Cavan County Council

Winter Service Response 2016/2017



November 2016

# Policy Statement

**Cavan County Council Winter Service Response**

Winter Policy Statement

“Cavan County Council will endeavour to carry out works to the best of their ability, within resources, to alleviate problems caused by adverse weather conditions that affect the people of the County.”

# Introduction

Local Authorities are required to carry out a major review of their operations and to produce a plan including maps detailing the proposed response/operations the Council will be operating. This review is to be carried out annually.

# Forecasting System

Winter gritting is undertaken to increase road safety. The objective is to reduce the negative impact of frost or snow on the road surface and to treat the road prior to, or soon after, the occurrence of frost or snow. In order to plan for winter gritting operations, it is necessary to have a forecasting system in place.

The winter maintenance forecasting system involves the collation and interpretation of data from:

* Road weather information stations from Transport Infrastructure Ireland (TII previously the National Roads Authority)
* Road Weather Information System called Vaisala Manager and
* Weather forecasts by Met Eireann.

The weather stations provide road weather data on road surface temperatures, dew temperatures, road wetness, wind conditions, and salt concentrations that exist on the road surface. This information is fed electronically into the Vaisala Manager which gives real time weather data and road weather predictions for the area. The information available on

Vaisala Manager, together with Met Eireann forecasts, assist the Duty Engineer in finalising the decision on whether or not to salt on any particular night.

The forecasting system is accurate to about 85% at best. This can mean that there are a number of days in the winter when frost is not forecast, but may occur. There are also significant local weather variations that are difficult to forecast. Good judgment based on data available and experience is critical.

# The Existing System

**In Severe Weather Conditions**

The Council has a roster of Duty Engineers whose role is to monitor weather forecasts, utilise Met Eireann Consultancy service, monitor road conditions via the Vaisala Manager system, and then manage (in conjunction with the Machinery Yard), the deployment of Salt Spreaders and the treatment of roads.

The Vaisala Manager Software provides recording and observation of data from two Weather/Ice Monitoring Stations on the N3 at Virginia and Butlersbridge. This software provides text alerts when predetermined limits are reached for “Road Surface Temperature, Precipitation, and Road Surface State”.

# Winter Gritting Operation

Winter maintenance of public roads involves dealing with severe weather conditions such as icy roads and snow clearance operations. The key aim is to keep major routes as free as possible from hazardous road conditions.

The County Council has a schedule of priority routes which are gritted with salt, each time it is deemed necessary to do so. Other routes are gritted from time to time as the need arises and within the budgets and resources available. Weather scenarios arise when it is not possible to keep roads Ice free. When and if this occurs, priority one routes will be treated and retreated ahead of all other routes.

The main type of salt used is known as Rock Salt which is sourced centrally by the Transport Infrastructure Ireland. The rate of spread of salt varies from 10 grams per sq.

metre for precautionary treatment and up to 40 grams per sq. metre when snow exists on the ground. The timing of the salting is carefully judged to be completed, if possible, before freezing occurs. Should rain occur during or after salting it may render this precautionary treatment ineffective. Forecast rain may affect scheduling of treatment times.

Salt is normally purchased in advance of the winter period, through the TII, and stockpiled at a storage barn in Moynehall and other quarry locations throughout the County. Lorry mounted salt gritters are used to distribute salt across road surfaces. Once the driver sets the rate of spread of salt it is maintained electronically irrespective of vehicle speed.

There are 9 trucks fitted for salting and each is equipped with a plough and chains for snow conditions.

# Winter Gritting Equipment

The equipment currently used for winter gritting operations is as follows:

|  |  |
| --- | --- |
| **MACHINERY YARD** |  |
| **STAFF** | **PLANT** |
| Normal Staffing – 3 | 11 Trucks |
|  | demountable Stainless Steel Salt Spreaders |
| On Call – 8, Managed centrally | 3 No. 9m3 – Pre-wet |
| normally assigned to roads areas | 1 No. 6m3 – Pre-wet |
|  | 5 No. 5m3 |
|  | 10 Snow Ploughs |
|  | 1 Loading Shovel |
|  | 1 Brine Saturation Station at Moynehall |

|  |  |
| --- | --- |
| **Cavan-Belturbet Municipal District** | **OFFICE NO: 049-9526121** |
| **STAFF** | **PLANT** |
| Normal Staff - 23 Outdoor Road Staff; 3 G.S.S.; 3 Engineers,  On Call-10 men, 3 G.S.S. | 5 crew cabs  5 JCB’s  2 mini salters on crew cabs |

|  |  |
| --- | --- |
| **Ballyjamesduff Municipal District** | **OFFICE NO: 049 8547013** |
| **STAFF** | **PLANT** |
| Normal Staff -20 Outdoor Road Staff; 2 G.S.S., 2 Engineers,  On Call-10 men, 2 G.S.S. | 1. crew cabs 2. JCB’s   1 mini spreader for crew cabs |

|  |  |
| --- | --- |
| **Bailieborough-Cootehill Municipal District** | **OFFICE NO: 049-4378477** |
| **STAFF** | **PLANT** |
| Normal staffing 19 Outdoor Road Staff; | 2 mini salters for crew cabs, |
| 2 G.S.S; 3 Engineers | 1 buggy spreader  1 tractor spreader |
| On Call- 10 men, 2 G.S.S.’s | 4 crew cabs |
|  | 4 JCB’s |

**OUT OF HOURS EMERGENCY NUMBER: 087 6118116**

**Footpaths and Salt Bins**

The Council introduced a salting Bin system for local community groups which has proved very useful in previous years.

2009 & 2010 severe weather experience highlighted the need of local communities in having an organised response to severe weather eg funerals at churches, factory entrances, community halls etc. Minor salting works such as footpaths, are at the discretion of the Municipal Engineers, who are best placed to judge resources available and each situation as they arise.

# Salt Bins

As part of Cavan County Council’s winter weather response, attempts to facilitate community participation in keeping local roads and footpaths open during prolonged severely cold weather is supported by maintaining our salt bin initiative to communities.

To aid local communities Cavan County Council supplies bins, and a fill of salt, for community groups to purchase at cost price.

**Purchase Options**

Option A: 1 Bin – Delivery plus one fill of salt Option B: 1 Bin – Delivery only

**Fee € 170.00**

**Fee € 120.00**

The proposed charge is €170 per bin including delivery and initial fill of the bin. During prolonged severe weather conditions the Council may refill the bins at cost depending on resources. It is however, recommended that the community groups find their own suppliers where possible, as other duties may hamper this service.

Interested parties should apply for bins from their local Municipal District office or on line at [www.cavancoco.ie](http://www.cavancoco.ie/)

# Salting Routes

The following Salting Routes are included in Appendix 1 of this Report. These maps are also available for viewing on the Cavan County Council Website at: <http://www.cavancoco.ie/current-salting-routes.htm>

The existing salting routes and operation work well, however, future budgetary constraints may impact on the level of service provided. In times of severe weather, the salting routes are activated by the Duty Engineer in conjunction with the Machinery Yard Supervisor.

The routes are prioritised as follows: Under normal circumstances the Council will treat Priority 1, 2 and 3 routes; however, if resources are limited priority 1 route will be treated to the exclusion of the others.

|  |  |  |
| --- | --- | --- |
| **Route Designation** | **Description** | **Level of Service** |
| Priority 1 | National Roads: N3, N54, N55, N87, N16 (Salted by Leitrim Co Co) R198 to Hospital, R935 Salt Depot. | To be treated during all weather events |
| Priority 2 | R188**,** R198, R154, R199, R203, R194, R191, R178, R935, R188, R192, R162, R190, R202, R205, R165, R164, R200, R207, R206, R212, L1045, LP1532, L3020, L3021, L3026, L3029, L2500, L2502. | To be treated as part of the normal winter service but may have interruptions to treatment in certain severe weather events |
| Priority 3 | Local recognised hazard locations as directed by Municipal District Engineers. | Not treated as part of the normal winter service but may receive intermittent treatment during certain severe weather events |

Table 1

# Priority 1 & 2

The National Roads N3, N54, N55, N87 and most Regional Roads within Co. Cavan are salted by Cavan County Council (see attached map – Appendix 1). The N16 is treated by Leitrim County Council on an agency basis.

# Priority 3

The Machinery Yard in conjunction with the Municipal Districts make every effort to tackle local problem areas. Chains and Snow ploughs are mounted on trucks and Municipal District staff are diverted from regular duties to addressing local snow problems.

# Priority Routes

Routes are treated according to their priority rating. There are three Priorities levels as shown on the map in Appendix 1. A reduction in funding may lead to a reduction in treatments. Priority 1 routes are the National routes only, Priority two and three cover the Regional and local roads as per Table 1 above.

# Gritting Events

The frequency at which the winter gritting crews are called out to salt Scheduled Routes depends on the severity of the weather during the season. The numbers of call-outs over the past five seasons were:

|  |  |  |
| --- | --- | --- |
| o 2007/08 | = | 37 |
| o 2008/09 | = | 66 |
| o 2009/10 | = | 77 |
| o 2011/12 | = | 52 |
| o 2012/13 | = | 85 |
| o 2013/14 | = | 77 |
| o 2014/15 | = | 72 |
| o 2015/16 | = | 58 |

# Salt Storage

Cavan County Council endeavours to keep its salt stocks at as high a level as possible during the winter season. Currently, Cavan County Council has the capacity to store approximately 2,750 tonnes of salt (enough to do circa 30 pre-salting runs for the County for standard frost conditions). During severe snowfalls and, where resources permit, a contingency plan may be put in place to provide grit at strategic locations in each Municipal District.

The department has recommended that Local Authorities maintain a 10 day salt supply.

# Future Gritting Policy

The critical decision in regard to winter maintenance is the extent of roads to be included in the Schedule of Priority Routes. This has significant budgetary implications.

All National routes salting is funded by the NRA. The extent of Regional and Local roads salted is a discretionary matter for each Local Authority based on finance available and priorities adopted. In the Schedule of Priority Routes, the main decisions to be made are in relation to Regional Roads.

These decisions are predicated on: Finance Available, Capacity of Other Resources Available, Need on the basis of traffic volumes, type of topography, and the Practice on adjoining road sections, particularly in adjoining Counties.

* **Finance Available** – It is important to consider that while winter maintenance expenditure does contribute to road safety, it has very short term impact and monies expended are not available for other road maintenance requirements such as street sweeping, public lighting, verge trimming, pothole repair, signage, and drainage.
* **Capacity of the Other Resources Available –** The Other Resources used in winter gritting are Labour (Drivers, General Operatives, General Services Supervisors, and Duty Engineers), Plant as detailed above, and Salt. From a Resources point of view the critical limiting factors to extending the Scheduled Routes are the volume of the Gritters and the length of route that each unit can cover within a reasonable treatment time.
* **Need on the basis of traffic volumes and type and topography –** There is a wide variation in the volumes and type of traffic on the regional roads in County Cavan, depending on proximity to towns, centres being served, and industrial facilities along the route. Cavan’s topography results in an increase in the extent and severity of elevation from East to West. The two areas where the greatest disruptions occur are in the Ballyconnell/Glan Area in the North-West and Bailieborough in the east of the county.
* **Practice in Adjoining Counties –** The attached maps indicate the adjoining counties that tie in with our salting routes. Leitrim County Council covers the gritting of the N16 to Blacklion/Belcoo. Other minor gritting arrangements exist with Fermanagh, Monaghan and Meath.

# Overview

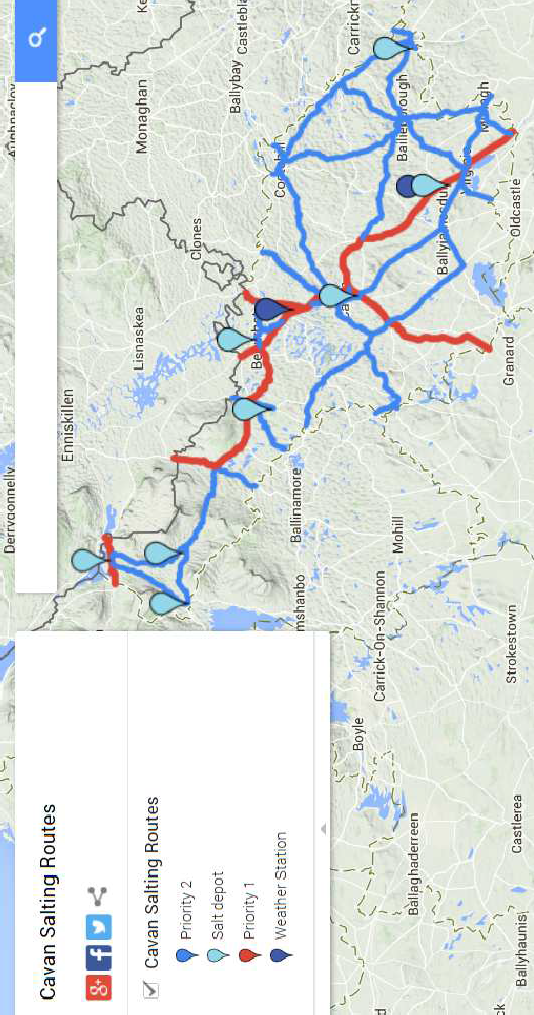
Community salt bins scheme continues to operate. A list of suppliers of Winter Maintenance Materials is available on Cavan County Council’s website.

Winter weather precautions and general advice is posted and advertised on the Cavan County Council website, the Department of Transport, the TII, and the AA’s website.

The Media Liaison Officer, Corporate Services deals with public announcements when required. Announcements are coordinated between the Duty Engineers and Corporate Services.

It is recommended that all heavy goods vehicles should have their own supply of salt on board for severe weather conditions.

Cavan County Council may no longer be in a position to assist local problem areas such as Farms, Schools as it did in the past. In the absence of Council assistance the effected parties should form their own appropriate arrangements.

Appendix 1 - Map of Salting routes in Co Cavan

Details of the Salting routes, including Cavan Town, can be view on <http://www.cavancoco.ie/current-salting-routes.htm>