Kilkenny County Council





Table of Contents

Tab	le of Contents	1
1.	Document Control	2
2.	Purpose and Scope	2
3.	Winter Maintenance Policy	2
4.	Decision Matrix	4
5.	Winter Maintenance Route Mapping Schedule	6
6.	Duty Rosters	7
7.	Treatment Matrix	9
8.	Plant, Vehicles and Equipment	9
9.	Winter Service Plan Distribution List	. 12
App	pendix 1 - Priority 1 & Priority 2 Treatment Routes	. 13
App	pendix 2 - Priority 3 Treatment Routes	. 14
App	pendix 3 - Section 85 - Treatment Routes Maps	. 15

1. Document Control

Role	Name	Signature	Date
Prepared By:	Kieran Kelly		
Checked By:	Seamus Kavanagh		
Winter Services Manager	Tim Butler		
Director of Services for Transportation	Tim Butler		

2. Purpose and Scope

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

3. Winter Maintenance Policy

Motorists have a general duty of care to consider prevailing weather and road conditions when planning and/or undertaking journeys across the public road network.

Due to the length of the road network in County Kilkenny, it is not feasible to treat all roads in the County during the Winter Season (October 16th 2023 to April 30th, 2024). Accordingly, a form of prioritisation is necessary, and routes are divided into the following three priority designations:

Kilkenny County Council will seek to ensure, as far as reasonably practicable, the prevention of ice formation and of snow accumulation on **Priority 1 Routes (Red Routes)**.

Kilkenny County Council will seek to ensure, as far as reasonably practicable, the prevention of ice formation and of snow accumulation on **Priority 2 Routes (Blue Routes)**.

In extreme weather events and/or in circumstances requiring resource prioritisation, Priority 1 Routes will take precedence over Priority 2 Routes in terms of the allocation of available resources.

Kilkenny County Council will provide periodic winter maintenance services on **Priority 3 Routes (Green Routes)**. Such services will only be provided on selected occasions associated with the anticipation of particularly severe weather conditions. Road-users must not assume that pre-salting services have been provided to the Priority 3 Network.

Mobilisation and Treatment times are detailed in Table 4.1 below. In the case of Priority 1 and 2 Routes, notification of the intention to commence pre-salting services is required a minimum of five to six hours in advance of the predicted time of ice formation.

Table 4.1

Treatment Route	Priority 1	Priority 2	Priority 3
Mobilisation Time	1hr	1hr	When possible
Treatment Time	2.5hr	3.5hr	When possible

4. Decision Matrix

The Duty Engineer will inspect the forecast system daily from approximately 2pm or as soon thereafter as the Met Eireann forecast has been received. The decision matrix in Table 4.1 consists of the following;

Table 4.1 Decision Matrix

Road Surface	Dro sinitation	Predicted Road Conditions			
Temperature	Precipitation	Wet	Wet Patches	Dry	
May fall below 1°C No rain No hoar frost No fog			Salt before	No action likely	
	No rain No hoar frost No fog	Salt before frost	(see note a)	weather (see note a)	
	Expected hoar frost Expected fog		Salt before frost (see note b)		
Expected to fall below 1°C	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		weather	
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.

5. Winter Maintenance Route Mapping Schedule

The following list in Table 5.1 sets out the drawings which indicate the Priority 1, 2 and 3 Routes for Winter Maintenance and also indicate the Section 85 arrangements between Kilkenny County Council and Tipperary County Council whereby, in the interests of efficiency services are provided by one local authority on behalf of another. The mapping for Priority 1, 2 and 3 Routes is contained in the Appendices.

Table 5.1 Winter Maintenance Route Mapping Schedule

Drawing. No.	Drawing Name	Date
KCC-WM-01	Priority 1 & 2 Routes	Oct. 2015
KCC-WMP1&2-01	Route A – N77, N78, R639 & R693	Oct. 2017
KCC-WMP1&2-02	Route B – N76, N24 & R448	Oct. 2015
KCC-WMP1&2-03	Route C – R700, N25 & R704	Oct. 2015
KCC-WMP1&2-04	Route D – N10, R713, R448, R712 & Ring Road	Oct. 2015
KCC-WM-05	Section 85 Kilkenny/Tipperary	Oct.2013
KCC-WM-08	Section 85 Tipperary/Kilkenny	Oct. 2013
KCC-WMP3-01	Priority 3 Route Kilkenny Area	Sept. 2011
KCC-WMP3-02	Priority 3 Route Castlecomer Area	Nov. 2010
KCC-WMP3-04	Priority 3 Route Newrath Area	Nov. 2010

6. Duty Rosters

The duty rosters for Kilkenny Local Authority staff assigned to the winter service plan are contained in Tables 6.1 and 6.2 below.

Table 6.1 Duty Engineers Roster

Duty Engineer	Duty Period Start	Duty Period Finish
Stan Cullen	16/10/2023	22/10/2023
Declan Murphy	23/10/2023	29/10/2023
Seamus Kavanagh	30/10/2023	05/11/2023
Philippe Beubry	06/11/2023	12/11/2023
Stan Cullen	13/11/2023	19/11/2023
Declan Murphy	20/11/2023	26/11/2023
Seamus Kavanagh	27/11/2023	03/12/2023
Philippe Beubry	04/12/2023	10/12/2023
Stan Cullen	11/12/2023	17/12/2023
Declan Murphy	18/12/2023	24/12/2023
Seamus Kavanagh	25/12/2023	31/12/2023
Philippe Beubry	01/01/2024	07/01/2024
Stan Cullen	08/01/2024	14/01/2024
Declan Murphy	15/01/2024	21/01/2024
Seamus Kavanagh	22/01/2024	28/01/2024
Philippe Beubry	29/01/2024	04/02/2024
Stan Cullen	05/02/2024	11/02/2024
Declan Murphy	12/02/2024	18/02/2024
Seamus Kavanagh	19/02/2024	25/02/2024
Philippe Beubry	26/02/2024	03/03/2024
Stan Cullen	04/03/2024	10/03/2024
Declan Murphy	11/03/2024	17/03/2024
Seamus Kavanagh	18/03/2024	24/03/2024
Philippe Beubry	25/03/2024	31/03/2024
Stan Cullen	01/04/2024	07/04/2024
Declan Murphy	08/04/2024	14/04/2024
Seamus Kavanagh	15/04/2024	21/04/2024
Philippe Beubry	22/04/2024	28/04/2024

Table 6.2 Drivers and Fitters Roster

Drivers	Fitters	Duty Period Start	Duty Period Finish
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Andy Cleere/James Fenion	16/10/2023	22/10/2023
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Paul Hogan/Pat Kavanagh	23/10/2023	29/10/2023
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Michael Lonergan/Declan Lawlor	30/10/2023	05/11/2023
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Andy Cleere/James Fenion	06/11/2023	12/11/2023
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Paul Hogan/Pat Kavanagh	13/11/2023	19/11/2023
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Michael Lonergan/Declan Lawlor	20/11/2023	26/11/2023
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Andy Cleere/James Fenion	27/11/2023	03/12/2023
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Paul Hogan/Pat Kavanagh	04/12/2023	10/12/2023
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Michael Lonergan/Declan Lawlor	11/12/2023	17/12/2023
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Andy Cleere/James Fenion	18/12/2023	24/12/2023
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Paul Hogan/Pat Kavanagh	25/12/2023	31/12/2023
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Michael Lonergan/Declan Lawlor	01/01/2024	07/01/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Andy Cleere/James Fenion	08/01/2024	14/01/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Paul Hogan/Pat Kavanagh	15/01/2024	21/01/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Michael Lonergan/Declan Lawlor	22/01/2024	28/01/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Andy Cleere/James Fenion	29/01/2024	04/02/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Paul Hogan/Pat Kavanagh	05/02/2024	11/02/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Michael Lonergan/Declan Lawlor	12/02/2024	18/02/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Andy Cleere/James Fenion	19/02/2024	25/02/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Paul Hogan/Pat Kavanagh	26/02/2024	03/03/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Michael Lonergan/Declan Lawlor	04/03/2024	10/03/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Andy Cleere/James Fenion	11/03/2024	17/03/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Paul Hogan/Pat Kavanagh	18/03/2024	24/03/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Michael Lonergan/Declan Lawlor	25/03/2024	31/03/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Andy Cleere/James Fenion	01/04/2024	07/04/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Paul Hogan/Pat Kavanagh	08/04/2024	14/04/2024
Matty Foley, Colm Killian, Eamonn Coogan, Nicky Grace	Michael Lonergan/Declan Lawlor	15/04/2024	21/04/2024
David Dooley, Martin Morrissey, Pat Sweeney, Michael Reade	Andy Cleere/James Fenion	22/04/2024	28/04/2024

7. Treatment Matrix

The following information outlines the application rates for pre-salting:

- Pre-salting is provided at a rate of 10g/m²
- At selected sections of pre-salting routes or on particularly severe events,
 application rates may be increased to reflect localised conditions.
- Routes have been designed to allow a treatment at 15g/m² when conditions
 dictate (For example during nights with prolonged cold periods or excess
 residual water).

8. Plant, Vehicles and Equipment

Kilkenny County Council operates 4 No. demountable salt spreaders which are permanently mounted on trucks for the duration of the winter maintenance season. Also, Kilkenny County Council has 3 No. demountable salt spreaders which are permanently mounted on trucks to provide extra cover in the event of a breakdown or extreme conditions. In addition to the above plant, Kilkenny County Council maintains 3 No. salt spreaders in the Machinery Yard which can be mobilised in extreme conditions when required.

Kilkenny County Council has 7 No. snow ploughs available for deployment in the event of snow conditions. 5 No. of these snow ploughs are truck mounted and the other 2 No. have been adapted to fit loading shovels.

Kilkenny County Council also operates 7 No. demountable salt spreaders and 3 No. towed salt spreaders.

The list of plant and service records are itemised in Tables 9.1 and 9.2 below:

Table 9.1 Salt Spreaders – Service Record

					Date of	Date of
Description	Depot	Capacity	Date	Date	Next	next
Description	Location	Capacity	Calibrated	Serviced	Calibration	Service
SG10 -	Machinery	9m³ Pre-	Nov '23	Nov '23	Nov '24	Nov '24
Demountable	Yard	Wet	1101 20	110. 20	1.0	1.0.
SG9 -	Machinery	9m³ Pre	Nov '23	Nov '23	Nov '24	Nov '24
Demountable	Yard	Wet	1.0, 20	1.0.		
SG8 –	Machinery		Oct '23	Oct '23	Oct '24	Oct '24
Demountable	Yard	9m³				
SG7 -	Machinery	0 1	Oct '23	Oct '23	Oct '24	Oct '24
Demountable	Yard	9m³				
SG6 -	Machinery	0 3	Oct '23	Oct '23	Oct '24	Oct '24
Demountable	Yard	9m³				
SG5 –	Machinery	0 3	Oct '23	Oct '23	Oct '24	Oct '24
Demountable	Yard	9m³				
SG4 –	Machinery	77 3	Oct '23	Oct '23	Oct '24	Oct '24
Demountable	Yard	$7 \mathrm{m}^3$				
SG3 –	Machinery	C3				
Demountable	Yard	6m³				
SG2 –	Machinery	C3				
Demountable	Yard	6m³				
SG1 –	Machinery	5m ³				
Demountable	Yard	5m ³				
CLN1 -	Thomastown	23				
Demountable	Depot	$3m^3$				
CLN2 -	Callan Depot	1.5m³				
Demountable	Canan Depot	1.3111				
CLN3 –	Kilmaganny	1.5m³				
Demountable	Depot	1.3111				
CLN4 –	Kilkenny	$3m^3$				
Towable	Depot	3111				
CC1 -	Johnstown	4.5m³				
Towable	Depot	7.JIII				
CC2 -	Castlecomer	4.5m³				
Towable	Depot	4.5111				
N1 -	Listerlin Depot	$3m^3$				
Demountable		JIII				
KK1 -	Machinery	$3m^3$				
Demountable	Yard	3111				
TT1 -	Graignamanagh	$3.8m^3$				
Demountable	Depot	J.0111				
TT2 -	Gowran Depot	2.6m³				
Demountable		2.0111				
TT3 -	Thomastown	4.5m³				
Towable	Depot					

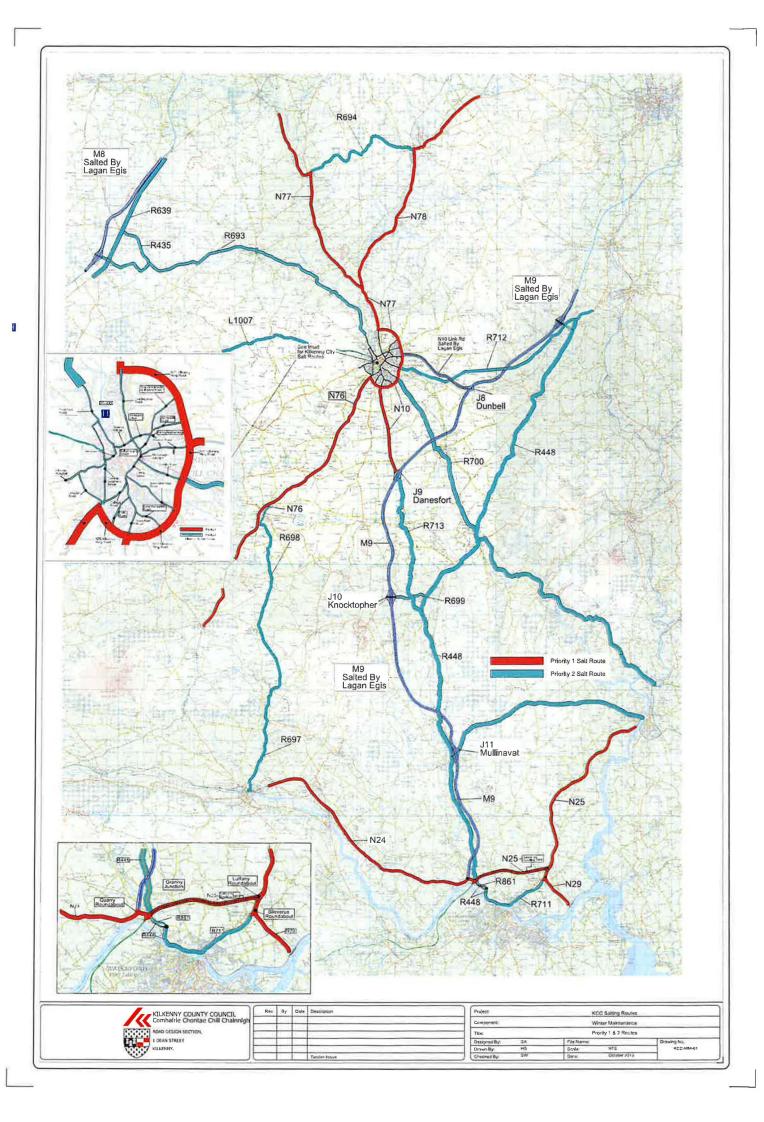
Table 9.2 Snow Ploughs & Loading Shovels

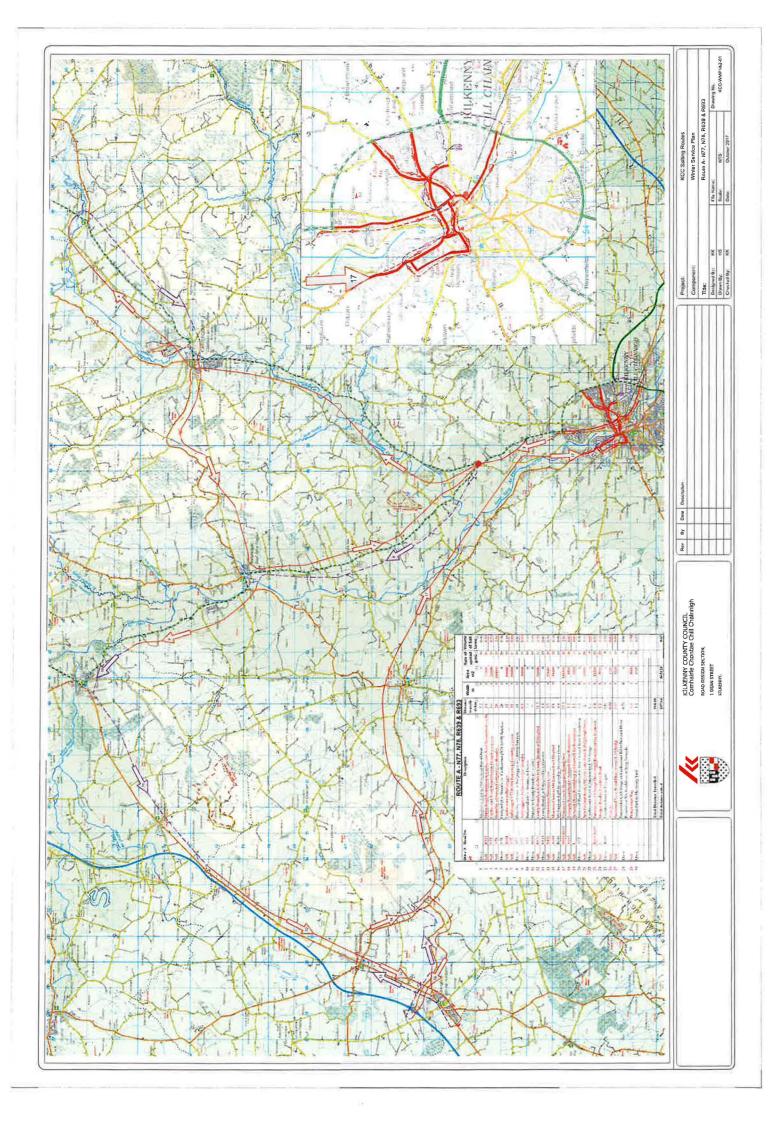
Snowploughs & Loading Shovels	Depot Location	Fitted to	Date Serviced	Date of Next Service
86T – Loading Shovel	Machinery Yard		Regular Servicing	
101T – Manitou Teleporter	Machinery Yard		Regular Servicing	
102T – Manitou Teleporter	Newrath Depot		Regular Servicing	
77T – Manitou Teleporter	Machinery Yard		Regular Servicing	
Snowplough - SP - MY1	Machinery Yard			
SP - MY2	Machinery Yard			
SP - MY3	Machinery Yard			
SP - MY4	Machinery Yard			
SP - MY5	Machinery Yard			
SP - MY6	Machinery Yard			
SP – MY7	Machinery Yard			

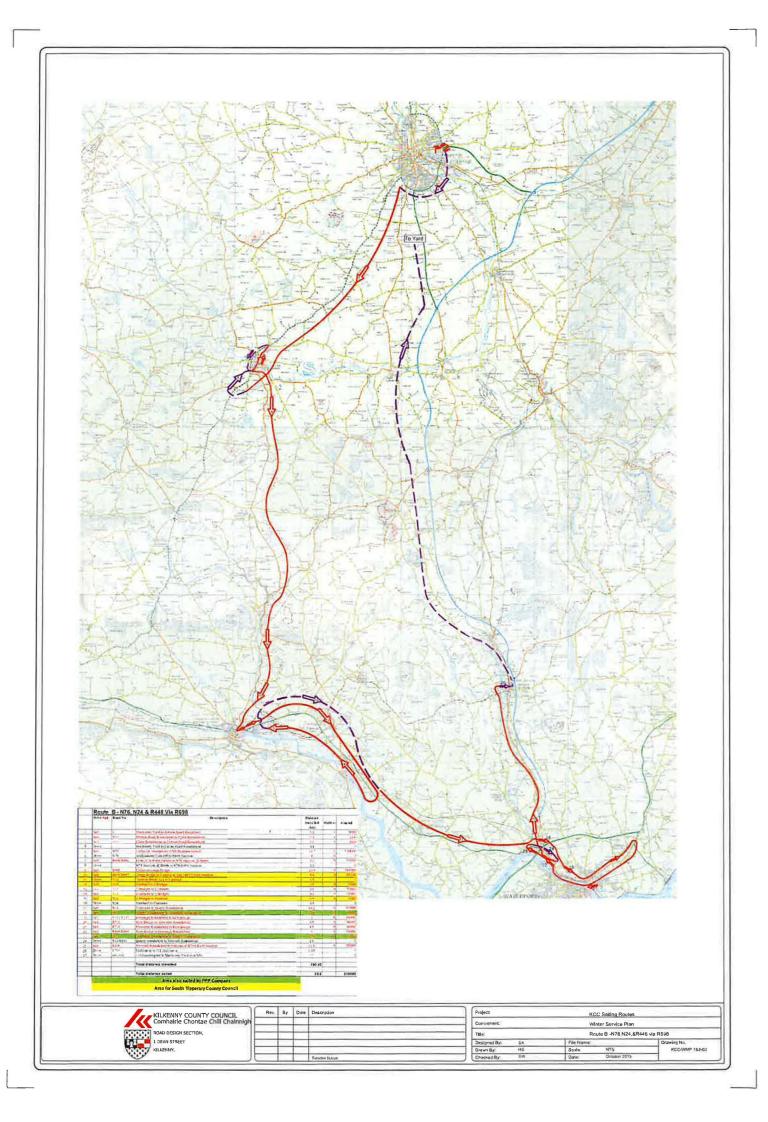
9. Winter Service Plan Distribution List

Issued to	Position	Organisation	Location
Lar Power	Chief Executive	Kilkenny County Council	County Hall, Kilkenny
Tim Butler	Director of Services	Kilkenny County Council	County Hall, Kilkenny
Seamus Kavanagh	Senior Engineer Roads	Kilkenny County Council	County Hall, Kilkenny
Ian Gardner	Senior Engineer Kilkenny Municipal Area	Kilkenny County Council	City Hall
Brendan Sheehan	Executive Engineer Kilkenny Municipal Urban Area	Kilkenny County Council	City Hall
Eamon Mahon	Area Engineer Kilkenny Municipal Rural Area	Kilkenny County Council	County Hall, Kilkenny
Stan Cullen	Area Engineer Newrath Municipal Area	Kilkenny County Council	Piltown Area Office
Philippe Beubry	Area Engineer Castlecomer Municipal Area	Kilkenny County Council	Castlecomer Area Office
Declan Murphy	Area Engineer Thomastown/Callan Municipal Areas	Kilkenny County Council	Thomastown Area Office
Kieran Kelly	Machinery Yard Engineer	Kilkenny County Council	Machinery Yard
Art Hennessy	Technical Services Supervisor	Kilkenny County Council	Machinery Yard
Sinead Fanning	Health & Safety Officer	Kilkenny County Council	County Hall, Kilkenny
Ray Wickham	Senior Executive Engineer	Carlow County Council	
Paul Mcloughlin	Senior Engineer	Laois County Council	
James Murray	Senior Engineer	Tipperary County Council	
Sinead Casey	Senior Engineer	Wexford County Council	
Gabriel Hynes	Senior Engineer	Waterford Council	
Stephen Smyth	Winter Maintenance Manager	National Roads Authority	
John Moore	Winter Maintenance Manager	Lagan Egis	N25 Toll Plaza
Evelyn Cusack	Head of Forecasting	Met Eireann	Glasnevin Hill, Dublin 9.
Superintendent Aidan Brennan	Traffic Corps	An Garda Siochana	Kilkenny Garda Station
nspector Claire Kinealy	Traffic Corps	An Garda Siochana	Thomastown Garda Station

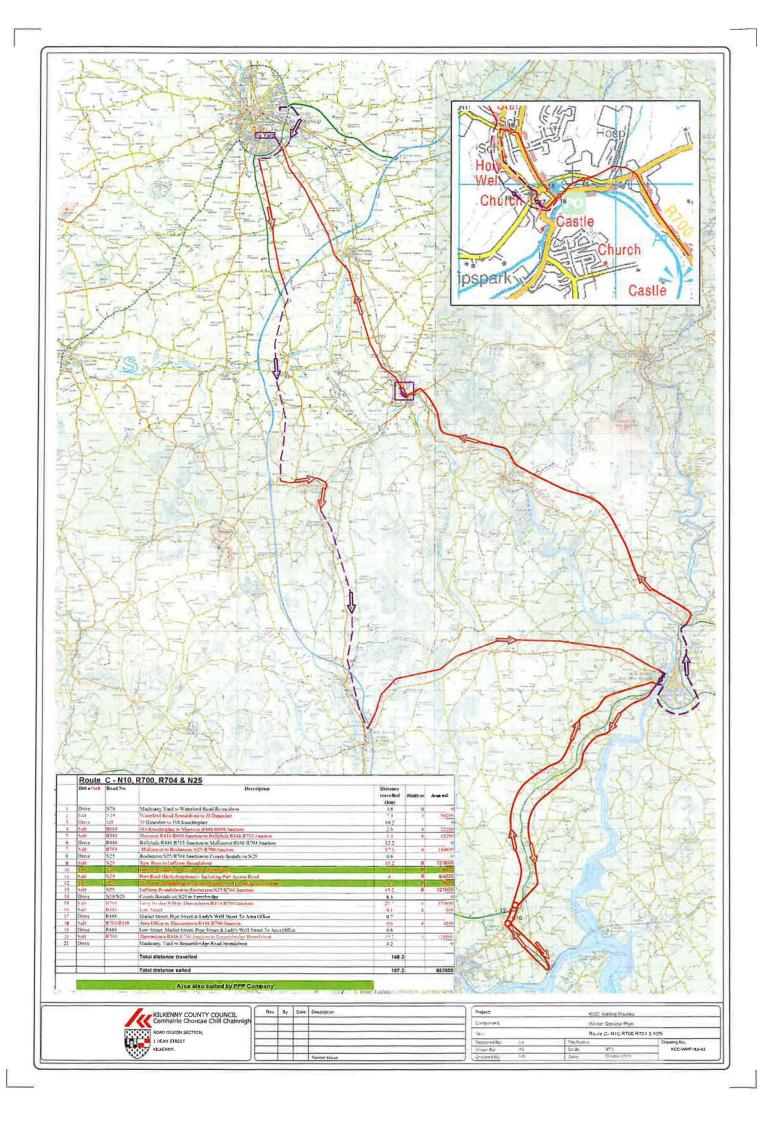
Appendix 1 - Priority 1 & Priority 2 Treatment Routes

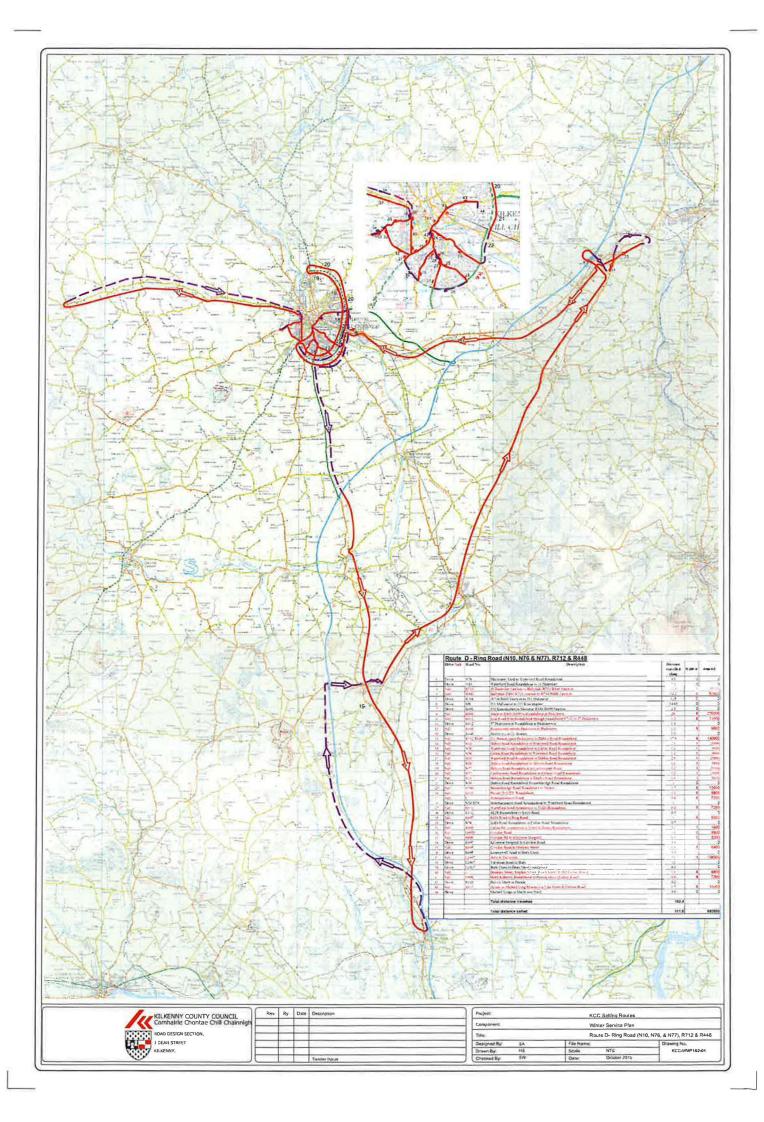






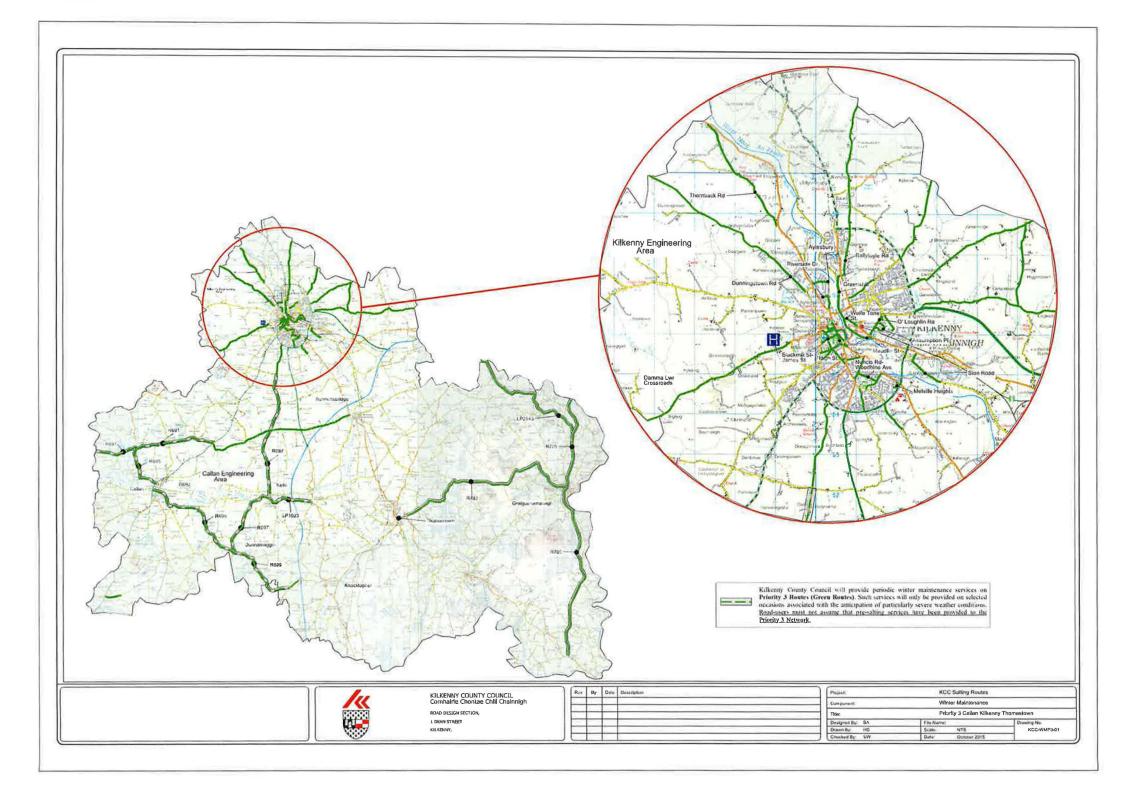


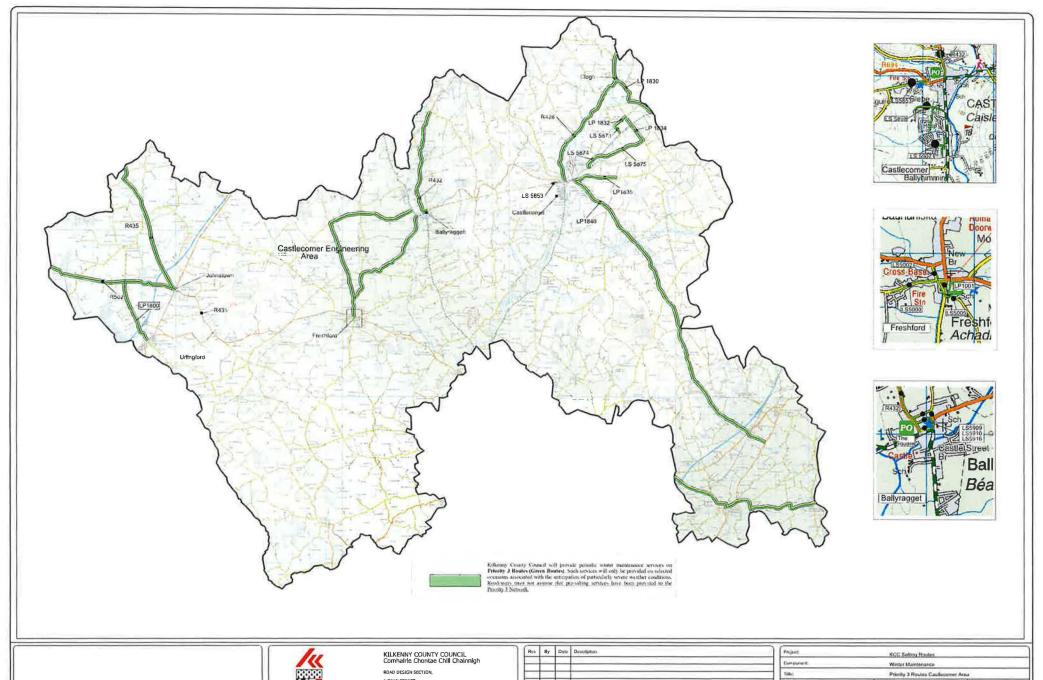






Appendix 2 - Priority 3 Treatment Routes





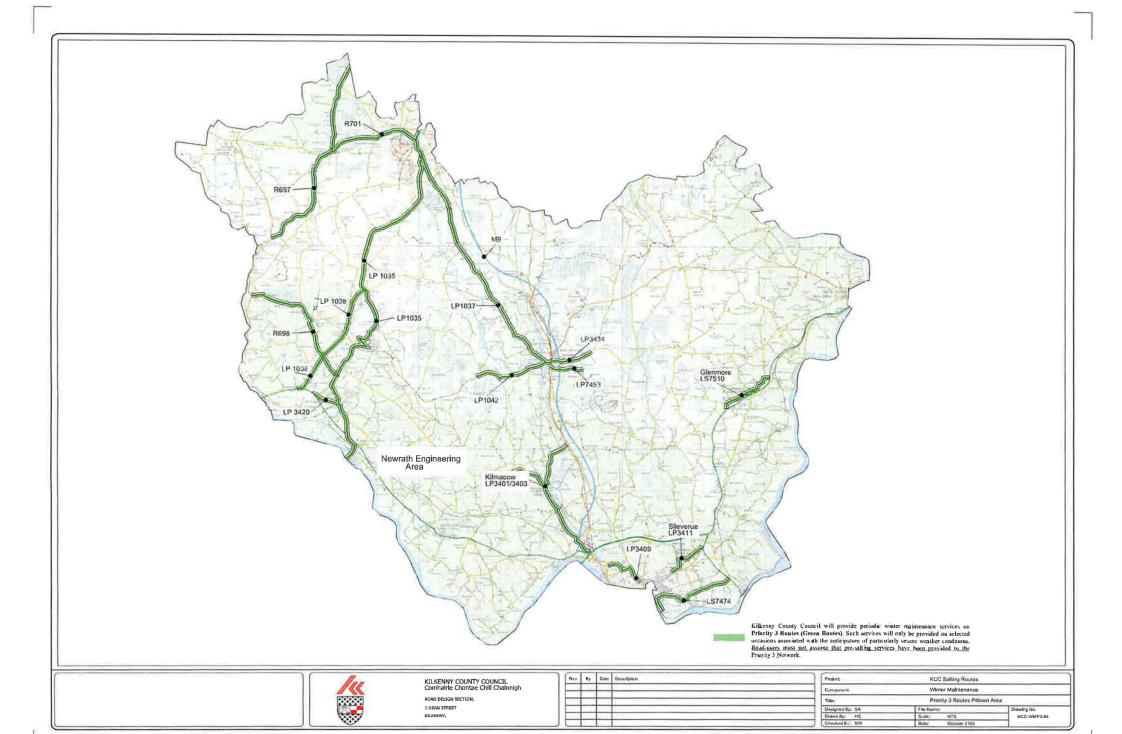


1 DEAN STREET KILKENNY,

Res	Ву	Date	Descripture
	_		
_	-	-	
		_	

Project	KCC Selling Houses			
Conquest:	Winter Mointenance Priority 3 Routes Castlecomer Area			
Yide;				
Designed By: SA	File Name:	Driendreg No.		
Distant By: 1-5	Scale: MIR.	KCC-WMP3-02		
Checked But DW	Date: Children 2100			







<u>Appendix 3 - Section 85 -</u> <u>Treatment Routes Maps</u>

