

Winter Service Policy 2021 – 2026

Corporate Director.

Neighbourhood Services and Infrastructure.

September 2021.

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Document Control & Council Approval

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Introduction

Winter Service Policy Statement 2021 - 2026

- 1. Orkney Islands Council aims to provide a winter service which allows the safe movement of vehicles and pedestrians on roads, and keeps to a minimum, delays caused by adverse winter weather.
- 2. The Council as Roads Authority will set the standards and level of service, make adequate budgetary provision to achieve the standards and approve a carriageway and footway hierarchy.
- 3. The operational management of the service will be provided by the Corporate Director, Neighbourhood Services and Infrastructure. The service will be delivered using in-house resources and other contractors as appropriate.
- 4. The service will be provided in accordance with the aims and objectives of the Council Plan 2018-2023, The Roads Management and Maintenance Plan 2018 2023, the Development and Infrastructure Service Plans and this Winter Service Policy Statement.
- 5. The Corporate Director, Neighbourhood Services and Infrastructure will prepare a Winter Service Plan defining a Carriageway and Footway hierarchy for winter treatment, which will be reviewed annually by the Council.
- 6. The standard of performance achieved, and all the fixed and variable costs incurred will be monitored annually and reported to the Corporate Director, Neighbourhood Services and Infrastructure.
- 7. The Corporate Director, Neighbourhood Services and Infrastructure will report to the Council annually on the standard of service achieved, the costs involved and where changes or improvements to the level of services should be considered.
- 8. The Corporate Director, Neighbourhood Services and Infrastructure may in certain circumstances due to severe weather conditions or other conditions amend or suspend part of the Winter Service Plan to achieve the best service that the prevailing conditions will allow.
- 9. The Corporate Director, Neighbourhood Services and Infrastructure may carry out trials whenever necessary on proposals to improve the service prior to the review.

A - Statement of Policies

- 1. The Service will be provided in accordance with this document and the current Winter Service Plan.
- 2. The Team Manager Roads Support shall amend the Winter Service Plan on an annual basis and shall submit a final copy before 1st October each year to The Team Manager Roads and Grounds for implementation.
- 3. This document reflects the recommendations in Well-Managed Highway Infrastructure: A Code of Practice 2016 to adopt a risk-based approach to winter service operations utilising recommendations within the National Winter Service Research Group (NWSRG) Practical Guide for Winter Service.
- 4. The Team Manager Roads and Grounds is authorised to make such operational decisions as are necessary to perform the service as specified and as are allowed for in Appendix 1 and 2 of this document. If circumstances arise which require further instruction such matters should be referred to the Service Manager Roads and Grounds or such other person appointed by the Corporate Director, Neighbourhood Services and Infrastructure for this purpose.

B - Specification

1. General

This specification relates to the delivery of the winter service. Roads and Grounds will be required to follow the procedures and policies referred to as set out in this document.

The functions conferred by this document shall be exercised by the Corporate Director, Neighbourhood Services and Infrastructure, or duly appointed representative.

The Team Manager Roads and Grounds shall provide and maintain sufficient personnel, vehicles, plant, machinery, and equipment as are necessary for the proper and safe delivery of the service outlined in this document and the Winter Service Plan.

If insufficient resources are available from within the Roads and Grounds Section to ensure the delivery of the service, the Team Manager Roads and Grounds shall notify this to the Head of Neighbourhood Services who will identify resources available from within other sections of the Service, other Services of the Council or from external contractors.

The Service as specified will be delivered during the winter period 1st November to 31st March the following year. The Team Manager Roads and Grounds may decide to extend this cover out with this period as necessary.

All charges incurred through the delivery of this Winter Service Policy will be covered by the relevant revenue budget code.

All materials laid down in accordance with the Specification remain the property of Roads Services.

2. Safety

Drivers should be instructed to take all possible precautions to protect their own safety and that of other road users.

High visibility clothing to BS EN 471 Class 3 must be worn by all personnel carrying out treatment to carriageway or footway.

All vehicles being actively used in winter service operations shall have warning beacons on at all times.

Drivers must abide by regulation 110 of the Road Vehicles (Construction and Use) Regulations, which prohibits a person from driving a motor vehicle from using a hand-held mobile telephone or a hand-held device.

3. Route Planning for Carriageways and Footways

Route plans showing extent of cover for treatment are provided annually in the Winter Service Plan.

Carriageway routine treatment – Treatment to commence not earlier than 06:00 and no new routes to be started after 18:00.

Footway routine treatment – Prioritised treatment will be provided Monday to Saturday 06:00 to 16:00. A reduced service, subject to available resources, will be provided on all days observed by the workforce as local holidays.

Emergencies – 24-hour cover will be provided for emergencies notified via the Police only.

4. Route Hierarchy

It is recognised by the NWSRG that no Council has sufficient resources to treat all its road network. It is therefore necessary to establish, based on the risk-based approach, a Carriageway and Footway hierarchy which provides a resilient network to the best of the Councils ability given current resource levels.

The following indicators are used to establish the route priority of each section of carriageway, footway and cycleway across Orkney and will be reviewed annually. Consultation with the community will also take place annually and feed into this decision-making process.

Carriageway Hierarchy

This hierarchy excludes Islands where resources are not currently present. All roads on those Islands will be treated when resources allow. Increased Salt bin allocation will be considered on these Islands.

Salting and Snow Clearance Carriageways

Priority 1

- Primary Routes.
- Important Principal Roads.
- Roads Leading to important industrial establishments.
- Roads leading to the Hospital.
- Roads leading to Police and Fire Stations.
- Roads leading to Schools.
- Roads leading to Transport terminals.
- Selected Bus Routes.
- Important journey-to-work routes.
- Known trouble spots.

Priority 2

- Other known trouble spots (not on Priority 1).
- Remaining principal roads.
- Town Centres.
- School Bus Routes (Priority 2S) treated on school days.
- Roads leading to Health Centres.

Priority 3 (Snow Clearance only. Not normally treated unless snow is present for more than 48 hours).

- Minor side Roads.
- Residential Roads
- No Salting or Gritting to be undertaken.

Footway and Cycleway Hierarchy

Footway treatment will apply to Kirkwall and Stromness only.

Salting and Snow Clearance Footway, Footpath and Cycleway

Priority 1

- Primary Routes
- Footways leading to the Town Centre
- Footways leading to the Hospital and other Health Centres.
- Footways leading to Police and Fire Stations
- Footways leading to Schools.
- Footways leading to Transport terminals.
- Important journey-to-work routes.

Priority 2

- Busy footways leading to Priority 1's from well populated areas.
- Other routes leading to Schools.

Priority 3

Other busy footways not included in Priority 1 or 2.

5. Car Parks

Public Car Parks including Education and Care establishments will be treated as per the Winter Service Plan.

When notified, car parks adjacent to cemeteries will be treated prior to any funeral. The adjoining public carriageway will also be treated if not already done so on that day.

6. Standards

The Team Manager Roads and Grounds must ensure that sufficient resources are or can be made available in the light of the decisions made in accordance with Appendix 1 and 2 considering response times, treatment times, vehicle characteristics, treatment length and rate of spread.

The target response time is one hour. This is the mobilisation period for commencing winter service operations following receipt of a weather warning.

Salting and Gritting - Carriageways

Priority 1 Routes – on receipt of frost, ice, or snow warning but subject to judgement and local experience. Once treatment has commenced the target completion time for Carriageway Priority 1's is 2 hours.

Priority 2 Routes – only when adverse conditions become apparent and when all Priority 1 routes have been completed. Priority 2's will not generally be pre-treated in the afternoon unless conditions become severe.

Priority 3 Routes – No salting or gritting to be undertaken.

Snow Clearance – Carriageways

Generally, should be started as soon as practicable and the need for it becomes apparent beginning with Priority 1 routes and then Priority 2 as equipment is available.

Under adverse weather conditions and when snow is drifting resources must be withdrawn from lower priority routes to preserve the integrity of the higher priority.

Priority 1 Routes – Should not remain impassable to heavy vehicles for more than 6 hours in rural areas or 4 hours in urban areas except under exceptional weather condition and when snow is drifting.

Priority 2 Routes – Should not remain impassable to heavy vehicles for more than 6 hours in urban areas or 24 hours in rural areas except under exceptional weather conditions and when snow is drifting.

Priority 3 Routes – To be made passable to heavy vehicles within 48 hours wherever possible after dealing with the higher priority routes and only when conditions are severe and likely to persist for several days. The priority of works should be areas with steep hills or where there is a higher number of vehicle movements.

Salting and Gritting – Footways, Footpaths and Cycleways

Priority 1 Routes – on receipt of frost, ice, or snow warning but subject to judgement and local experience.

Priority 2 Routes – only when adverse conditions become apparent and when Priority 1 routes have been completed. Priority 2's will not generally be pre-treated in the afternoon unless conditions become severe.

Priority 3 Routes – only when adverse conditions persist for more than 3 days and when Priority 1 and 2 routes have been completed. Priority 3's will not be pre-treated in the afternoon.

Snow Clearing – Footways, Footpaths and Cycleways

Generally, should be started as soon as practicable and the need for it becomes apparent beginning with Priority 1 routes and then Priority 2 as equipment is available.

Gaps will be formed in piled snow at roadsides at bus-stops and at crossing points.

7. Salt Bins

Salt bins will be deposited and maintained in locations such as known trouble spots, steep hills, dangerous bends, and densely populated areas not on priority routes, as set out in the Winter Service Plan. Additional bins may be instructed throughout the winter as deemed necessary.

The Council will provide salt bins, for self-help by members of the public only where the following criteria are met: -

- 1. In general, where the location is not on a Priority 1 or 2 route.
- 2. The bin shall not obstruct pedestrians.
- 3. The location shall not obstruct junction sight lines.
- 4. In general, where the location is not within 200 metres of another salt bin location.
- 5. The location is within the boundary of the public road.
- 6. The Council will not provide bins in private roads or car parks or any other public or private property unless a service level agreement is in place.

Bins will only be located where they can be filled from a lorry and shall be replenished on a regular basis during the winter period, as resources permit.

The location of each bin will be recorded in an electronic database, with a unique identity code for each item.

Formal requests should be submitted to the Council's Roads Support team for consideration. Where the criteria for a bin are met the provision will be dependent on available resources.

8. Islands Services

The level of service for all main Ro-Ro connected islands will be the same as the Orkney Mainland where resources allow. This excludes islands where resources are not currently present.

Additional salt bins may be provided in consultation with the local Community Council during the annual Winter Service Plan review.

The local Community Council should liaise with the Team Manager Roads and Grounds as quickly as possible where procedures are not being followed.

9. Personnel

The Team Manager Roads and Grounds must ensure that, as minimum, the following personnel are always on standby during the winter period:

- Duty Technician
- Duty Officer
- Duty Supervisor
- One crew located on the Mainland and Linking South Isles
- One Operative on each of the following islands: Hoy, Flotta, Rousay, Shapinsay, Stronsay, Eday, Westray and Sanday.

The Team Manager Roads and Grounds will, in addition to the personnel noted above, ensure that an additional three crews are on standby on the mainland and linked isles for all local and public holidays, in particular 25th/26th December and 1st/2nd January.

During these periods and in all circumstances other than an emergency the delivery of the service will be limited to between 06:00hrs and 18:00hrs.

The Team Manager Roads and Grounds will provide staff rotas, manpower plan, sources of manpower and methods of contact.

The Team Manager Roads and Grounds will maintain an operations room for the use of operational staff. A copy of this Policy and the Winter Service Plan should be kept in the operations room.

In general vehicles will be single manned however if for reasons of safety or other operational reasons during periods of severe conditions it is necessary, double manning will be permitted.

The Team Manager Roads Support will amend the Winter Service Plan, incorporating any agreed changes following consultation, and present to the Service Manager Roads and Grounds by 1st October annually.

10. Training

The Team Manager Roads and Grounds will ensure that all personnel engaged on winter service activities will be properly trained and are familiar with safe working practices.

The Team Manager Roads and Grounds shall be responsible for training all winter service personnel and shall ensure that all employees are made aware, to whatever degree necessary for them to perform their functions, of the conditions, specification and operational statements relating to this document and the Winter Service Plan.

It is recommended that training be provided on the following issues. This is not an exhaustive list and will largely be based on local circumstances:

- The Content and operation of both this Policy, and the Winter Service Plan.
- Route familiarisation.
- Driving in difficult and hazardous road conditions including duty of care to other road users.
- Circumstances where special safety considerations apply.
- Snow ploughing.
- Avoidance of spraying pedestrians, cyclists, where practicable with salt or slush when salting or ploughing.
- Avoidance of risks to pedestrians and cyclists when using vehicles in segregated or partially segregated areas and in treating footways.
- Ploughing and manoeuvring in restricted circumstances.
- Dealing with emergencies; and
- Dealing with post ice and snow emergencies especially flooding.

In addition to such specific training, it will be necessary to ensure that all personnel are provided with information during operational periods on current network characteristics and constraints, including:

- Traffic management in place; and
- Network unavailability.

A system of formal training records shall be maintained by the Team Manager Roads and Grounds.

11. Plant, Vehicles and Equipment

Roads and Grounds will maintain a fleet inventory highlighting Location, Capacity and characteristics of plant, vehicles, and equipment to be used in the delivery of the service.

12. Operational communication systems

The Team Manager Roads and Grounds will provide and maintain operational communications systems as detailed in Table 1 below:

Table 1

Communications System	Method of Contact	Allocation
2 Way Radio	Radio Call Sign	All operational vehicles
Telephone Answering machine	Public Telephone System	Operations Room
Mobile Telephones	24-hour Contact/Message Relay Service	Duty Technician Duty Officer Duty Supervisor

A list of all radio call signs, radio paging numbers and telephone numbers shall be finalised no later than 1st October annually and distributed to all relevant personnel.

13. Weather Forecasts

Roads and Grounds will supply and maintain an approved ice prediction system covering the mainland and linked isles including thermal mapping and/or Route Based Forecasting to be used in conjunction with a weather forecasting service.

The forecasting service and a minimum 2-5-day prediction facility is to be directly transmitted into the ice prediction computer system.

The principal forecasts should be available no later than 1400 hours each day with updates based on local sensor data transmitted no later than 0500 hours the following morning.

The Roads and Grounds Operations Team shall provide, no later than 1600 hours each day, a copy of the 24-hour forecast incorporating planned action, the 2-5-day prediction and the 24-hour temperature prediction graph. In addition, no later than 1600 hours the following day a copy of the graph comparing the temperature prediction to actual temperatures will be provided.

14. Decision Making

The success or otherwise of winter service operations depends greatly on the judgement, enhanced by experience and local knowledge, of those who must make the decisions, however, it is essential that such judgements are also based on recognised and accepted good practice.

Decision making processes will follow the guidance documents provided by the National Winter Service Research Group.

The procedure for decision making is outlined in Appendices 1 and 2.

All decision-making procedures must be recorded and documented in an operational diary stored either electronically or in physical form.

15. Material standards and storage

Salt shall be supplied to Roads and Grounds by the Team Manager Quarry at Cursiter Quarry. All Salt must be stored and delivered as per the Salt Specification in Appendix 3. Any deviation from this specification must be notified to the Team Manager Roads and Grounds as soon as reasonably practicable.

16. Treatment

Dry Salting treatment will be used on all occasions. Should other treatment options be introduced through the life of this document, it must be ensured that the guidance provided in the National Winter Service Research Group guidance documents is followed.

Carriageway treatment will be undertaken as shown in Appendix 1.

Footway and Cycleway treatment will be undertaken as shown in Appendix 2. It is noted by the NWSRG that there is considerably less research available regarding footway treatments when compared with carriageway treatments. Although recommended spread rates are issued by the NWSRG these are far less precise when compared with the carriageway treatments.

Road Surface Temperature has therefore been used as a guide as to when to treat footways and cycleways. If further research becomes available through the lifetime of this document, Appendix 2 will be updated where appropriate.

The spread rates indicated in Appendices 1 and 2 must only be used when Salt moisture content is within the optimum range shown in Appendix 3, and when spreader performance is good and calibrated correctly.

Where moisture content falls out with the optimum range the effectiveness of the salt will be greatly reduced therefore consideration must be made for increasing the spread rate by 20%.

Following decisions taken according to the procedures outlined in Appendix 1 and 2, undertake the treatment in the locations depicted on the weather forecasts. The treatment should be undertaken lane by lane except on roads where low traffic and narrow width permit full width spreading.

The average speed for gritters should be 20mph and never exceed 25mph whilst operating.

During prolonged falls of snow, it is preferred to plough continuously from the onset to prevent build up and compaction by traffic. At all times once passage is achieved on Priority 1 routes, it must be maintained wherever possible and in preference to treatment of other routes when necessary.

17. Media Communications

A standard messaging service will be provided to the Councils Communications team and disseminated as required.

18. Performance Monitoring

The Team Manager Roads Support will monitor generally, winter maintenance performance and expenditure, against the agreed specification and budget, and will notify the Service Manager Roads and Grounds of any variations.

The Service Manager Roads and Grounds shall forward a report annually to the Head of Neighbourhood Services detailing the performance of the service against the agreed specification and budget. This will include details of the accuracy of the forecasting and ice prediction systems and performance of OIC Quarries in relation to the supply of salt and grit in accordance with Appendix 3.

All activities carried out in accordance with this document will be summarised and recorded.

C - Appendices

- Appendix 1 Carriageway Treatment Decision Making
- Appendix 2 Footway Treatment Decision Making
- Appendix 3 Salt Specification