to delay action until the rain stops in order to prevent the de-icing material from being washed away. This situation can be even more difficult if it occurs during the rush hour as traffic congestion impedes the progress of the gritting vehicle.

3.4.7 Following the formation of snow, work will continue around the clock until all priority 1 roads are clear. When the priority 1 roads are cleared to a standard which safeguards the safe passage of vehicular traffic, all available resources will be dedicated to attend to priority 2 roads as described in 3.2.6.

3.4.8 Priority 3 routes will receive attention when resources are available and priority 1 and 2 roads have received appropriate attention.

3.4.9 During periods of snowfall all gritting vehicles will be equipped with snow or slush ploughs depending on the type of snow being cleared. Consideration will be given to provide accompanying operatives to drivers of bulk gritting vehicles involved in snow clearing operations based upon an individual risk assessment taking into account the severity of the conditions and the particulars of the route receiving attention. Private sub-contractors operating in rural areas will be deployed at the discretion of the Senior Services Manager or his representative.

3.5 Partnership Working

3.5.1 Liaison and cross boundary operational practices are established between Wrexham County Borough Council and its neighbouring Authorities and highways Managing Agents prior to the winter period, with the intention of maintaining a consistency and continuity of winter services throughout the region.

For this purpose the following cross boundary precautionary gritting arrangements are in place:-

**Flintshire County Council** will treat the following roads for **Wrexham County Borough Council**:

- B5373 Rackery Lane, Llay from the County Boundary to the traffic lights at the Crown Inn.
Wrexham County Borough Council will treat the following roads for Flintshire County Council:-
- A541 Mold Road from B5102 junction to county boundary.
- B5102 from county boundary to A541 Mold Road.

Denbighshire County Council will treat the following roads for Wrexham County Borough Council:-
- A525 Llandegla from county boundary through to Four Crosses Inn junction.
- B5430 from A525 through to county boundary.
- A5 from county boundary through to B5434 Station Road, Froncysyllte.

Wrexham County Borough Council will treat the following roads for Denbighshire County Council:-
- A539 from county boundary through to Bryn Howell.

Wrexham County Borough Council will treat the following Trunk Roads for Amey Mouchel (managing agent Highways Agency Area 9) on behalf of the Welsh Assembly Government.
- A5 Chirk Bypass from county boundary to Gledrid Roundabout.

Wrexham County Borough Council acting as agents for the Welsh Assembly Government will plough during snow conditions the following roads in conjunction with Balfour Beatty Mott Macdonald (managing agent for Highways Agency Area 10).
- A483 county boundary to Belgrave Roundabout, Cheshire.
- A483 Belgrave Roundabout to county boundary.

3.5.2 It is the responsibility of each individual Highway Authority to ensure adequate treatment of the roads under their jurisdiction. A protocol of daily communications between neighbouring authorities / agencies has therefore been established to ensure continuity of actions.

3.6 Footways and Cycleways

3.6.1 Footways, pedestrian areas or cycleways are not included in precautionary treatment operations. Nevertheless, there will be a certain amount of overspill of de-icing material onto footways and cycleways when
precautionary gritting actions are being carried out on adjacent carriageways.

3.6.2 Resources will be deployed to treat footways once snow has settled or during periods of prolonged freezing conditions on a priority basis at locations including:-

- Town centre footways and footways in the vicinity of shopping areas
- Footways in the vicinity of civic buildings
- Public highway in the vicinity of hospitals
- Public highway in the vicinity of residential homes / old age pensioners flats
- Public highway in the vicinity of day care centres
- Public highway in the vicinity of Schools (during term times only)
- Footbridges
- Bus Stops

If any reports of icy footways are received for locations not included in the above criteria the footway will be inspected to assess whether treatment is appropriate dependant upon available resources.

3.7 Salt Bins

3.7.1 Salt bins are located in areas for the use of pedestrians and motorists to treat the public highway only. The decision for the distribution of salt bins is that of the Senior Service Manager or his representative in the interest of financial management and public safety.

3.7.2 Salt bin locations will be individually assessed against criteria which includes:-

- Non precautionary gritting routes
- Location within bounds of public highway
- Benefit to road safety, ie areas with steep inclines
- Traffic volumes
- Proximity to schools and locations of public interest.
- Nuisance and environmental impact on surrounding location
A Pro Forma to aid in the assessment of suitable salt bin locations has been created and will be distributed to staff as required.

3.7.3 The Environment Department will provide salt bins and de-icing materials within Council establishments on request at cost to the relevant Department. Every effort is made to establish and meet the requirements of each Department prior to the onset of the winter season. The availability of resources will dictate the priority allocated to provide this service during the winter season.

3.7.4 Provision is available for Community Councils to purchase salt bins and rocksalt from the Housing, Public Protection and Environment Department with the intention of supplementing the Authority’s winter maintenance services to the benefit of the general public. Salt bins purchased by the Community Council will be distinguishable from Environment Department salt bins and will be maintainable by the Community Council. Location of the salt bin on the public highway will require prior approval of the Highway Authority.

3.8 Resources

3.8.1 The workforce involved will be formed primarily from the Environment Streetscene Department. All drivers will be trained and assessed. Additional resources will be sought from other sections or Departments if required.

3.8.2 The Council owns a fleet of 14 large gritting vehicles, 4 small demountable gritters, 2 towable gritting units and 6 quad bikes fitted with towable gritting appliances which are currently stored at one of the 3 operational depots in Wrexham Indust Estate, Llay and Chirk.

3.8.3 Rocksalt is currently stored in the Abbey Road depot, Chirk Depot and Llay recycling depot. A stock management service is operated in collaboration with the Salt Union, Winsford. The stock management system highlights the requirement for the delivery of rocksalt which is triggered by predetermined maximum and minimum stock levels throughout the winter season. This service provides the following benefits:

- Fresh stocks of rocksalt which retain maximum salinity values.
• Controlled levels of stock to meet storage availability and providing the ability to avoid storing large volumes of rocksalt outside of the winter period.
• Avoidance of a shortage of rocksalt during periods of high demand.
• Regional proximity of supplier provides reduced delivery times.

3.8.4 Stock levels of rocksalt are maintained from a starting stock level of 8000 tonnes (3000 tonnes at Abbey Road, 2000 tonnes at Chirk, 3000 tonnes at Llay Depot). Regular deliveries are organised in collaboration with the suppliers to ensure that adequate stocks are retained throughout the winter period.

3.8.5 Access to additional stocks retained by the Welsh Government at strategic locations are available should there be a shortfall in stocks due to unforeseen circumstances such as prolonged severe periods of weather combined with logistical shortfalls.

3.9 Standards Monitoring

3.9.1 Wrexham County Borough Councils service delivery is benchmarked against National performance statistics to ensure that a comparative cost effective service delivery is being maintained.

3.9.2 Regional and National meetings of operational staff and support service providers creates the opportunity for continual assessment of operational practices, standards and resources.

3.10 Vehicle Tracking

Wrexham County Borough Council’s fleet of 14 bulk gritting vehicles has been provided with operational tracking devices. This facility provides the following service benefits :-

• Driver safety – the location of each vehicle can be constantly monitored
• Defence against insurance claims – maximises accountability
• Route maximisation
• Auditable recording of treatment standards, ie speed of vehicle and time of treatment.
• Supports financial management of the service.
The system will monitor and record time, speed, location and whether spreading salt.

3.11 **Extreme Weather Protocol**

On receipt of a severe weather warning a control room will be established and manned by staff from the Streetscene Division who will act as a dedicated point of contact for the Contact Centre staff. The staff within the control room will have direct contact with Area Supervisors who will be on-site to investigate complaints and mobilise dedicated gritting vehicles under their direct control.

The control room will be responsible for directing all operations and act as a liaison contact to the press office through whom all press releases with be made.
4.0 **Supporting Documents**

(i) Highways Act 1980.
(iii) North and Mid Wales Precautionary Treatment Matrix

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