

CORK COUNTY COUNCIL



Winter Service Plan 2021 - 2022 For Roads

A1 Document Control

Revision	Status	Revision Details	Date
A			28 Sep 2021

A2 Introduction

- Cork County Council's Roads and Transportation Directorate is responsible for the maintenance of 391km of National Roads and 11,739km of Regional and Local Roads. This is the largest road network maintained by any local authority in the country.
- The term 'Winter Service' relates to those activities undertaken by Cork County Council to minimise the impact of frost, ice or snow on the travelling public. Winter service is not an emergency service in that low temperatures, frost, ice and snow are frequent and reasonably predictable occurrences.
- This Winter Service Plan provides the framework for dealing with winter weather conditions on the roads and provides for a planned and co-ordinated response by Cork County Council. The Plan takes cognisance of the guidance and best practices provided by Transport Infrastructure Ireland (TII) in the Winter Service Manual which was issued in draft format ahead of the 2010/2011 winter season.
- The Winter Service Period is usually from the middle of October to the end of April.
- A review and update of Winter Service Operations is undertaken each year before the start of the next Winter Season.

A3 Policy

- The objective of the winter maintenance programme is to provide so far as is reasonably practical for the safe movement of road users on the National Roads and other strategic routes identified during adverse weather conditions.
- As it not feasible to treat all public thoroughfares, it is necessary to create a schedule of route prioritisation. Routes are designated a priority rating of between 1 and 3 based upon the road classification, the traffic volume carried, public transport usage, and the importance of the route on a national, regional or local level. There is 13% of the National Roads network located in Cork County and these routes are prioritised as Priority 1.
- Priority 1 and Priority 2 routes are normally pre-salted. They receive precautionary treatment, where salt is spread following weather forecasts of expected low temperatures, in order to reduce the likelihood of frost and ice forming on the road. The precautionary treatment is dependent on the salt spreaders performing as specified and completing the routes.
- Priority 3 routes are post-salted as resources allow. This is a response based service where routes are treated during normal working hours if they become impassable and where resources are available. However, during spells of severe

weather every effort will be made to regularly treat Priority 3 routes which service important large industries and otherwise strategically important facilities.

A4 Treatment Route Prioritisation and Level of Service

The priority rating assigned to a particular route also has an associated stated level of service to be delivered on the route as outlined in the following table :

Route Designation	Description	Level of Service
Priority 1	Those routes which are essential to be kept serviceable in all weather conditions, as far as reasonably practicable	To be treated during all weather events
Priority 2	Those routes which are desirable to be kept serviceable in normal winter weather conditions, as far as reasonably practicable	To be treated as part of the normal winter service on nights where widespread ice / frost on roads is anticipated. It may have interruptions to treatment in certain severe weather events where efforts need to be concentrated on Priority 1 Routes.
Priority 3	Those routes that could be kept serviceable once Priority 1 and 2 routes have been treated, if resources allow	Not treated as part of the normal winter service but may receive intermittent treatment during certain weather events

Footpaths and Cycleways

Footpaths, cycleways, and other local roads, will be treated in towns, villages and city environs as local resources permit when a prolonged period of snow / icy conditions occur.

Salt and Grit for Community Use

Salt bins and a fill of salt are being offered, for their use, to a limited number of Residents Associations / Community Groups on a shared funding basis. Grit will be made available at multiple locations across the county for use by the community and details of these locations are available on the Council's website

A5 Mobilisation and Treatment Timeframe

The desirable maximum timeframe for the mobilisation and treatment of the priority routes is set out in the following table :

Treatment Route	Priority 1	Priority 2	Priority 3
Mobilisation Time	1 hr	3 hr	When possible
Treatment Time	5 hr	5 hrs	When possible

A6 Treatment Routes

The current Priority 1 and Priority 2 routes are listed in the following table :

Priority	Route No	Location	Length m	Width m	Area m ²
1	N20	Charleville to Mallow	26,500	12	318,000
1	N20	Mallow slip on and slip off	600	8	4,800
1	N22	Kerry County Bounds to Macroom to Start of Ballincollig Bypass at Ovens Bridge	48,500	12	582,000
1	N25	End of Midleton dual carriageway to Start of Youghal bypass	22,900	12	274,800
1	N25	Start of Youghal bypass to Waterford Boundary	4,180	12	50,160
1	N25	Ballyvergan slip off and slip on	1,100	6	6,600
1	N28	Shannon Park Roundabout to Ringaskiddy Car Ferry	5,700	12	68,400
1	N71	Southern End of Dual Carriageway to Bandon to Pedlar's Cross	33,400	12	400,800
1	N71	Pedlars Cross to tunnel at Co. Bounds via Clonakilty, Rosscarbery, Leap, Skibbereen, Ballydehob, Bantry, Ballylickey & Glengarriff	99,200	7.5	744,000
1	N72	Rathmore to Mallow (N20)	42,400	8	339,200
1	N72	Mallow (N20) to Fermoy Bridge	31,600	8	252,800
1	N72	Fermoy Bridge to Tallow.	20,300	9	182,700
1	N73	Junction with N72 at Olivers Cross to Mitchelstown North Interchange (M8)	34,600	8	276,800
2	R513	Mitch Golf Club Via Main Street to Cloonlough Roundabout	5,200	7	36,400
2	R515	Limerick Co. Bdy on Kilmallock Road, through Charleville and westwards through Newtownshandrum and Milford Village to Dromcollogher.	17,000	6	102,000
2	R522	Jcn with N20 at Buttevant to Dromcollogher	23,500	6.2	145,700
2	R522	Jcn with N20 at Buttevant to Doneraile	6,600	6.2	40,920
2	R522	Doneraile to Clogher Cross	5,400	6	32,400
2	R572	Glengarriff to Coolieragh	6,600	6	39,600
2	R572	Coolieragh to Castletownbere	27,300	6	163,800
2	R576	N72 at Bidy's Green to Kerry County Boundary West of Rockchapel	37,280	6.2	231,136
2	R577	Ballydesmond through Kiskeam to Boherbue to Clonbannin Cross	18,400	6	110,400

Priority	Route No	Location	Length m	Width m	Area m ²
2	R578	Newtown Cross to Dromina to Aughrim Cross	7,400	6	44,400
2	R578	Aughrim Cross to Freemount	5,600	6	33,600
2	R578	Freemount to Newmarket	11,500	6	69,000
2	R578	Newmarket to Ballydesmond	16,580	6	99,480
2	R579	Kanturk to Freemount	11,200	6	67,200
2	R579	Kanturk to Ballymaquirk Cross (N72 junction)	4,600	6	27,600
2	R579	Ballymaquirk Cross, Banteer to Nad (South Cork)	16,700	6	100,200
2	R579	Garies Cross (R622) to Nad (North Cork Boundary)	26,170	6	157,020
2	R579	Sheep Bridge Road (L6842) to Garies Cross (R622) (Treated by Cork City Council)	630	6	3,780
2	R581	Turnpike X through Doneraile to Newtwopothouse	8,100	6.2	50,220
2	R582	South Boundary (Caherdowney) to Millstreet	6,290	6.2	38,998
2	R582	Millstreet to Rathmore	11,100	6	66,600
2	R582	Knocknagree to Rathmore	4,700	6	28,200
2	R582	Ballydesmond to Knocknagree	6,700	6	40200
2	R582	Macroom to Keim (L5250)	13,600	6	81,600
2	R583	Millstreet to Sandpit House	9,800	6.6	64,680
2	R584	Ballylickey to Kealkill	5,000	6	30,000
2	R584	Kealkill to Inchinossig Bridge, Ballingearry	17,400	6	104,400
2	R584	Inchinossig Bridge, Ballingearry to Toon Bridge	18,660	6	111,960
2	R584	Toon Bridge to Macroom	6,100	6	36,600
2	R585	N22 to Crookstown to Bealnablath to Moneycroha Cross	13,250	6	79,500
2	R585	Kealkill to Coppeen to Moneycroha Cross	33,400	6	200,400
2	R586	Kealnascarta (N71) to Enniskean	40,700	8	325,600
2	R587	Shanlaragh Cross to Dunmanway	8,300	6	49,800
2	R587	Glan Cross to Droncarra Bridge (South Cork)	9,200	6	55,200

Priority	Route No	Location	Length m	Width m	Area m ²
2	R587	Toon Bridge to Droncarra Bridge (West Cork)	3,200	6	19,200
2	R588	Clonakilty to Enniskean	14700	6	88200
2	R588	Enniskean to Coppeen	9,500	6	57,000
2	R589	Bandon to Halfway Roundabout	15,300	6	91,800
2	R590	Crookstown to N22 Stage Cross	900	6	5,400
2	R593	Drimoleague to Skibbereen	12,500	6	75,000
2	R594	Aghaville to Derreeny Cross	7,900	6	47,400
2	R595	Skibbereen Town	2,800	6	16,800
2	R599	Clonakilty to Dunmanway	21,000	6	126,000
2	R600	Five Mile Bridge to Airport Entrance	4,620	6	27,720
2	R600	Fivemilebridge to Kinsale	15,580	6	93,480
2	R605	Kinsale to Innishannon	13,520	6	81,120
2	R610	Rochestown to Passage West to Monkstown to N28	7,734	6	46,404
2	R611	Shannon Park Roundabout to Carrigaline to Kilmoney Road Upper	3,840	6	23,040
2	R612	Carrigaline to Crosshaven	8,400	6	50,400
2	R612	Crosshaven to Inchigeelagh	2,500	6	15,000
2	R612	Fountinstown to Frenchfurze Cross	5,800	6	34,800
2	R613	Ringaskiddy Car Ferry to Fivemmilebridge	14,200	6	85,200
2	R613	Fivemilebridge to Ballinhassig	3,800	6	22,800
2	R618	Macroom to Coachford to Inniscarra Road	26,000	6	156,000
2	R619	Farnanes to Coachford	9200	6	55,200
2	R619	Coachford to Crean's Cross	8,400	6	50,400
2	R619	Crean's Cross to Donoughmore to North Boundary	7,000	6	42,000
2	R619	Mallow Bridge to Newberry Cross	4,360	9	39,240
2	R619	Drommahane to Newberry Cross	1,900	6	11,400
2	R619	Drommahane to Bweeng to South Boundary	10,740	6	6,440

Priority	Route No	Location	Length m	Width m	Area m ²
2	R620	Mallow Bridge to Quartertown Upper	3,200	8	25,600
2	R620	Quartertown Upper to Drommahane	2,900	6	17,400
2	R621	Junction with N72 to Newberry Cross R619 (Mallow Environs)	1,720	8	13,760
2	R622	Cannon's Cross to Garies Cross	1,900	6	11,400
2	R623	Little Island	3300	6	19800
2	R624	Cobh to Fota Isl. to N20	12,300	6	73,800
2	R629	Cloyne to Ballinacurra	6,000	6	36,000
2	R630	Midleton to Whitegate	14,100	6	84,600
2	R631	Rostellen to Cloyne	3,220	6	19,320
2	R634	Youghal Town	2,500	6	15,000
2	R637	Manch West to Bunanumera Cross	1,100	6	6,600
2	R638	Junction with N20 to Junction with R619 Clyda Bridge Lower (Mallow Environs)	2,340	8	18,720
2	R639	Glanmire North Interchange to Watergrassshill	6,900	6	41,400
2	R639	County Bounds at Kilbeheny to Carrigane Roundabout	1,170	8	9,360
2	R639	Mitchelstown to Fermoy	15,440	12	185,280
2	R639	Fermoy to Watergrasshill (South Cork Boundary)	17,120	12	205,440
2	R665	Mitchelstown, N73 Roundabout to Junction with R513 near Tesco	1,600	6.2	9,920
2	R665	Clonmel Rd, Mitchelstown	5,200	6	31,200
2	R667	Killworth	3,200	6	19,200
2	R800	Clonakilty Town	1,800	6	10,800
2	R883	Main Street, (Davis Street), Mallow	740	7	5,180
2	R930	Beecher Street and Shortcastle Street, Mallow	740	6	4,440
2	L1019	Newmarket to Long Bridge	3,730	6	22,380
2	L1033	Long Bridge to Ballyhoolahan Cross	3,080	6	18,480
2	L1108	Boherboy School Road	400	6	2,400

Priority	Route No	Location	Length m	Width m	Area m ²
2	L1109	Boherboy to Ballyhoolahan Cross	1,800	6	10,800
2	L1115	Millstreet to Railway Station	2,200	6	13,200
2	L1203	Mallow, Kennel Hill	600	6	3,600
2	L1207	Mallow, Fair Street	820	6	4,920
2	L1207	Mallow, Ironmine Bridge Road	1,400	6	8,400
2	L1213	Bweeng School Road	1,800	6	10,800
2	L1220	St Joesph's Road to Olivers Cross	2300	6	13,800
2	L1223	Mallow Bridge to Ballyellis	1,800	6	10,800
2	L1238	Mallow, Bowling Green	530	6	3,180
2	L1237	Batchelor's Walk	600	6	3,600
2	L1239	Mallow, Lisheen Row	240	6	1,440
2	L1240	Mallow, O'Brien Street,	430	6	2,580
2	L1246	Mallow, Spaglen	810	6	4,860
2		Mallow Hospital	700	6	4,200
2		Mallow Medical Center / SouthDoc	700	6	4,200
2	L1317	Charleville, Railway Road	1,700	6	10,200
2	L1417	Killworth	1,100	6	6,600
2	L1418	Mitchelstown, Brigown Road to Overbridge	1,500	6	9,000
2	L1428	Mitchelstown, Mulberry Road	1,100	6	6,600
2	L1429	Mitchelstown, Chapel Hill to Church Road	700	6	4,200
2	L1430	Mitchelstown, Convent Hill	100	6	600
2	L1434	Mitchelstown, Robert Street	300	6	1,800
2	L1435	Mitchelstown, James Street	300	6	1,800
2	L1436	Mitchelstown, King Street	200	6	1,200
2	L1437	Mitchelstown, Baldwin Street	140	6	840
2	L1440	Mitchelstown, Georges Street	560	6	3,360

Priority	Route No	Location	Length m	Width m	Area m ²
2	L1441	Mitchelstown, Barrack Street	850	6	5,100
2	L1443/4	Mitchelstown, New Market Square	300	6	1,800
2	L1449	Fermoy, Richmond Hill	400	6	2,400
2	L1511	Fermoy, Duntaheen Road to Glenabo Bridge	1,500	6	9,000
2	L1515	Fermoy, Collage Road	2,000	6	12,000
2	L1541	Fermoy, Kevin Barry Hill	250	6	1,500
2	L1542	Fermoy, Link Road (Duntahane Distributor Road)	1,200	6	7,200
2	L1524	Watergrasshill	400	6	2,400
2	L2002	Lissarda - Killmurry	1,700	6	10,200
2	L2216	Greenfields Interchange to Kilumney Road	3,200	6	19,200
2	L2260	Classes Link Road	500	6	3,000
2	L2464	Carrigaline to Ballinrea Cross to Board of Works Road	2,522	6	15,132
2	L2475	Church Hill, Passage West	200	6	1,200
2	L2476	Church Hill, Passage West	340	6	2,040
2	L2495	Church Hill, Carrigaline	330	6	1,980
2	L2496	Currabinny Road (R613 to GSK Entrance)	1,600	6	9,600
2	L2547	Carrigaline Bridge to Crosshaven Road Roundabout	300	6	1,800
2	L2964	Watergrasshill	350	6	2,100
2	L2970	Glanmire to Caherlag Road	600	6	3,600
2	L2989	Cobh Back Road	5,900	6	35,400
2	L2998	Glanmire Bridge to Burys Bridge	2,000	6	12,000
2	L3011	Watergrasshill	680	6	4,080
2	L3012	Watergrasshill	490	6	2,940
2	L3409	Ballymakeery to Clondrohid to Macroom/Millstreet Road	11,400	6	68,400
2	L3418	Macroom to Ballinagree	8,500	6	51,000
2	L3422	Nutricia Foods Road	2,800	6	16,800

Priority	Route No	Location	Length m	Width m	Area m ²
2	L3810	Cork Hill, Youghal	2,800	6	16,800
2	L4032	N71 at Grillagh Cross to Technology Park entrance	50	5	250
2	L4211	Skibbereen to Ballyhilty Bridge	2,300	6	13,800
2	L4212	Ballyhilty Bridge to The Bog Cross	1,030	6	6,180
2	L4213	Ballyhilty Bridge to Bunalunn (R593)	1,270	6	7,620
2	L4609	Dunmanway to Derragh Bridge	9,200	6	55,200
2	L4617	Cat Lane, Dunmanway	350	6	2,100
2	L4620	Quarry Road, Dunmanway	750	6	4,500
2	L4633	Bunanumera Cross south to L4632 / L4633 Cross	450	5	2,250
2	L4754	Wolfe Tone Square to Bantry Library via New St. & Bridge St.	260	4	1,040
2	L4752	Bantry Library to Hospital Cross	355	4.8	1,704
2	L4753	Bantry Library to Wolfe Tone Sq. via Chapel St. & William St.	300	4	1,200
2	L4716	Hospital Cross to Keyes Terrace	535	4.8	2,568
2	L4727	Council Depo to Wolfe Tone Square	200	6	1,200
2	L6501	Pipers Cross to Bothar Buidhe Cross	870	6	5,220
2	L6506	Ferney Road	650	6	3,900
2	L6517	Ringaskiddy to Loughbeg (DuPuy & Pfizer Entrances)	2,000	6	12,000
2	L6524	Inchigeelagh Road, Crosshaven	700	6	4,200
2	L6730	Maulbawn Spine Road, Passage West	430	6	2,580
2	L6723	The Meadows Spine Road, Passage West	280	6	1,680
2	L6854	Coachford Community School Road	320	6	1,920
2	L7300	Kilnagleary Link Road (Roundabout to R612)	530	6	3,180
2	L8570	Kilbarry Road, Dunmanway	360	6	2,130
2	L8632	L4632 / L4633 Cross to Randal Og GAA Entrance	220	4.8	1,056
2	L8633	Randal Og GAA Entrance north to L4633 Junction	300	4.8	1,440
2	L9212	Fermoy, St. Colman's Hill	200	6	1,200

Priority	Route No	Location	Length m	Width m	Area m ²

A7 Map of the Service Plan Area

- A map showing the priority treatment routes for the North Cork Division is attached in Appendix A.
- A map showing the priority treatment routes for the South Cork Division and the Bandon – Kinsale Municipal District is attached in Appendix B.
- A map showing the priority treatment routes for the West Cork Municipal District is attached in Appendix C.

A8 Equipment - Salt Spreaders and Snow Ploughs

The main salt spreading equipment and snow ploughs available for winter maintenance are listed in the following table :

Depot	Salt Spreaders No.	Type	Capacity m ³	Speed Related Spreading (Y/N)	Snow Plough Attachment (Y/N)
Newberry (Mallow)	3	Fixed	6	Y	Y(1)
Newberry (Mitchelstown)	1	Fixed	6	Y	Y
Fermoy	1	Fixed	6	Y	Y
Millstreet	1	Fixed	7	Y	Y
Newberry (Newmarket)	1	Fixed	10	Y	Y
Newberry (Charleville)	1	Fixed	6	Y	N
Newmarket	1	Fixed	2	Y	N
Glanmire	1	Demountable	6	Y	Y
Glanmire	1	Demountable	9	Y	Y
Ballincollig	3	Demountable	6	Y	Y(2)
Ballincollig	1	Fixed	7	Y	Y
Macroom	1	Fixed	10	Y	Y
Macroom	1	Fixed	7	Y	N
Macroom (Stage Cross)	1	Demountable	2	Y	N
Glanmire	1	Demountable	2	Y	N
Glanmire (Midleton)	1	Demountable	2	Y	N
Carrigaline	1	Demountable	2	Y	N
Bandon	1	Demountable	2	Y	N
Ballincollig (Macroom)	1	Demountable	2	Y	N
Machinery Yard Skibbereen	2	Demountable	6	Y	Y(1)
Machinery Yard Skibbereen	1	Fixed	7	Y	Y
Bantry	1	Demountable	6	Y	Y
Dunmanway	1	Fixed	10	Y	Y
Skibbereen	1	Demountable	2	Y	N
Dunmanway	1	Demountable	2	Y	N
Clonakilty	1	Demountable	2	Y	N
Bantry	1	Demountable	1	N	N
Castletownbere	1	Demountable	2	N	N
Schull	1	Demountable	1	N	N

A9 Salt Storage Capacity

The salt for winter maintenance is now purchased and supplied by Transport Infrastructure Ireland through a framework agreement for the supply of de-icing materials.

The main salt storage depots are listed in the following table :

Depot No.	Address	Capacity (Tonnes)
1	Salt Barn - Newberry, Mallow	2,000
2	Fermoy	300
3	Mitchelstown	60
4	Millstreet	250
5	Newmarket	160
6	Charleville	30
7	Salt Barn - Innishmore, Ballincollig	1,250
8	Blarney	150
9	Salt Barn - Glanmire	1,250
10	Midleton	30
11	Carrigaline	30
12	Bandon	30
13	Macroom Yard Depot, Macroom Town	100
14	Salt Barn – Skibbereen Machinery Yard	1,250
15	Kilbarry Road, Dunmanway	150
16	Bantry Town	60
17	Castletownbere	60
18	Clonakilty	15
19	Schull	15
Total Storage Capacity		7,190

A10 Rosters

Rosters have been prepared & distributed to relevant personnel involved with the delivery of winter service operations.

The Duty Engineer in each Region is available 24/7 during the period rostered.

All Duty Engineers receive training from Vaisala regarding decision making using the Vaisala Manager system.

The Vaisala Manager website is updated early each afternoon with information from Met Eireann and road condition sensors from the various sites throughout the country. The website includes a 24 hour and a 2-5 day text forecast which gives an initial indication if ice is expected. The site contains a graph index for various weather station sites which gives a forecast road surface state and forecast weather conditions up until 12pm the following day. The graph index is updated continuously to show current surface state and weather conditions at the site. Many of the weather stations are now fitted with on line cameras. The

Priority 1 and Priority 2 routes in Cork are thermally mapped accurately reflecting variations in road temperatures.

The Duty Engineer monitors the short to medium term general forecast and checks the Vaisala Manager website every afternoon during the rostered period to determine if roads require treatment. Often it may be necessary to continue to monitor the conditions before making the final decision.

If treatment is required the Duty Engineer instructs the Plant Supervisors in relation to roads that require treatment and relays information to the Municipal District Engineers and others regarding the roads to be treated in their areas. The Duty Engineer ensures that sufficient medium term forecast information is available to allow for adequate salt stocks during a prolonged cold spell.

The Duty Engineer may on occasion receive update phone or text information from Met Eireann in relation to changing weather information.

A11 Decision Matrix

Decision matrix for the Duty Engineer

Road Surface Temperature	Precipitation	Predicted Road Conditions		
		Wet	Wet Patches	Dry
Expected to 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 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, as required during rain and 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 will be, if appropriate, adjusted to take account of residual salt, surface moisture or prevailing weather conditions (precipitation). 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 and may require treating in the evening and morning and possible other occasions. Ideally the source of the run-off from adjacent properties should be diverted from the roadway by the landowner.

- (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.

A12 Treatment Matrix

Treatment Matrix Guide for Dry Unmodified Salt

Weather Conditions Road Surface Conditions Road Surface Temperature (RST)	Treatment Air Temperature	Salt Spread Rate (gm/m ²)	Ploughing
Frost or forecast frost RST at or above -2°C		10 Also refer to Note (b)	No
Frost or forecast frost RST below -2°C and above -5°C depending on resources		10-20	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

Weather Conditions Road Surface Conditions Road Surface Temperature (RST)	Treatment Air Temperature	Salt Spread Rate (gm/m ²)	Ploughing
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

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) For the Winter Season 2020-2021, Cork County Council utilised a brine plant, based in the Machinery yard at Newberry, Mallow, to trial the solution on priority routes during winter maintenance. This involves pre-wetting the roads with a brine solution to improve the effectiveness of winter maintenance operation. It is intended to continue the pilot for the Winter Season 2021-2022.

Target Spread Rates by Location

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

A18 Service Limitations

Despite the resources that are applied to providing the winter service, ice-free roads cannot be guaranteed. The motorist should remember the following:

- In Ireland there are a high risk proportion of marginal nights when temperatures are very close to zero. This makes it more difficult to accurately predict frost than in colder countries. As a consequence Met Eireann can only guarantee 80% accuracy in their forecasts.
- It can take up to 5 hours to salt a route, so any journey may start or end on an untreated section of the route.
- In heavy rain, salt can be washed away and the wet surface may subsequently freeze if the temperature falls below zero.
- In cases of extended severe weather events, the network salted may need to be reduced to Priority 1 routes.

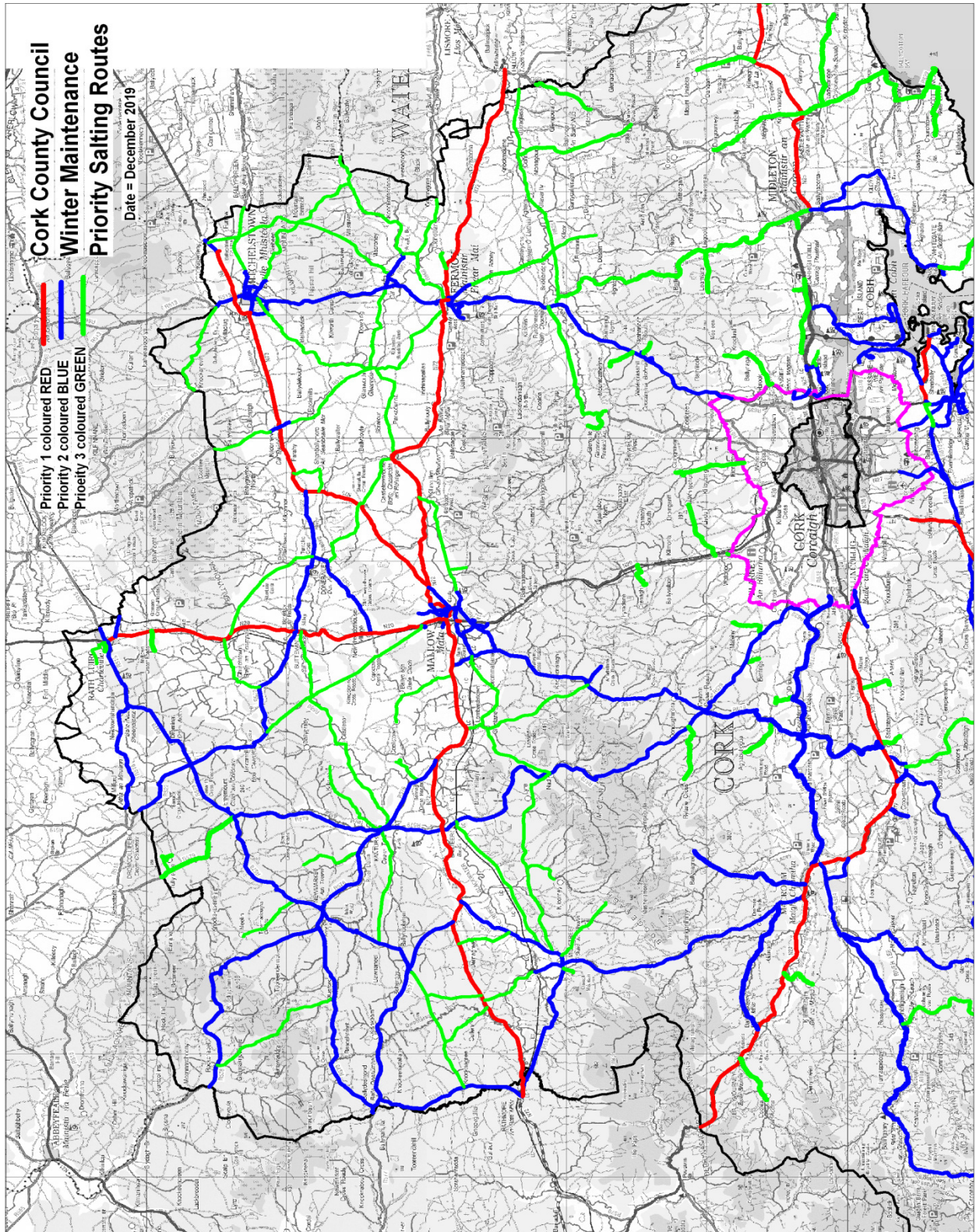
A13 Communication

The winter service provision will be communicated to the general public through the Cork County Council website in order to ensure that –

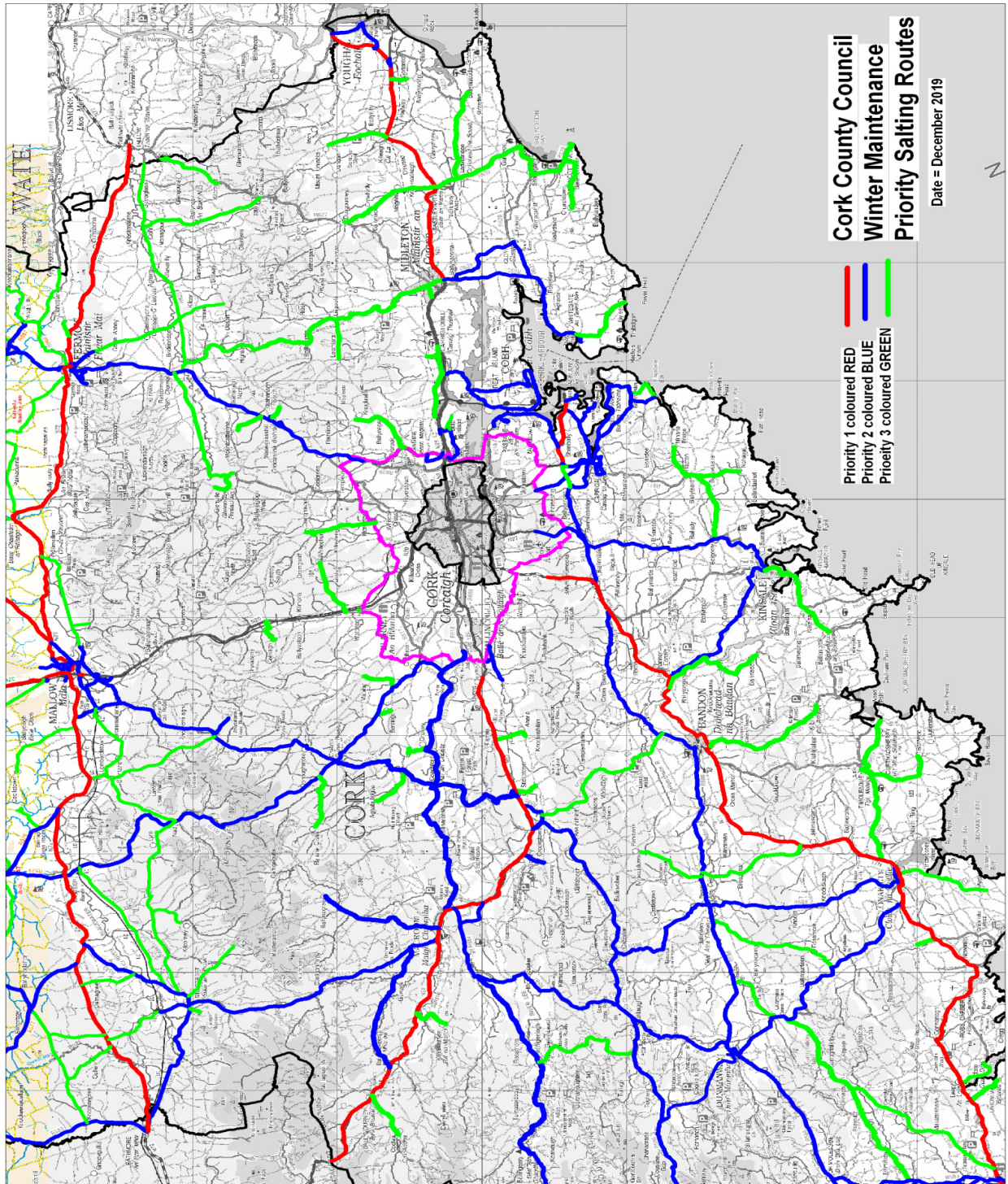
- Service expectations are realistic.
- To reinforce the message that the primary responsibility for safety rests with the road user even when routes are treated.
- To bring to the attention of the public, as stated in the information leaflet published by Transport Infrastructure Ireland titled 'Safe Winter Driving', that the **"SPREADING OF SALT DOES NOT MEAN THAT THE ROAD SURFACE WILL NECESSARILY BE ICE-FREE. IN FREEZING CONDITIONS, ALWAYS DRIVE WITH GREAT CARE EVEN IF THE ROAD HAS BEEN SALTED!"**
- In severe weather conditions non-essential travel should be avoided and public transport used where possible.

Out of hours emergency contact number is 021 – 480 0048.

Appendix A – North Cork Priority Routes Map



Appendix B – South Cork & Bandon/Kinsale MD Priority Routes Map



Appendix C – West Cork Municipal District Priority Routes Map

