
WINTER SERVICE PLAN 2020 - 2021



**Comhairle Contae
Loch Garman
Wexford
County Council**

VERSION 10.00

**NOEL O'DRISCOLL
SENIOR ENGINEER
ROADS DEPARTMENT
WEXFORD COUNTY COUNCIL
CARRICKLAWN
WEXFORD**

October 2020

CONTENTS

| Section | Description | Page |
|----------------|---|-------------|
| 1. | <i>Document Control</i> | 2 |
| 2. | <i>Distribution List</i> | 2 |
| 3. | <i>Purpose and Scope</i> | 3 |
| 4. | <i>Policy</i> | 3 |
| 5. | <i>Overall Map of the Service Plan Area</i> | 4 |
| 6. | <i>Roles and Responsibilities</i> | 4 |
| 7. | <i>Rosters</i> | 6 |
| 8. | <i>Routes and Protocols</i> | 6 |
| 9. | <i>PPP Operator and Cross Boundary Arrangements</i> | 7 |
| 10. | <i>Contact Details</i> | 8 |
| 11. | <i>Decision Matrix</i> | 8 |
| 12. | <i>Treatment Matrix</i> | 10 |
| 13. | <i>Plant Vehicles and Equipment</i> | 12 |
| 14. | <i>Supplementary Resources</i> | 13 |
| 15. | <i>Community Involvement</i> | 13 |
| 16. | <i>Details of Depots</i> | 14 |
| 17. | <i>Salt</i> | 14 |
| 18. | <i>Grit</i> | 15 |
| 19. | <i>Materials and Spares</i> | 15 |
| 20. | <i>Appendices</i> | 15 |

1 Document Control

| Version | Issue Date | Revision Details | Prepared | Approved |
|---------|-----------------|------------------|----------|----------|
| 10.00 | October 12 2020 | Final Draft | AD | NOD |
| | | | | |
| | | | | |

2 Distribution List

| Issued To | Organisation / Company | Location |
|----------------------------|-------------------------|-------------------------------|
| Tom Enright | Wexford County Council | County Hall |
| Eamonn Hore | Wexford County Council | County Hall |
| Noel O'Driscoll | Wexford County Council | County Hall |
| Tim Murphy | Wexford County Council | County Hall |
| Abraham Dunne | Wexford County Council | County Hall |
| Neil Dempsey | Wexford County Council | Enniscorthy District |
| Joanne Kehoe | Wexford County Council | Gorey Kilmuckridge District |
| David Murphy | Wexford County Council | New Ross District |
| Sean Kavanagh | Wexford County Council | Wexford District |
| Mark Collins | Wexford County Council | Rosslare District |
| Hugh Russell | Wexford County Council | Machinery Yard |
| Tom Bates | Wexford County Council | Machinery Yard |
| Kieran Whelan | Wexford County Council | Machinery Yard |
| Geraldine Dowler | Wexford County Council | Machinery Yard |
| Amanda Richards | Wexford County Council | County Hall |
| Ray Murphy | Wexford County Council | County Hall |
| Seamus Kavanagh | Kilkenny County Council | Kilkenny |
| Ray Wickham | Carlow County Council | Carlow |
| Gabriel Hynes | Waterford CCC | Waterford |
| Michael Flynn | Wicklow County Council | Wicklow |
| Winter Maintenance Manager | TII | Parkgate Street |
| Jason Bolger | BAM Iridium O&M | Wicklow |
| David O'Grady | Department of Transport | Leeson Lane, Dublin, D02 TR60 |
| Inspector Syl Hipwell | Garda Siochana | Gorey Garda Station |
| Head of Forecasting | Met Éireann | Glasnevin Hill, Dublin 9 |

3 Purpose and Scope

The purpose of this document is to identify the processes, procedures and key personnel employed by Wexford County Council in the delivery of winter maintenance services throughout County Wexford.

4 Policy

Due to the length of the road network in County Wexford, it is not feasible to treat all roads in the County during the Winter Season (12 October 2020 to 30 April 2021). Accordingly, a form of prioritisation is necessary, and routes are divided into the following three priority designations:

Priority 1 Routes (Red Routes). These are listed in the table below. Wexford County Council will try to ensure, as far as is reasonably practicable, the prevention of ice formation on these routes.

Priority 2 Routes (Blue Routes). These are listed in the table below. Wexford County Council will try to ensure, as far as is reasonably practicable, the prevention of ice formation on these routes. In extreme weather events Priority 1 Routes will take precedence over Priority 2 Routes in the allocation of available resources.

Priority 3 Routes (Green Routes). These are listed in the table below. As resources allow, Wexford County Council will provide periodic winter maintenance services on these routes. Such services will only be provided on selected occasions associated with particularly severe weather conditions. Of these routes, the R739 (Kilmore Road) will take priority, and will be treated before other Priority 3 Routes. Motorists must not assume that pre-salting services have been provided to the Priority 3 Network.

| Route Designation | Description | Level of Service |
|-------------------|--|--|
| Priority 1 | N11; N25; N30; N80; M11 (Clogh to Frankfort Interchange) | To be treated during all sub-zero (frost, ice, snow) weather events |
| Priority 2 | R700; R702 (part of) from Enniscorthy to Killealy; R714; R723 (part of) from Ballymacar to Raheen; R725 (part of) from Gorey to Co. Bounds; R728; R730 (part of) from Drinagh Roundabout to Wexford Bridge to Ardcandrisk; R732; R733 (part of) from King Street to Ballyhack and from Slaght to Oaklands Roundabout; R734 (part of) from Slaght to Tellarought Cross; R738 (part of) from Taghmon to Larkin's Cross; R741; R742 (part of) from Gorey to Courtown; R744 (part of) from Templescoby to Castleellis; R761 (part of) from Courtown Road Roundabout to Ballycanew Road Roundabout; R769; R770; R772; R890. | To be treated for the most part as per Priority 1, but may have interruptions to treatment in certain severe weather events |
| Priority 3 | All other Regional Roads | Not treated as part of the normal winter service but may receive intermittent treatment during certain severe weather events |

Mobilisation and treatment times for each type of route are set out in the table below.

| Treatment Route | Priority 1 | Priority 2 | Priority 3 |
|-------------------|------------|------------|---------------|
| Mobilisation Time | 1 hr | 1 hr | When possible |
| Treatment Time | 2.5 hrs | 3 hrs | When possible |

5 Overall Map of the Service Plan Area

Appendix 1 contains an overall map of the area covered by the Winter Service Plan. It includes the following:

- The overall extent of the network covered by the Winter Service Plan
- Treatment routes & their priority, using red for Priority 1 routes, blue for Priority 2 routes, and (where applicable) green for Priority 3 routes. The M11 Gorey Bypass, the M11 Gorey to Enniscorthy route and the N25 New Ross Bypass are indicated by the colour yellow; this route will be treated by the O&M operator – BAM/Iridium.
- Weather stations
- Compounds and Depots

6 Roles and Responsibilities

The names of key winter service personnel and their roles are contained in *Appendix 4*. The responsibilities are set out below.

6.1 Winter Service Manager

The Winter Service Manager's responsibilities are:

- To ensure the preparation of the Winter Service Plan prior to the start of each winter period
- To undertake co-ordination with neighbouring Local Authorities and any relevant private winter service operators on the Winter Service Plan, and to issue the Winter Service Plan to the TII and the Department of Transport
- To ensure the preparation of a rota of suitably experienced Duty Engineers identifying the availability of a decision maker throughout the entire Winter period, and send an electronic copy of the final roster to the TII and the bureau weather forecaster
- To ensure the preparation of a rota of suitably trained operatives identifying the availability of labour throughout the entire Winter period
- To ensure suitable plant, equipment and salt supplies are available to undertake effective Winter Service operations for the duration of the Winter period

- To provide advice to the Duty Engineer
- To give direction or advice on any aspect of the winter service
- To liaise with and report to the Director of Services for Roads
- To liaise with and report to the Senior Engineer, Roads
- To liaise with the TII and the Department of Transport
- To provide factual information concerning the network to An Garda Síochána for onward distribution to the press, local radio, RTE and AA
- To ensure the preparation of the network treatment maps for public communication
- To respond to public enquiries or winter service complaints that may arise
- To carry out an end-of-season review of issues that arose during the winter service period and to communicate any important aspects of this review to the Director of Services for Roads.

6.2 Duty Engineer

The Duty Engineer's responsibilities are to:

- Use the weather bureau service (Vaisala Manager) to examine the forecast and track the actual conditions on the routes
- Obtain updated or more detailed road weather forecasts by talking to the Duty Weather Forecaster using the telephone consultancy service, as required
- Make a decision based on the forecast data, and notify the Winter Service Supervisor of the proposed treatment for that night/day – the decision is to include the treatment to be carried out, commencement times, routes to be treated and spread rates
- Record decisions and details such as treatment records, decision times, commencement times, routes to be treated and spread rates
- Monitor the actual weather conditions until a decision is made and thereafter, as appropriate, to ensure that any changes to the forecast are identified and, on foot of these changes, to decide whether the proposed treatment should be revised
- Fill in the winter service returns on the TII Network Management System (NMS)
- Report to the TII in relation to salt stocks and salt requirements
- Liaise with An Garda Síochána, if required
- Communicate with other relevant parties
- Maintain records of any reported road conditions and of any reported blocked routes or lanes
- Make decisions on special situations, in consultation with the Winter Service Supervisor
- Consult and liaise with the Winter Service Manager during the preparation or revision of the Winter Service Plan

6.3 Winter Service Supervisor

This Winter Service Supervisor's responsibilities are to:

- Notify the designated Winter Service Driver(s), as per the rota, of the proposed treatment for that night/day, including the type of treatment to be carried out, the commencement times, the routes to be treated and the spread rates.
- Inform the Duty Engineer and Machinery Yard Fleet Manager of any servicing or maintenance needs for the winter service equipment or plant
- Update the Duty Engineer with estimates of local salt stocks
- Advise the Duty Engineer and the Winter Service Manager of modifications, incidents, or any problems encountered
- Consult and liaise with the Winter Service Manager during the preparation or revision of the Winter Service Plan

7 Rosters

The Duty Engineers' Roster is attached (see *Appendix 5*).

8 Routes and Protocols

There are five designated salting routes: Enniscorthy; Gorey; New Ross; Wexford; and Regional Roads. Each route has its own designated demountable salt spreader. There are two drivers assigned to each route. Drivers are utilised on alternate call-outs, i.e. if Driver A attends a call-out, Driver B will attend the subsequent call-out.

Appendix 2 contains Treatment Route Cards for all five routes. The Treatment Route Card contains a map of the treatment route, with accompanying driving instructions.

At approximately 14:00 each day, from 12 October 2020 to 30 April 2021, the Duty Engineer will examine the Vaisala Manager Weather Prediction System. If the Duty Engineer decides a call-out is warranted, he will contact the Winter Service Supervisor (WSS) by phone. The WSS will then mobilise the appropriate drivers, as required.

The aim is to treat the roads prior to the time of forecasted frost/ice formation.

Once a decision to salt has been made, the Duty Engineer will text the five Roads District Engineers, the nine General Services Supervisors, the Fleet Manager, the General Services Supervisor (Machinery Yard) and all the Winter Service Drivers . This is purely for information purposes.

The Duty Engineer will record all decisions made and actions taken on the Vaisala Manager system.

The decision to treat streets and footpaths in the urban areas will be made by the District Engineer. Treatment of these areas will be on an ad hoc basis and will not be as frequent as the treatment of Priority 1 or Priority 2 roads.

Since March 2013, Wexford County Council has operated a driver-only system in relation to their salting trucks. A risk assessment was carried out to ensure that this change did not result in any increased risk to the operatives. A copy of this Risk Assessment is contained in Appendix 8. While helpers will no longer be used for the normal winter maintenance operations, they will be brought back during snow and blizzard conditions.

9 O&M Operator and Cross Boundary Arrangements

9.1 Coordination with O&M Operator

Agreements are in place between TII and the O&M Operator Bam/Iridium in relation to the maintenance of the M11 Gorey Bypass, the M11 Gorey to Enniscorthy route and the N25 New Ross Bypass. This includes responsibility for the winter maintenance. The extents of the areas to be treated by the O&M Operator are displayed on the maps in Appendix 3.

BAM will text each of Wexford County Council's duty engineers in the event of a decision to treat the roads in their charge. Wexford County Council will reciprocate.

BAM and Wexford County Council will also exchange copies of their Winter Service Plans.

9.2 Cross Boundary Arrangements

Kilkenny County Council has agreed to salt a short section of the R704 in County Wexford, from its junction with the R723 in New Ross to the Kilkenny County bounds. Wexford County Council has no reciprocal arrangements with Kilkenny County Council.

Kilkenny and Wexford County Council will each text the other's duty engineers in the event of a decision to treat the roads in their charge.

Kilkenny County Council and Wexford County Council will also exchange copies of their Winter Service Plans.

Purely for information purposes, Wexford County Council will exchange copies of its Winter Service Plans with Carlow County Council, Wicklow County Council, and Waterford City and County Council.

10 Contact Details

Contact details for Duty Engineers, District Staff, Drivers, Met Office and Vaisala Helpdesk are listed in *Appendix 6*.

11 Decision Matrix

The decision matrix for the Duty Engineer is given below.

| Road Surface Temperature | Precipitation | Predicted Road Conditions | | |
|---|--|---|-----------------------------------|---|
| | | Wet | Wet Patches | Dry |
| May fall below 1°C | No rain No hoar frost No fog | Salt before frost | Salt before frost (see note a) | No action likely, monitor weather (see note a) |
| Expected to fall below 1°C | Expected hoar frost Expected fog | | Salt before frost (see note b) | |
| | Expected rain before freezing | Salt after rain stops (see note c) | | |
| | Expected rain during freezing | Salt before frost and, as required, after rain stops (see note d) | | |
| | Possible rain Possible hoar frost Possible fog | Salt before frost | Monitor weather conditions | |
| | Expected Snow | Salt before snow fall | | |
| The decision to undertake precautionary treatments should be, if appropriate, adjusted to take account of residual salt or surface moisture. All decisions should be evidence based, recorded and require careful monitoring and review. | | | | |

Notes:

- (a) Particular attention should be given to the possibility of water running across carriageways and other running surfaces e.g. surface water off adjacent fields after heavy rains, washing off salt previously deposited. Such locations should be closely monitored. Ideally the source of the run-off should be diverted from the roadway.

- (b) When a weather warning contains reference to expected hoar frost, considerable deposits of frost can occur. Hoar frost usually occurs in the early morning and is difficult to cater for because of the probability that any salt deposited on a dry road too soon before its onset, may be dispersed before it can become effective. Careful monitoring is required under this forecast condition which should ideally be treated just as the hoar frost is forming. Such action is usually not practicable and salt may have to be deposited on a dry road prior to but as close as possible to the expected time of the condition. Hoar frost may also be forecast at other times of the day, in which case the timing of salting operations should be adjusted accordingly.
- (c) If under these conditions, rain has not ceased by early morning, crews should be called out and action initiated as rain ceases.
- (d) Under these circumstances rain will freeze on contact with running surfaces and full precautionary treatment should be provided even on dry roads. This is a most serious condition and should be monitored closely and carefully throughout the danger period.

12 Treatment Matrix

The guide used for treating roads with dry unmodified salt is given below.

| Weather Conditions Road Surface Conditions Road Surface Temperature (RST) | Treatment Air Temperature | Salt Spread Rate (gm/m²) | Ploughing |
|---|--|---|------------------|
| Frost or forecast frost RST at or above -5°C | | 10 Also refer to Note (b) | No |
| Frost or forecast frost RST below -5°C and above -10°C and dry or damp road conditions | | 20 | No |
| Frost or forecast frost RST below -5°C and above -10°C and wet road conditions (existing or anticipated) | | 2 runs X 20 | No |
| Light snow forecast (<10mm) | | 20 | No |
| Forecast for Medium/heavy snow or a freezing rain forecast | | 2 runs X 20 | No |
| Ice formed | Above -5°C | 20 | Not possible |
| Ice formed | At or below -5°C | 2 runs X 20 | Not possible |
| Snow covering exceeding 30mm | | 20 to supplement ploughing, up to 40 if temperatures are falling | Required |
| Snow accumulations due to prolonged falls | | 20 to 40 to supplement ploughing | Required |
| Hard packed snow/ice | Above -8°C | Successive treatments at 20 to 40 (repeat as needed) | Not possible |
| Hard packed snow/ice | At or below -8°C | Successive treatments at 20 to 40, supplemented by abrasives (repeat as needed) | Not possible |
| Sustained low temperatures | Below -10°C | Successive treatments at 20 to 40 (repeat as needed) | |

Treatment Matrix Guide for Dry Unmodified Salt

Notes:

- (a) Rate of spread for precautionary treatments may be adjusted to take account of variations occurring along the route such as residual salt, surface moisture (in the air or on the road surface) and traffic density.
- (b) For salt stored outside, it may be necessary to increase the spread rate for precautionary treatment salting from 10gm/m² to 15-20gm/m².

- (c) All decisions should be forecast based, recorded and require careful monitoring and review.
- (d) Ice refers to all ice on the road surface, including black ice.
- (e) All spread rates given above are obviously subject to availability of salt. Rates may have to be reduced or salt may have to be mixed with grit if there is a scarcity.

| Location | Salt Spread Rate |
|--|--|
| Carriageways | As described in the Treatment Matrix Guide |
| Hard shoulder or carriageway marginal strips | 50% of selected treatment |
| Porous Surfacing | Plus 25% of selected treatment |
| Footways, cycletracks and pedestrian areas | 25 gm/m ² |

Target Spread Rates by Location

13 Plant, Vehicles and Equipment

Wexford County Council operates 5 no. demountable mounted salt spreaders and 6 no. snowploughs to deliver its winter service. In addition, it has one standby demountable salt spreader, which is used in emergencies and in the event of breakdowns.

| Description | Depot Location | Capacity | Date Calibrated | Date Serviced | Date of next Calibration | Date of next Service |
|--|-------------------|-----------------|-----------------|---------------|--------------------------|----------------------|
| Demountable salt spreader. <i>Enniscorthy Truck.</i> Fleet no. 106. 03 WX 5042. | Enniscorthy Depot | 6m ³ | October 2020 | Sept/Oct 2020 | October 2021 | Sept/Oct 2021 |
| Demountable salt spreader. <i>Gorey Truck.</i> Fleet no. 115. 11 WX 2327. | Enniscorthy Depot | 6m ³ | October 2020 | Sept/Oct 2020 | October 2021 | Sept/Oct 2021 |
| Demountable salt spreader. <i>New Ross Truck.</i> Fleet no. 113. 09 WX 1194. | Wexford Depot | 6m ³ | October 2020 | Sept/Oct 2020 | October 2021 | Sept/Oct 2021 |
| Demountable salt spreader. <i>Wexford Truck.</i> Fleet no. 112. 09 WX 1094. | Wexford Depot | 6m ³ | October 2020 | Sept/Oct 2020 | October 2021 | Sept/Oct 2021 |
| Demountable salt spreader. <i>Regional Roads.</i> Fleet no. 114. 11 WX 2326. | Enniscorthy Depot | 6m ³ | October 2020 | Sept/Oct 2020 | October 2021 | Sept/Oct 2021 |
| Demountable salt spreader. <i>Standby.</i> Fleet no. 107. 03 WX 5044. | Enniscorthy Depot | 6m ³ | October 2020 | Sept/Oct 2020 | October 2021 | Sept/Oct 2021 |

The salt spreaders are demountable, and are mounted as required. Spreaders will remain permanently mounted during holiday periods.

| Snowploughs & Loading Shovels | Depot Location | Fitted to | Date Serviced | Date of next Service |
|--|-----------------------|------------------|----------------------|-----------------------------|
| Snowplough | Wexford Depot | 09 WX 1094 | October 2020 | October 2021 |
| Snowplough | Wexford Depot | 09 WX 1194 | October 2020 | October 2021 |
| Snowplough | Enniscorthy Depot | 03 WX 5044 | October 2020 | October 2021 |
| Snowplough | Enniscorthy Depot | 03 WX 5042 | October 2020 | October 2021 |
| Snowplough | Enniscorthy Depot | 11 WX 2326 | October 2020 | October 2021 |
| Snowplough | Enniscorthy Depot | 11 WX 2327 | October 2020 | October 2021 |
| Teleporter 12 TS 676 | Enniscorthy Depot | | | |
| Teleporter 07 WX 11105 | Wexford Depot | | | |

14 Supplementary Resources

Wexford County Council has 13 no. snow blades in stock. These will be fitted to privately hired tractors, when required, to assist with snow clearance operations. In cases of heavy snow, loading shovels, tractors with snow blades, graders and wheel diggers will be hired in. In addition, Wexford County Council will hire in agricultural contractors to assist with gritting operations on Priority 3 routes.

15 Community Involvement during Severe Weather Events

Schools and Community Groups

Schools and Community Groups are advised to plan ahead for severe weather events and to make the necessary arrangements to have sufficient supplies of materials, plant and equipment in storage or available to them to cater for their anticipated needs during such events. Materials and equipment should be acquired in a timely manner in advance of the winter season while stocks are available.

Business Sector

The Commercial, Retail & Business sectors are requested to lend assistance in periods of severe weather by clearing snow and ice from footpaths in front of their premises. Recent legal opinion on the matter states that no legal liability exists to those carrying out such works once they are executed in a safe manner. It should be noted that the application of hot water to remove snow and ice from footpaths is not a

safe or an acceptable method as more often than not the water refreezes and exacerbates the initial problem.

Agricultural Sector

The Local Authority will endeavour to work with rural communities & the IFA where possible. The treatment of rural roads by third parties should be carried out in accordance with national policy in this area, once published.

16 Details of Depots

| Map Ref. | Salt Depots | Routes Serviced | Indoor or Outdoor | Max Capacity (tonnes) | Minimum stock levels at: | | |
|-------------------|---------------------------------------|---|-------------------|-----------------------|--------------------------|----------------------|---------------------|
| | | | | | 1 st Oct | 15 th Dec | 1 st Mar |
| 297740, 141970 | EY Depot, Old Dublin Rd | Enniscorthy; Gorey; Regional Roads | Indoor | 280 | 210 | | |
| 303020, 120630 | WX Depot 1, Whitemill Ind. Est. | Wexford; New Ross; | Indoor | 1235 | 880 | | |
| TOTALS | | | | 1515 | 1090 | | |

17 Salt

Wexford County Council will be assigned an allocation of salt by the TII for use on its National roads. A further allocation of salt will be assigned by the Department of Transport for use on the non-National roads. At the time of writing, Wexford County Council was still awaiting details of these allocations. The suppliers of salt have been chosen on the basis of a Framework competition. Tim Murphy, Duty Engineer, will be responsible for the countywide (including the urban areas) ordering of salt from the supplier(s) and for coordinating deliveries. Tim Murphy will also be responsible for reporting and updating salt usage on a weekly basis on the National Salt Management System.

18 Grit

In the event of snowfall being predicted, Wexford County Council will arrange the delivery of 2/6 mm grit to various depots throughout the County. The supply of grit will be to facilitate the mixing with salt.

In extreme weather events, consideration will be given to establishing grit stockpiles at strategic locations throughout the County to enable communities to grit non-priority routes.

19 Materials and Spares

Fuel for the winter service period is stored in a 14,000 litre tank in the Machinery Yard, Old Dublin Road, Enniscorthy. The minimum level of fuel to be maintained is 7,000 litres. The person responsible for ordering the fuel and ensuring that the minimum level is maintained is Geraldine Dowler, Assistant Staff Officer. Fuel is ordered through the SupplyGov.ie system. Suppliers vary, depending on the most economically advantageous tender submitted.

A limited number of spare parts for winter service machinery are stored in the Machinery Yard, Old Dublin Road, Enniscorthy. The person responsible for re-ordering parts is the Workshop Foreman in the Machinery Yard. All spare parts are ordered from Romaquip Ltd., Birr, Co. Offaly; Telephone: 057 9120836.

20 Appendices

The various Appendices connected with this Winter Service Plan are contained in the following pages. The list of Appendices is given below.

| | |
|-------------------|--|
| <i>Appendix 1</i> | Overall Map of the Service Plan Area |
| <i>Appendix 2</i> | Treatment Route Cards |
| <i>Appendix 3</i> | BAM – Winter Maintenance Arrangements for: Gorey Bypass; Enniscorthy Bypass and New Ross Bypass |
| <i>Appendix 4</i> | Names and Roles of Key Personnel |
| <i>Appendix 5</i> | Duty Engineers' Roster |
| <i>Appendix 6</i> | Contact Details |
| <i>Appendix 7</i> | Duty Engineer's Record Sheet |
| <i>Appendix 8</i> | Risk Assessment |