

LAOIS COUNTY COUNCIL



Winter Maintenance Plan

Henry Ritchie, Senior Engineer

Kieran Kehoe, Director of Services

Version 2 – 1st December 2016

2016 - 2017



1. Document Control

Revision	Status	Revision Details	Date
1.	Final		22 nd October 2010
2	Final	V2.2 - R433 from junction with N77 in Abbeyleix via Ballacolla, M8 junction 3 (Rathdowney interchange) to Rathdowney added as Priority 2 and Routes 5 and 6 changed accordingly. M7/M8 Project Road removed from Priority 1 Routes.	29 th November 2010
3	Final	Additional routes included in salting programme for 2011/2012:- <ul style="list-style-type: none"> • R430 Abbeyleix to Mountrath; • R426 Money Cross to Timahoe; • R427 Money Cross to Stradbally. 	12 th September 2011
4	Final	M7 Motorway between Junction 14(Monasterevin Interchange) to Junction 18(Clonee Interchange) is no longer the responsibility of Laois County Council. This section of Motorway to be maintained by Egis Lagan Services. Section of the R445 from the Laois/Offaly border at Ballaghmore to the North Tipp/ Offaly border at Ballinakill is no longer the responsibility of Laois County Council. This section of the R445 to be treated by North. Tipp Co. Council	18 th October 2013
5	Final	Winter Service programme changed from a 6 route plan to a 5 route plan.	28 th October 2014
6	Final	Additional routes included in salting programme for 2015/2016:- <ul style="list-style-type: none"> • R435 M7 Jct 21 (Borris-in-Ossory) to Rathdowney; • R426 Timahoe to Swan; • R431 Crettyard to Tolerton; • R422 Clonaslee to Offaly Border; • R433 Rathdowney to Errill; • R433 Errill to Tipperary Border • Portarlinton <ul style="list-style-type: none"> - R420 (Botley Lane French Street) - Main Street - Canal Road (R420 to R419) - Sandy Lane - Crowe Lane - R419 Bog Road (Spa Street to Edenderry Road) - Ballymorris Road - Killenard (Lea Road to School) 	15 th October 2015
7	Final	Additional route included in salting programme for 2016/2017:- <ul style="list-style-type: none"> • R425 Cashel to Sheffield Cross • Carlow Northern Relief Road Extension 	11 th October 2016
8	Final	Additional route included in salting programme for 2016/2017:- <ul style="list-style-type: none"> • R423 Mountrath to Mountmellick 	1 st December 2016



2. Approval List

Role	Name	Signature	Date
Author	Edmond Kenny		1 st December 2016
Checker	Henry Ritchie		1 st December 2016
Winter Service Manager	Edmond Kenny		1 st December 2016
Director of Services	Kieran Kehoe		1 st December 2016

3. Distribution List

The distribution includes the personnel named in the plan.

Issued To	Organisation / Company	Location
Duty Engineers and Area Engineers: Henry Ritchie, Wes Wilkinson, Farhan Nasiem, Edmond Kenny, Brenda Cuddy and Philip McVeigh	Laois County Council	County Hall, Portlaoise
Winter Service Supervisors: Roy Glynn	Laois County Council	County Hall, Portlaoise
Health and Safety Officer: Jim Bolger	Laois County Council	County Hall, Portlaoise
Chief Fire Officer: Declan Power	Laois County Council	County Hall, Portlaoise
Civil Defence Officer: Liam Preston	Laois County Council	County Hall, Portlaoise
Dominic Mullaney, Principal Technical Advisor	Department of Transport	Kildare Street, Dublin 2
T.I.I. Winter Service Manager, Stephen Smyth	T.I.I.	Waterloo Road, Dublin 4
Henry Ritchie, Senior Engineer	Laois County Council	County Hall, Portlaoise
Charles McCarthy, Senior Engineer	Offaly County Council	Tullamore, Co. Offaly
John Coppinger, Senior Engineer	Kildare County Council	Naas, Co Kildare
Simon Walton, Senior Engineer	Kilkenny County Council	John Street, Kilkenny
Michael Hayes, Senior Engineer	Tipperary County Council	Nenagh, Co. Tipperary
Liam Fitzgerald, Senior Engineer	Carlow County Council	Centaur Street, Carlow
Stephen Dunne, O&M Manager	M7/M8 PPP Toll Road Operator	Toll Plaza, Mountrath, Co. Laois
Superintendent Joseph Prendergast	An Garda Síochána	Portlaoise
Inspector of Traffic Martin Harrington	An Garda Síochána	Portlaoise
Gerry Fleming, Head of Forecasting	Met Éireann	Glasnevin Hill, Dublin 9
Thomas O'Sullivan, Maintenance & Asset Manager	Egis Lagan Services	Clonkeen, Portlaoise Co. Laois
Sean Callery	Colas Roadbridge	Ennis, Co. Clare

4. Purpose and Scope

The purpose of this document is to identify the processes, procedures and key personnel employed by Laois County Council to deliver the winter service programme for the county.



5. Policy

It is the policy of Laois County Council to implement a procedure which prioritises the treatment of the road network within its jurisdiction in line with the table below.

Note: The M7/M8 Project Road between M7 Junction 18 at Clonkeen and M7 Junction 21 (Borris-in-Ossory) and M8 just 200m north of Kilkenny County Boundary is within the jurisdiction of the PPP Company CRG and is maintained and operated by its operator Midlink.

M7 Motorway including all interchanges from the Laois/Kildare border at Killaglish to Junction 18 (Clonkeen Interchange) is maintained and operated by a private contractor namely Egis Lagan Services on behalf of the National Roads Authority.

Route Designation	Description	Level of Service
Priority 1	<ul style="list-style-type: none"> • M7 Motorway from Laois/Kildare border at Killaglish to M7 Junction 18 (Clonkeen Interchange). • M7/M8 Project road from Junction 18 (Clonkeen Interchange) to Junction 21 (Borris-in-Ossory Interchange) and westwards along the M7 to the County Boundary with North Tipperary. • M8 Project road from M7/M8 Interchange Junction 19/01 to just 200 metres north of the County Boundary at Oldtown/Parknahown and south on the M8 Motorway to the County Boundary at Oldtown. • N80 National Secondary Road from Laois/Offaly border at Moneyquid via Mountmellick, Portlaoise and Stradbally to the boundary with Carlow County Council at the Bill Duggan bridge over the Barrow. • N78 National Secondary road from Laois/Kildare border at Killyganard via Ballylinan to Laois/Kilkenny border at Crettyard. • N77 from M7 junction 17 at Togher to Laois/Kilkenny border at Tinwear via Abbeyleix and Durrow. • R445 from the Laois/Offaly Border at Ballaghmore and eastwards as far as the Laois/Kildare border at Killenure via Borris-in-Ossory, Mountrath, Portlaoise and Ballybrittas. • R639 from Durrow south via Cullahill to the Laois/Kilkenny County Boundary at Oldtown. • R435 from roundabout on R445 to M7 Junction 21 at Borris-in-Ossory. 	All these routes to be treated in all weather conditions and to be given priority over all other routes during severe and prolonged weather conditions
Priority 2	<ul style="list-style-type: none"> • R430, from junction at St. Clare's church Graiguecullen via Killeslin, Swan, Spink, Abbeyleix to junction with R445 in Mountrath. • R422 from County Bounds via Clonaslee, Rosenallis, Mountmellick, and Emo to roundabout on R445 at New Inn. • R423 from junction with R422 in Mountmellick to the Laois/Offaly border at Forest Lower. • R419 from junction with R445 at the Heath to junction with R420 French Church Street in Portarlinton. • R419 the Square in Portarlinton with the junction of the R420 north to the County Boundary with Offaly at Droughill. • R420 at the junction of the R445 in Killenure westwards to the Barrow Bridge on the Offaly/Laois border via Bracklone Street, Main street and French Church Street in Portarlinton, • R423 at junction with R445 in Mountrath to junction with N80 at Derrycloney. • R425 from junction with N77 in Abbeyleix to Sheffield Cross at the junction with the R426 and from the junction with the R426 at Sheffield Cross to Junction with R445 at Ballyclider. 	To be treated after priority 1 routes are treated



Route Designation	Description	Level of Service
Priority 2 cont'd	<ul style="list-style-type: none"> • R427 from junction with R425 at Cashel Cross via Money Cross to junction with N80 in Stradbally. • R426 from Timahoe via Money Cross to junction with R425 at Sheffield Cross. • R428 From junction with N80 in Stradbally to Laois/Kildare border at Blackford. • R431 junction with N78 at Crettyard to the junction with the R430 at Tolerton. • R432 from junction with R430 in Abbeyleix to Ballinakill. • R434 from junction with N77 in Durrow via Ballacolla and Aghaboe to Junction with R445 east of Borris- in-Ossory. • R435 from junction with R433 in Rathdowney to M7 junction 21 at Borris-in-Ossory • Local Road from Roundabout on R445 at Ballydavis to junction with R445 at Rathbrennan. • R433 from junction with N77 in Abbeyleix via Ballacolla, M8 junction 3 (Rathdowney interchange) and Rathdowney to the Tipperary County Boundary at Knockahaw. 	
Priority 3	<ul style="list-style-type: none"> • Other roads to be treated from time to time as the need arises and within the budgets available including the R435 from Junction with R433 in the Square Rathdowney to the Kilkenny County Boundary at Rosdarragh. 	To be treated only in severe weather conditions after priority 1 and priority 2 routes are treated and subject to available funding and resources.

It should be noted that the following regional roads are not included in the schedule of routes which are treated as part of the normal winter service operations (i.e. Priority 1 and 2 routes);

- R421 from junction with R422 at Coolagh Cross to Offaly County Boundary
- R440 from junction with R423 in Mountrath to Offaly County Boundary
- R424 from junction with R420 at Lea Cross to Kildare County Boundary at Ullard
- R435 from Junction with R433 in the Square Rathdowney to the Kilkenny County Boundary at Rosdarragh
- R432 from Ballinakill to Kilkenny County Boundary at Kilcronan
- R426 from Junction with R430 at the Swan to Kilkenny County Boundary at Slatt Bridge
- R429 from Junction with N80 at Ballickmoyler to Kildare County Boundary at Grange
- R427 from Junction with N80 in Stradbally to Kildare County boundary at Dunrally bridge.

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



6. Overall Map of the Service Plan Area

A map of the area covered by the Winter Service Plan is attached in Appendix 2.

Routes in Laois maintained by Private Contractors

- M7 Motorway from Laois/Kildare border at Killaglish to M7 Junction 18 (Clonkeen Interchange) is maintained by Egis Lagan Services.
- The M7/M8 Project Road between M7 Junction 18 at Clonkeen and M7 Junction 21 (Borris-in-Ossory) and M8 from M7/M8 interchange junction 19/01 to 200 metres north of Kilkenny County Boundary is within the jurisdiction of the PPP Company CRG and is maintained and operated by the Midlink.
- 200 metre section of M8 Motorway from the Laois/Kilkenny border at Oldtown to the start of the M7/M8 Project road at Oldtown/Parknahown is maintained by Egis Lagan Services.

M7 Motorway from Junction 21 at Borris- in-Ossory westwards to the Laois/Tipperary border at Curraghmore is maintained by Colas Roadbridge.

7. Rosters

- Names of drivers including standby drivers employed in the carrying out of the winter maintenance operations and their contact details are shown below.
- The drivers' roster for Portlaoise and Mountmellick towns and contact details is also included.
- Duty Engineers roster for the 2016-2017 winter maintenance period is also shown on the following page.

**Drivers Roster 17th October 2016 - 24th April 2017**

Week beginning Monday	Northern Route	Central Route	Eastern Route	Western Route	South Western Route	Off Duty Driver
17/10/2016	GS	DD	EF	KOS	WS	MM
24/10/2016	MM	DD	EF	KOS	WS	GS
31/10/2016	GS	MM	EF	KOS	WS	DD
07/11/2016	GS	DD	MM	KOS	WS	EF
14/11/2016	GS	DD	EF	MM	WS	KOS
21/11/2016	GS	DD	EF	KOS	MM	WS
28/11/2016	GS	DD	EF	KOS	WS	MM
05/12/2016	MM	DD	EF	KOS	WS	GS
12/12/2016	GS	MM	EF	KOS	WS	DD
19/12/2016	GS	DD	MM	KOS	WS	EF
26/12/2016	GS	DD	EF	MM	WS	KOS
02/01/2017	GS	DD	EF	KOS	MM	WS
09/01/2017	GS	DD	EF	KOS	WS	MM
16/01/2017	MM	DD	EF	KOS	WS	GS
23/01/2017	GS	MM	EF	KOS	WS	DD
30/01/2017	GS	DD	MM	KOS	WS	EF
06/02/2017	GS	DD	EF	MM	WS	KOS
13/02/2017	GS	DD	EF	KOS	MM	WS
20/02/2017	GS	DD	EF	KOS	WS	MM
27/02/2017	MM	DD	EF	KOS	WS	GS
06/03/2017	GS	MM	EF	KOS	WS	DD
13/03/2017	GS	DD	MM	KOS	WS	EF
20/03/2017	GS	DD	EF	MM	WS	KOS
27/03/2017	GS	DD	EF	KOS	MM	WS
03/04/2017	GS	DD	EF	KOS	WS	MM
10/04/2017	MM	DD	EF	KOS	WS	GS
17/04/2017	GS	MM	EF	KOS	WS	DD
24/04/2017	GS	DD	MM	KOS	WS	EF

Dermot Dillon	(DD)	Eamon Fitzpatrick	(EF)
Martin Maher	(MM)	Kieran O'Sullivan	(KOS)
Walter Saunders	(WS)	Greg Shelly	(GS)

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Portlaoise Town Driver On Duty Roster							
Week starting Monday	Portlaoise Town Driver on Duty	Week starting Monday	Portlaoise Town Driver on Duty	Week starting Monday	Portlaoise Town Driver on Duty	Week starting Monday	Portlaoise Town Driver on Duty
17/10/2016	Fint Callaghan	12/12/2016	Fint Callaghan	06/02/2017	Fint Callaghan	03/04/2017	Fint Callaghan
24/10/2016	Pat Callaghan	19/12/2016	Pat Callaghan	13/02/2017	Pat Callaghan	10/04/2017	Pat Callaghan
31/10/2016	Fint Callaghan	26/12/2016	Fint Callaghan	20/02/2017	Fint Callaghan	17/04/2017	Fint Callaghan
07/11/2016	Pat Callaghan	02/01/2017	Pat Callaghan	27/02/2017	Pat Callaghan	24/04/2017	Pat Callaghan
14/11/2016	Fint Callaghan	09/01/2017	Fint Callaghan	06/03/2017	Fint Callaghan		
21/11/2016	Pat Callaghan	16/01/2017	Pat Callaghan	13/03/2017	Pat Callaghan		
28/11/2016	Fint Callaghan	23/01/2017	Fint Callaghan	20/03/2017	Fint Callaghan		
05/12/2016	Pat Callaghan	30/01/2017	Pat Callaghan	27/03/2017	Pat Callaghan		

Mountmellick Town Driver Duty Roster							
Week starting Monday	Mountmellick Town Driver on Duty	Week starting Monday	Mountmellick Town Driver on Duty	Week starting Monday	Mountmellick Town Driver on Duty	Week starting Monday	Mountmellick Town Driver on Duty
17/10/2016	Michael McEvoy	12/12/2016	Michael McEvoy	06/02/2017	Michael McEvoy	03/04/2017	Michael McEvoy
24/10/2016	Liam McEvoy	19/12/2016	Liam McEvoy	13/02/2017	Liam McEvoy	10/04/2017	Liam McEvoy
31/10/2016	Michael McEvoy	26/12/2016	Michael McEvoy	20/02/2017	Michael McEvoy	17/04/2017	Michael McEvoy
07/11/2016	Liam McEvoy	02/01/2017	Liam McEvoy	27/02/2017	Liam McEvoy	24/04/2017	Liam McEvoy
14/11/2016	Michael McEvoy	09/01/2017	Michael McEvoy	06/03/2017	Michael McEvoy		
21/11/2016	Liam McEvoy	16/01/2017	Liam McEvoy	13/03/2017	Liam McEvoy		
28/11/2016	Michael McEvoy	23/01/2017	Michael McEvoy	20/03/2017	Michael McEvoy		
05/12/2016	Liam McEvoy	30/01/2017	Liam McEvoy	27/03/2017	Liam McEvoy		



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Driver Contact Details			
Municipal District	Vehicle	Name	Notes
Graigucullen / Portarlinton	Lorry	Dermot Dillon	See Driver's roster
Graigucullen / Portarlinton	Lorry	Eamon Fitzpatrick	See Driver's roster
Portlaoise	Lorry	Martin Maher	See Driver's roster
Portlaoise	Lorry	Kieran O'Sullivan	See Driver's roster
Borris-in-Ossory / Mountmellick	Lorry	Walter Saunders	See Driver's roster
Borris-in-Ossory / Mountmellick	Lorry	Greg Shelly	See Driver's roster
Portlaoise	Pick-up	Fint Callaghan	See Town Driver's Roster
Portlaoise	Pick-up	Pat Callaghan	See Town Driver's Roster
Borris-in-Ossory / Mountmellick	Pick-up	Michael McEvoy	See Town Driver's Roster
Borris-in-Ossory / Mountmellick	Pick-up	Liam McEvoy	See Town Driver's Roster
Portlaoise	JCB	Michael McGlynn	JCB driver



Winter Service Duty Engineers' Roster for the Period 17 th October 2016 – 30 th April 2017							
Local Authority:	LAOIS		Version: 1.0				
Week starting Monday	Duty engineer's Initials	Week starting Monday	Duty Engineer's Initials	Week starting Monday	Duty Engineer's Initials	Week starting Monday	Duty Engineer's Initials
17/10/2016	FN	19/12/2016	HR	20/02/2017	EK	24/04/2017	BC
24/10/2016	HR	26/12/2016	EK	27/02/2017	BC		
31/10/2016	EK	02/01/2017	BC	06/03/2017	FN		
07/11/2016	BC	09/01/2017	FN	13/03/2017	HR		
14/11/2016	FN	16/01/2017	HR	20/03/2017	EK		
21/11/2016	HR	23/01/2017	EK	27/03/2017	BC		
28/11/2016	FN	30/01/2017	BC	03/04/2017	FN		
05/12/2016	BC	06/02/2017	FN	10/04/2017	HR		
12/12/2016	EK	13/02/2017	HR	17/04/2017	EK		

Duty Engineer's Name & Initials
Farhan Naslem (FN)
Henry Ritchie (HR)
Edmond Kenny (EK)
Brenda Cuddy (BC)



8. Contact Details

Contact details are shown below

- Duty Engineers: See attached duty engineer's roster **057 866 4000**
- The Duty Forecaster: Met Eireann Forecast Office 01 806 5550
- Technical support for the Bureau Weather Service: Vaisala, Birmingham, UK 00 44 121 683 1269
- Garda stations: Portlaoise Divisional HQ 057 867 4100. Abbeyleix District HG 057 873 0580
- Adjoining Local Authority Winter Service Managers
 - Offaly County Council: Charles McCarthy*
 - Tipperary County Council: Michael Hayes*
 - Kildare County Council: Des O'Connor*
 - Carlow County Council: Liam Fitzgerald*
 - Kilkenny County Council: Simon Walton*
- M7M8 MidLink PPP Operator: Stephen Dunne
- MMarC Network C - Egis Lagan Services: Thomas O'Sullivan
- MMarC Network B - Colas Roadbridge Donal O'Dwyer
- Ambulance: Midland Regional Hospital Portlaoise **057 862 1364**
- Fire Department: Laois County Council 057-866 4000 **999/112**

9. Supplementary Resources

JCBs and loading shovels are hired from local plant hire companies from the tender list/LA Quotes, if required during times of heavy and lying snowfalls.



10. Decision Matrix

The decision matrix used by the Duty Engineer when deciding on a winter service call out is shown below:

The following table is a reproduction of Table 6.1.

The following table is for prediction of salt use				
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	No rain No hoar frost No fog		Salt before frost (see note b)	
	Expected hoar frost Expected fog			
	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 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:

- 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 should be diverted from the roadway.
- 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.
- If under these conditions, rain has not ceased by early morning, crews should be called out and action initiated as rain ceases.
- 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.



11. Treatment Matrix

The treatment matrix below is utilised by the Duty Engineer as a guideline to treatment required under various conditions.

The following table is a reproduction of Table 6.2, which is for dry unmodified salt. If Laois County Council are using materials other than dry unmodified salt, a modified version of this table will be prepared and included in the Winter Service Plan, based on documented evidence and the specification of suppliers.

Treatment Matrix Guide for Dry Unmodified Salt

Weather Conditions Road Surface Conditions Road Surface Temperature (RST)	Treatment Air Temperature	Salt Spread Rate (g/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		15 Also refer to Note (e)	No
Frost or forecast frost RST below -5°C and above -10°C and dry or damp road conditions		15 Also refer to Note (e)	No
Frost or forecast frost RST below -5°C and above -10°C and wet road conditions (existing or anticipated)		2 runs X 15 Also refer to Note (f)	No
Light snow forecast (<10mm)		15 Also refer to Note (e)	No
Forecast for Medium/heavy snow or a freezing rain forecast		2 runs X 15 Also refer to Note (f)	No
Ice formed	Above -5°C	15 Also refer to Note (e)	Not possible
Ice formed	At or below -5°C	2 runs X 15 Also refer to Note (f)	Not possible
Snow covering exceeding 30mm		15 to supplement ploughing, up to 30 if temperatures are falling Also refer to Note (f)	Required
Snow accumulations due to prolonged falls		15 to 30 to supplement ploughing Also refer to Note (f)	Required
Hard packed snow/ice	Above -8°C	Successive treatments at 15 (repeat as needed)	Not possible
Hard packed snow/ice	At or below -8°C	Successive treatments at 15 supplemented by abrasives (repeat as needed)	Not possible
Sustained low temperatures	Below -10°C		

Notes:

- 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.
- For salt stored outside, it may be necessary to increase the spread rate for precautionary treatment salting from 10g/m² to 15g/m².
- All decisions should be forecast based, recorded and require careful monitoring and review.
- Ice refers to all ice on the road surface, including black ice.
- Due to limited capacity of spreaders if the target spread rate is greater than 15g/m² a second treatment at 10-15g/m², may be required.
- Successive treatments(repeat as needed) at 15g/m² to be used if required.



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 g/m ²

12. Plant, Vehicles and Equipment

The plant, vehicles and equipment available to the Local Authority are as follows:

- Laois County Council operates 5 demountable salt spreaders, (3 x 9m³ & 2 x 6m³) 5 snowploughs, 2 mini salt spreaders to deliver the winter service.
- One demountable salt spreader 1 x 6m³ and 4 x Snow ploughs are on standby in the Central Area Compound, Clonkeen for salting purposes if required
- 1 No Single axle truck is available for salting purposes if required

Details of Salt gritters, Snowploughs, Loading Shovels and pick-ups are given in the following tables:

Description (List each piece of equipment on its own line, & its registration plate, if applicable)	Depot Location	Capacity	Date Calibrated	Date Serviced	Date of next Calibration	Date of next Service
Plant for footways, footpaths or cycleways, e.g. trailer salt spreaders	10 x 3 tonne pick-ups located in the Eastern, Western and Central areas of the County	3/5 Tonne	N/A	October 2016	N/A	October 2017



Salt Spreaders

Description/Serial No	Capacity (m ³)	Depot Location	Date Calibrated	Date Serviced	Date of next calibration	Date of next Service
Demountable Salt Spreader (Direct Drive)	9	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017
Demountable Salt Spreader (Direct Drive)	9	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017
Demountable Salt Spreader (donkey engine)	9	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017
Demountable Salt Spreader 03986005	6	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017
Demountable Salt Spreader 07016048	6	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017
Demountable Salt Spreader 12806031	6	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017
Demountable Salt Spreader 01082059	2.2	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017
Demountable Salt Spreader 01082060	2.2	Central Area Depot, Clonkeen	Sept 2016	Sept 2016	Sept 2017	Sept 2017

Note 1: Various maintenance works carried out frequently at various times.

Note 2: Demountable Salt Spreader and Snowploughs are supplied and manufactured by Romaquip

Snowploughs and Loading Shovels

Description	Depot Location	Driver	Fitted to
Snowplough	Central Area Depot, Clonkeen	Dermot Dillon	08LS3184
Snowplough	Central Area Depot, Clonkeen	Eamon Fitzpatrick	08LS3334
Snowplough	Central Area Depot, Clonkeen	Martin Maher	06LS3343
Snowplough	Central Area Depot, Clonkeen	Greg Shelly	06LS2985
Snowplough	Central Area Depot, Clonkeen	Walter Saunders	08LS3329
Snowplough	Central Area Depot, Clonkeen	Kieran O'Sullivan	151 LS 000
JCB Loader	Central Area Depot, Clonkeen	Michael McGlynn	N/A

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- Demountable salt spreaders are mounted on all trucks and fully loaded ready to salt during holiday periods and weekends particularly during cold spells.
- During normal working days, some trucks are required to carry out other duties. In these situations salt spreaders are taken off these trucks and stored in the Machinery Yard, Clonkeen. They can be fitted onto the trucks in 15-20 minutes.
- A JCB Loader is used to load all the salt spreaders at the Clonkeen Depot. The JCB is on continuous hire to the Council from Hinch Plant Hire, Mountmellick.
- Lorry drivers and JCB driver are on standby at all times and can be mobilised within 30 minutes.

13. Details of Depots

Barn Ref.	Salt Depots	Routes Serviced	Indoor or Outdoor	Max Capacity	Minimum stock levels at:		
					1 st Oct	15 th Dec	1 st Mar
Existing Barn	Clonkeen	All Routes	Indoor	750 tonnes	500 tonnes	500 tonnes	300 tonnes
		TOTALS		750 tonnes	500 tonnes	500 tonnes	300 tonnes

Existing salt barn, dimensions 18m x 9m x 3.5m (height of salt)

14. Materials and Spares

1. The purchase and distribution of salt to Laois County Council is undertaken by the T.I.I. through the national framework contract The mechanism for ordering and supply of salt is as set out below:
2. The contact address for all salt supply and distribution correspondence is salt@nra.ie
3. Laois Co. Co. provides a weekly update on salt usage and current salt stocks to the T.I.I. Daily updates of salt usage and stocks will be provided to the T.I.I if a prolonged cold period similar to the 2010/2011 winter is repeated.
4. Updates regarding salt usage and stocks will be co-ordinated and forwarded to the T.I.I. by Edmond Kenny, Laois County Council.
5. Checking of salt deliveries and the electronic scanning of delivery dockets to Edmond Kenny, a/E.E. will be organised by Roy Glynn, General Services Supervisor, Laois Co. Co.
6. Salt is ordered through the T.I.I. by submitting a salt request form online to Kildare Regional Design Office.

Notes:

- Each driver is issued with a fuel card and diesel fuel for the Trucks is purchased at Local filling stations.
- Agricultural diesel for loading shovels, tractors, etc is stored in a 9,000 litre tank, in the Central Area depot, Clonkeen.
- The maintenance repair and calibration of the salt spreaders is carried out by Romaquip, Birr Co. Offaly, and by Laois Co. Council mechanic, Joe Cross.
- Spare parts for the salt spreaders can also be obtained from Romaquip
- Edmond Kenny, a/Executive Engineer is responsible for the ordering of spare parts and the co-ordination of the maintenance, repair and calibration of the Spreaders.
- The Maintenance and repair of the Trucks is co-ordinated by the relevant GSS's depending on the Area to which the trucks are assigned.



Appendix 1 to the Winter Service Plan – Treatment Route Cards

Northern Route: Greg Shelly/ Martin Maher

Eastern Route: Eamon Fitzpatrick/ Martin Maher

South western Route: Walter Saunders/ Martin Maher

Western Route: Kieran O'Sullivan/ Martin Maher

Central Route: Dermot Dillon/ Martin Maher

Portlaoise Town Route: Fintan Callaghan/Pat Callaghan

Mountmellick Town Route: Michael McEvoy/Liam McEvoy

ROUTE CARD FOR PRECAUTIONARY TREATMENT OF NORTHERN ROUTE (Mountmellick, Rosenallis, Clonaslee, Emo, Portarlinton)

Depot: Clonkeen
Driver: Greg Shelly/Martin Maher
Vehicle: 20 tonnes, 06 LS 2985
Average Speed for route: 40km/hr
Average spread width for the route: 7 metres
Route Tonnage at 10 / 15 / 40 g/m²: 6.3/9.4/25 tonnes

Road	From	To	Action	Free run (km)	Spreading Distance (km)	Avg Speed (km/hr)	Time (mins)
R422	Rosenallis (drivers house)	Offaly County Bounds	Salt		17	40	25
R422	Offaly County Bounds	Rosenallis (drivers house)	Travel	17		50	20
R422	Rosenallis (drivers house)	Junction with N80 at Emmett Street, Mountmellick	Salt		6	40	9
N80	Junction with R422 at Emmett Street, Mountmellick	Laois/Offaly border at Moneyquid	Salt		13	40	20
N80	Laois/Offaly border at Moneyquid	Junction with R422 at Emmett Street, Mountmellick	Travel	13		50	16
N80/R422	Junction with R422 at Emmett Street, Mountmellick	New Inn Roundabout at Junction of R422 and R445	Salt		12	40	18
R445	New Inn Roundabout at Junction of R422 and R445	Laois/Kildare border at Killenure	Salt		8.5	40	12
R445	Laois/Kildare border at Killenure	Junction of R445 and R420 at Killenure	Travel	1		30	2
R420	Junction of R445 and R420 at Killenure	Junction with L3171 for Killenard	Salt		5	40	7
L-3171	Junction with R420 for Killenard	Killenard Village	Salt		3	40	5
L-3171	Killenard Village	Junction with R420 for Killenard	Travel	3		50	4
R420	Junction with L3171 for Killenard	Junction with Station Road, Portarlinton	Salt		2	30	4
L3170	Junction with Station Road, Portarlinton	Railway Station	Salt		1.5	30	3
L3170	Railway Station	Junction with Station Road, Portarlinton	Travel	1.5		30	3
R420	Junction with Station Road, Portarlinton	Junction with R419 at French Street	Salt		1	30	2
L31576/ R419	Junction with R420 at French Street	Junction of R422 and R419(Kennels Cross)	Salt		8	40	12

R422	Junction of R422 and R419(Kennels Cross)	Junction with N80 at Glanbia, Mountmellick	Travel	8		50	10
N80	Glanbia, Mountmellick	Junction of Portlaoise link road and N80 at Fairgreen shopping centre	Salt		8	50	10
Portlaoise link road	Junction of Portlaoise link road and N80 at Fairgreen shopping centre	Junction of Portlaoise Link Road and R445	Salt		4	30	8
Portlaoise link road	Junction of R445 and Portlaoise link road	Junction of Portlaoise link road and N80 at Fairgreen shopping centre	Travel	4		30	6
N80/R422	Junction of Portlaoise link road and N80 at Fairgreen shopping centre	Rosenallis (Drivers house)	Travel	14		50	16
Totals				62	89		212
Route Efficiency				59%			

ROUTE CARD FOR PRECAUTIONARY TREATMENT OF EASTERN ROUTE (Graiguecullen, Ballylinan, Newtown, Crettyard, Swan, Windy gap)

Depot: Clonkeen
Driver: E. Fitzpatrick/Martin Maher
Vehicle: 15 tonnes, 08 LS 3334/06 LS 3343
Average Speed for route: 49km/hr
Average spread width for the route: 6.5 metres
Route Tonnage at 10 / 15 / 40 g/m²: 4.6/6.9/18 tonnes

Road	From	To	Action	Free run (km)	Spreading Distance (km)	Avg Speed (km/hr)	Time (mins)
R429/L3993	Drivers house in Clonagh on L-3993	Junction of R429 and N80 in Ballickmoyler	Travel	5		60	5
N80	Junction of N80 and R429 in Ballickmoyler	Junction of N80 and R428 in Stradbally	Salt		19.5	55	21
N80/N78	Junction of N80 and R428 in Stradbally	Laois/Kildare border at Killyganard via Simmons Cross	Travel	20.5		60	20.5
N78	Junction of Laois/Kildare border at Killyganard	Laois/Kilkenny border at Crettyard	Salt		17	55	18
R431	Laois/Kilkenny border at Crettyard	Junction with R430 at Tolerton	Salt		5	40	8
R431	Junction with R430 at Tolerton	Laois/Kilkenny border at Crettyard	Travel	5		50	6
N78	Laois/Kilkenny border at Crettyard	Junction of N78 and R430 at Newtown	Travel	4		50	5
R430	Junction of N78 and R430 at Newtown	Junction of R430 and R426 at Swan village	Salt		5	50	6
R430	Junction of R430 and R426 in Swan village	Junction of R430 and N78 at Newtown	Travel	5		60	5
R430	Junction of R430 and N78 at Newtown	Castlecomer roundabout on R430 in Graiguecullen	Salt		12	50	15
Carlow Northern Relief Road	Castlecomer Rd roundabout on R430 in Graiguecullen	Numbers Rd roundabout in Graiguecullen	Salt		1	50	1
Carlow Northern Relief Road	Numbers Rd roundabout in Graiguecullen	Castlecomer Rd roundabout on R430 in Graiguecullen	Travel	1		60	1

R430	Junction on R430 at St. Clare Church, Graiguecullen	Castlecomer road roundabout on R430 in Graiguecullen	Salt		2	50	3
Carlow Northern relief road	Castlecomer roundabout on R430 in Graiguecullen	Portlaoise road roundabout on N80 in Graiguecullen	Travel	0.5		30	1
N80	Portlaoise road roundabout on N80 in Graiguecullen	Junction of R429 and N80 in Ballickmoyler	Salt		7	50	8
R419/L3993	Junction of R429 and N80 in Ballickmoyler	Drivers house in Clonagh on L-3993	Travel	5		60	5
Carlow Northern Relief road	Castlecomer road roundabout on R430 in Graiguecullen	Laois/Carlow border at Bill Duggan bridge over river Barrow in Carlow	Salt		2	50	3
N80	Laois/Carlow border at Bill Duggan Bridge in Carlow	Portlaoise road roundabout on N80 in Graiguecullen	Travel	2		50	3
N80	Portlaoise road roundabout on N80 in Graiguecullen	Laois/Carlow border at Killeshin (church of Ireland) church in Graiguecullen	Salt		1	30	2
R430	Laois/Carlow border at Killeshin (church of Ireland) church in Graiguecullen	Junction on R430 at St. Clare Church, Graiguecullen	Travel	0.5		30	1
Total				48.5	71		137
Route Efficiency				60%			

ROUTE CARD FOR PRECAUTIONARY TREATMENT OF SOUTH WESTERN ROUTE (Aghaboe, Durrow, Cullahill, Ballinakill, Mountrath, Abbeyleix)

Depot: Clonkeen
Driver: Walter Saunders/Martin Maher
Vehicle: 15 tonnes, 08 LS 3329/06 LS 3342
Average Speed for route: 42 km/hr
Average spread width for the route: 7 metres
Route Tonnage at 10 / 15 / 40 g/m²: 4.8/7.2/19.2 tonnes

Road	From	To	Action	Free run (km)	Spreading Distance (km)	Avg Speed (km/hr)	Time (mins)
R434	Aghaboe	Junction with R445 (Derrin Cross)	Travel	8	-	50	10
R434	Junction with R445 (Derrin Cross)	Junction With N77 in Durrow	Salt		19	40	28.5
R639	Junction with N77 in Durrow	Laois/Kilkenny border at Oldtown	Salt		9.5	40	14.5
R639	Laois/Kilkenny border at Oldtown	Junction with N77 in Durrow	Travel	10.5		50	13
R434	Junction with N77 in Durrow	Laois/Kilkenny border at Tinwear	Salt		3	40	4.5
R434	Laois/Kilkenny border at Tinwear	Junction with R639 in Durrow	Travel	3		40	4.5
N77	Junction with R639 in Durrow	Junction of R430 and N77 in Abbeyleix	Salt		9	40	13.5
N77	Junction of R430 and N77 in Abbeyleix	Junction of R432 and R430 in Abbeyleix	Travel	0.5		15	2
R432	Junction of R432 & R430 in Abbeyleix	Ballinakill	Salt		5	40	7.5
L-3777	Junction with R432	Heywood school	Salt		1.5	40	2.5
L-3777	Heywood school	Junction with R432	Travel	2		40	3
R430	Ballinakill	Junction of N77 & R430 in Abbeyleix	Travel	6		50	7
R432	Junction of N77 & R430 in Abbeyleix	Junction of R430 and R445 in Mountrath	Salt		14	40	21
R445	Junction of R430 and R445 in Mountrath	Junction of R445 and R423 in Mountrath	Travel	0.5		15	1
R423	Junction of R445 and R423 in Mountrath	Junction of R423 and N80 at Derrycloney	Salt		16	40	24

R432	Junction of R423 and N80 at Derrycloney	Aghaboe (Driver's House)	Travel	29		50	13
		Totals		59.5	77		169.5
		Route Efficiency		56%			

ROUTE CARD FOR PRECAUTIONARY TREATMENT OF WESTERN ROUTE (Mountrath, Borris in Ossory, Rathdowney, Errill, Ballacolla. Togher)

Depot: Clonkeen
Driver: Kieran O'Sullivan/Martin Maher
Vehicle: 20 Tonnes 152 LS -----
Average Speed for route: 42 km/hr
Average spread width for the route: 7.5 metres
Route Tonnage at 10 / 15 / 40 g/m²: 6.1/9.1/24tonnes

Road	From	To	Action	Free run (km)	Spreading Distance (km)	Avg Speed (km/hr)	Time (mins)
N77	Driver's Home at Raheen	Junction of N77 and R425 in Abbeyleix	Travel	7		50	8.5
N77	Junction of N77 and R425 in Abbeyleix	Roundabout at M7 junction 17 at Togher Interchange	Salt		12	45	16
M7	Roundabout at M7 junction 17 at Togher Interchange	Roundabout on R445 at end of westbound off ramp at M7 junction 18 (Clonkeen)	Travel	4		50	5
Local road	Roundabout on R445 at end of westbound off ramp at M7 junction 18 (Clonkeen)	Point 500m beyond Railway bridge	Salt		1	30	2
Local road	Point 500m beyond Railway bridge	Roundabout on R445 at end of westbound off ramp at M7 junction 18 (Clonkeen)	Travel	2		30	4
R445	Roundabout on R445 at end of westbound off ramp at M7 junction 18 (Clonkeen)	North Tipp/Offaly Border at Ballaghmore	Salt		32	40	48
R445	North Tipp/Offaly Border at Ballaghmore	Junction of R434 and R445(Derrin Cross)	Travel	12		50	15
R445	Junction of R434 and R445(Derrin Cross)	Roundabout at Junction of R445 & R435 to west of Borris-in-Ossory	Travel	4		50	5
R435	Roundabout at Junction of R445 & R435 to west of Borris-in-Ossory	Start of safety barrier at M7 Junction 21 (Borris-in-Ossory)	Salt		3	20	6
R435	Start of safety barrier at M7 Junction 21 (Borris-in-Ossory)	Roundabout south of M7 Junction 21(Borris-in-Ossory)	Travel	3		50	4
R435	Roundabout south of M7 Junction 21(Borris-in-Ossory)	Junction of R435 & R433 in Rathdowney	Salt		9	40	14

R433	Junction of R435 & R433 in Rathdowney	Tipperary County Boundary at Knockahaw	Salt		9	40	14
R433	Tipperary County Boundary at Knockahaw	Junction of R435 & R433 in Rathdowney	Travel	9		50	11
R433	Junction of R435 & R433 in Rathdowney	Junction of R433 with N77 in Abbeyleix	Salt		19	40	28.5
N77	Junction of R433 with N77 in Abbeyleix	Abbeyleix (Driver's House)	Travel	4		50	5
Totals				45	85		186
Route Efficiency				65%			

ROUTE CARD FOR PRECAUTIONARY TREATMENT OF CENTRAL ROUTE (Stradbally, Abbeyleix, Kilminchy, Money Cross, Timahoe, Swan)

Depot: Clonkeen
Drivers/Teams: Dermot Dillon/Martin Maher
Vehicle: 20 tonnes, 08 LS 3184
Average Speed for route: 39 km/hr
Average spread width for the route: 6.9 m
Route Tonnage at 10 / 15 / 40 g/m²: 7.3/11/29 tonnes

Road	From	To	Action	Free run (km)	Spreading Distance (km)	Avg Speed (km/hr)	Time (mins)
L7835/ L3837	Aghamaddock (Driver's House)	Junction of N80 and R428 in Stradbally	Travel	3		40	4.5
R428	Junction of N80 and R428 in Stradbally	Kildare/Laois border at Blackford	Salt		4	40	6
R428	Kildare/Laois border at Blackford	Junction of N80 and R428 in Stradbally	Travel	5		50	6
N80	Junction of N80 and R428 in Stradbally	Bloomfield Cross Roundabout (Junction of N80 and R425)	Salt		9	40	13.5
R425	Bloomfield Cross Roundabout at Junction of N80 and R425	Junction of R425 and R445 at Rathbrennan	Salt		2	40	3
R445	Junction of R425 and R445 at Rathbrennan	Roundabout on R445 at M7 Junction 16 at Ballydavis	Salt		1	40	1.5
R445	Roundabout on R445 at M7 Junction 16 at Ballydavis	Junction of R445 and R422(New Inn Roundabout)	Salt		6	50	7
R422	Junction of R445 and R422(New Inn Roundabout)	Junction of R422 and R419 (Kennells Cross)	Travel	3		50	4
R419	Junction of R422 and R419(Kennells Cross)	Junction of R419 and R445 at Wheel inn	Salt		4.5	40	7
R445	Junction of R419 and R445 at Wheel inn	Roundabout on R445 at M7 Junction 16 at Ballydavis	Salt		2	40	3
R419	Roundabout on R445 at M7 Junction 16 at Ballydavis	Junction of R419 and R445 at Kilminchy	Salt		1	40	2
R445	Junction of R419 and R445 at Kilminchy	Junction of R445 and R425 at Rathbrennan	Travel	1		50	1
R445	Junction of R445 and R425 at Rathbrennan	Roundabout at Junction of L-2120 and R445 near Church in Portlaoise	Salt		4	40	6
R445	Roundabout at Junction of L-2120 and R445 near Church in Portlaoise	Mini roundabouts at junction of N80 and R445 in Portlaoise	Travel	0.5		30	1

N80	Mini roundabouts at junction of N80 and R445 in Portlaoise	Junction of N80 and L- 6311(Block road)	Salt		1.5	30	3
L-6311	Junction of N80 and L- 6311(Block road)	Junction of L-6311 and R445(Block road)	Salt		0.5	30	2
L-6311	Junction of L-6311 and R445(Block road)	Junction of N80 and L-6311(Block road)	Travel	1		30	2
N80	Junction of N80 and L-6311(Block road)	Bloomfield Cross roundabout at junction of N80 and R425	Salt		1	30	2
R425	Bloomfield Cross roundabout at junction of N80 and R425	Junction of R426 and R425 at Rathleague overbridge	Salt		2	40	3
R426	Junction of R426 and R425 at Rathleague overbridge	Junction of L-6310 and R426 on Timahoe road	Salt		1	40	1.5
L- 6310	Junction of L-6310 and R426 on Timahoe road	Junction of L-6310 and R922 at Togher	Salt		1.5	40	2.5
R922	Junction of L-6310 and R922 at Togher	Roundabout at Togher Interchange(M7 junction 17)	Salt		0.5	40	1.5
N77	Roundabout at Togher Interchange(M7 junction 17)	Junction with L-26962 (Portlaoise Rugby club road)	Salt		1	40	1.5
L-26965	Junction with L-26962 (Portlaoise Rugby club road)	Junction of L-6310 and R922 at Togher	Travel	2		40	3
	Junction of L-6310 and R922 at Togher	Roundabout at junction of Knockmay Link road and R922 in Portlaoise	Salt		1	40	2.5
Knockmay Link road	Roundabout at junction of Knockmay Link road and R922 in Portlaoise	Roundabout at junction of Knockmay Link road and R445 in Portlaoise	Salt		2	30	4
R445	Roundabout at junction of Knockmay Link road and R445 in Portlaoise	Roundabout near entrance to Machinery yard, Clonkeen(M7 junction18)	Salt		2	30	4
R445/R922	Roundabout near entrance to Machinery yard, Clonkeen(M7 junction18)	Junction of R426 and R425 at Rathleague overbridge	Travel	8		40	12
R425	Junction of R426 and R425 at Rathleague overbridge	Sheffield Cross at Junction of R425 and R426	Salt		0.5	30	1
R426	Sheffield Cross at Junction of R425 and R426	Money Cross at Junction of R426 and R427	Salt		4.5	40	7.5

R427	Money Cross at Junction of R426 and R427	Junction of R425 and R427 (Cashel Cross)	Salt		6	45	9
R425	Junction of R425 and R427 (Cashel Cross)	Sheffield Cross at Junction of R425 and R426	Salt		4.5	40	7
R425	Sheffield Cross at Junction of R425 and R426	Junction of R425 and R427 (Cashel Cross)	Travel	4.5		40	7
R425	Point 1.5 km on R425 from Cashel Cross	Junction of R425 and R427 (Cashel Cross)	Travel	3		40	3
R425	Junction of R425 and R427 (Cashel Cross)	Junction of R425 and N77 in Abbeyleix	Salt		8	50	9.5
N77	Junction of R425 and N77 in Abbeyleix	Junction of R430 and N77 in Abbeyleix	Salt		0.5	30	1
R430	Junction of R430 and N77 in Abbeyleix	Junction of R430 and R426 in the Swan	Salt		13	40	19.5
R426	Junction of R430 and R426 in the Swan	Graveyard in Timahoe	Salt		8	40	12
R426	Graveyard in Timahoe	Money Cross at Junction of R426 and R427	Salt		5	40	7.5
R427	Money Cross at Junction of R426 and R427	Junction of R427 and N80 in Stradbally	Salt		6	50	7
	Junction of R427 and N80 in Stradbally	Drivers Home in Aghamaddock	Travel	4		40	6
Totals				34.5	106		204
Route Efficiency				75%			

ROUTE CARD FOR PRECAUTIONARY TREATMENT OF PORTLAOISE TOWN ROUTE

Depot: Clonkeen
Driver: Fint Callaghan/Pat Callaghan.
Vehicle: 3 ton pick up 10 W 484
Average Speed for route: 24 km/hr
Average spread width for the route: 7 metres
Route Tonnage at 10 / 15 / 40 g/m²: 1.25/1.75/5 tonnes

Road	From	To	Action	Free run (km)	Spreading Distance (km)	Avg Speed (km/hr)	Time (mins)
N80	From roundabout at junction of L2120 and R445 in Portlaoise	Roundabout at intersection of Clonrooske Link road and N80 at Fairgreen shopping centre in Portlaoise	Salt	3	3	20	18
R426	From roundabout at junction of Timahoe road (R426) and N80 in Portlaoise	Junction of L-6310 and R429 at Meelick, Portlaoise	Salt	2	2	20	12
R922	Roundabout on junction N80 and R922 at Garda station in Portlaoise	Roundabout at junction R922 and Clonminan link road in Portlaoise	Salt	1	1	20	6
R445	Roundabout at junction of N80 and R445 at Square, Portlaoise	Roundabout at intersection of Clonminan Link road and R445 on Mountrath road.	Salt	1	1	20	6
Main Street L 21208, L21209, 63101	Junction of main Street with N80 at the Square Portlaoise	Junction of Main street with N80 at Church in Portlaoise	Salt	1	1	20	6
Ridge Road L-2120	Junction of L-2120 with R445 in Portlaoise	Junction with L-21205 in Portlaoise	Salt	1	1	20	6
Borris Road L-2133	Junction of L 2133 and R445 in Portlaoise	Roundabout at junction of L-2133 and L-6137 in Portlaoise	Salt	2	2	20	12
Colliers Lane L-6137 in Portlaoise	Junction of L-6137 and R445 in Portlaoise	Roundabout at junction L-2133 and L-6137	Salt	1	1	20	6
Ballyfin road L-2112	Junction of L-2112 and N80 in Portlaoise	Junction of L-2112 and Portlaoise Link Road	Salt	1	1	20	6
Local Roads and streets in Portlaoise as listed below: Main Street L-21209, Knockmay Road, 2696, Church Street, Church Avenue, Railway Street, Well Road, Kylekiproe Road, Harper's Lane, Bull Lane, Mill Lane, , Council car park and access roads, Grenville Estate (50m), Kilminchy (250M), St. Brigids, Parkview, Carpark between Link road and main Street, Carpark and access road to Central Area Office on Mountmellick Road.			Salt	6.5	6.5	10	78
Total				19	19		156
Route Efficiency				50%			

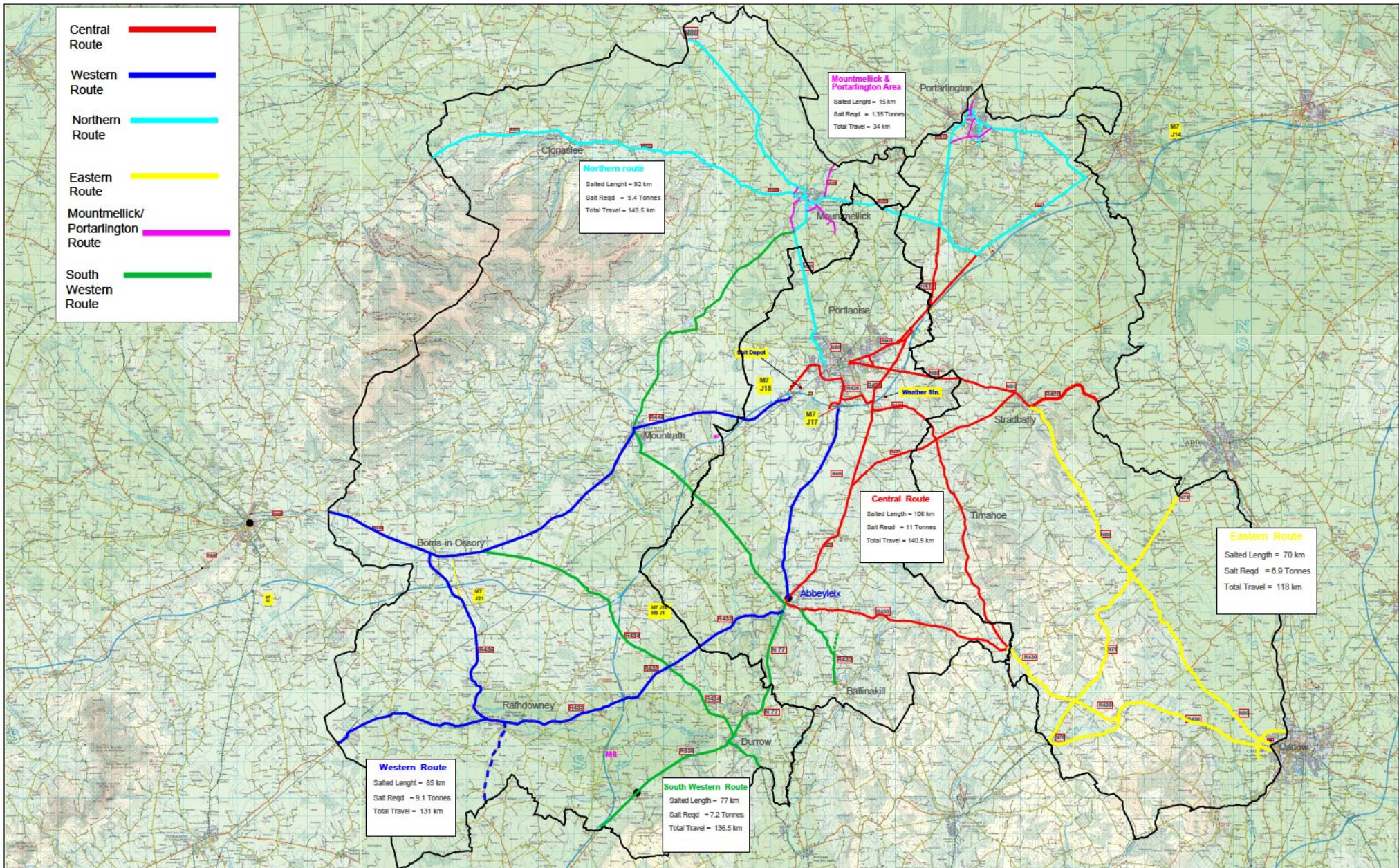
ROUTE CARD FOR PRECAUTIONARY TREATMENT OF MOUNTMELICK/PORTARLIGTON URBAN ROUTE.

Depot: Clonkeen
Driver: M. McEvoy/L. McEvoy
Vehicle: 10 W 485
Average Speed for route: 10km/hr
Average spread width for the route: 8 metres
Route Tonnage at 10 / 15 / 40 g/m²: 1.1/1.68/4.5 tonnes

Road	From	To	Action	Free run (km)	Spreading Distance (km)	Avg Speed (km/hr)	Time (mins)
L20974	Junction of N80 with New Road	Junction of R422 with New Road	Salt		0.5	20	1.5
R422	Junction of R422 with New Road	Junction of R422 with Manor Street	Travel	0.4		20	1.2
Local Roads	Junction of R422 with Manor Street	Junction on the N80 at Derrycloney bridge	Salt		2.2	20	6.6
N80	Junction on the N80 at Derrycloney bridge	Junction on the N80 at Irishtown	Travel	1.4		20	4.2
L6131	Junction on the N80 at Irishtown	Roundabout at Supervalu	Salt		0.6	20	1.8
L2120	Roundabout at Supervalu	Acragar	Salt		2	20	6
L2120	Acragar	Entrance to Hill 60 Housing Estate	Travel	0.9		20	2.7
L21201	Entrance to Hill 60 Housing Estate	Hill 60 Housing Estate	Salt		0.5	20	1.5
L2120	Entrance to Hill 60 Housing Estate	Roundabout at Supervalu	Travel	1.1		20	3.3
L2120	Roundabout at Supervalu	Rounabout at the lower end of Sarsfield Street	Salt		0.2	20	0.6
R422	Rounabout at the lower end of Sarsfield Street	Junction of R422 and R423 in Mountmellick	Travel	0.6		20	1.8
R423	Junction of R422 and R423 in Mountmellick	Laois/Offaly border in Forrest Lower	Salt		2	20	6
R423	Laois/Offaly border in Forrest Lower	Botley Lane on the Offaly side of the Barrow Bridge, Portarlinton	Travel	8.4		20	25.2
R420	Botley Lane on the Offaly side of the Barrow Bridge, Portarlinton	Junction with R419 at French Street	Salt		0.1	20	0.3

L31576	Junction with R419 at French Street	Junction at the Old Fire Station	Travel	0.4		20	1.2
R419	Junction at the Old Fire Station	Junction of Foxcroft Street with Main Street	Salt		0.2	20	0.6
Main Street	Junction of Foxcroft Street with Main Street	The Square, Portarlinton	Salt		0.2	20	0.6
R419	The Square, Portarlinton	Roundabout at Droughill	Salt		0.5	20	1.5
Reg & Local Roads	Roundabout at Droughill	Sandy Lane	Travel	1.2		20	3.6
Local Roads	Sandy Lane	Crowe Lane	Salt		0.7	20	2.1
Local Roads	Crowe Lane	Junction of Foxcroft Street with Main Street	Salt		0.3	20	0.9
Local Roads	Junction of Foxcroft Street with Main Street	Ballymorris Road junction with Sandy/Crowe Lane	Travel	1.4		20	4.2
Local Roads	Ballymorris Road junction with Sandy/Crowe Lane	Ballymorris Road	Salt		1	20	3
Local Roads	Ballymorris Road	Junction of R420 with the Canal Road	Travel	1		20	3
Local Roads	Junction of R420 with the Canal Road	Junction of R419 with the Canal Road	Salt		2.5	20	7.5
Reg & Local Roads	Junction of R419 with the Canal Road	Drivers home Mountmellick	Travel	11		20	33
Total				28	14		123.9
Route Efficiency				50%			

Appendix 2 Winter Service Plan – Overall Map of Routes Treated



REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE

Winter Maintenance Programme 2016 /2017

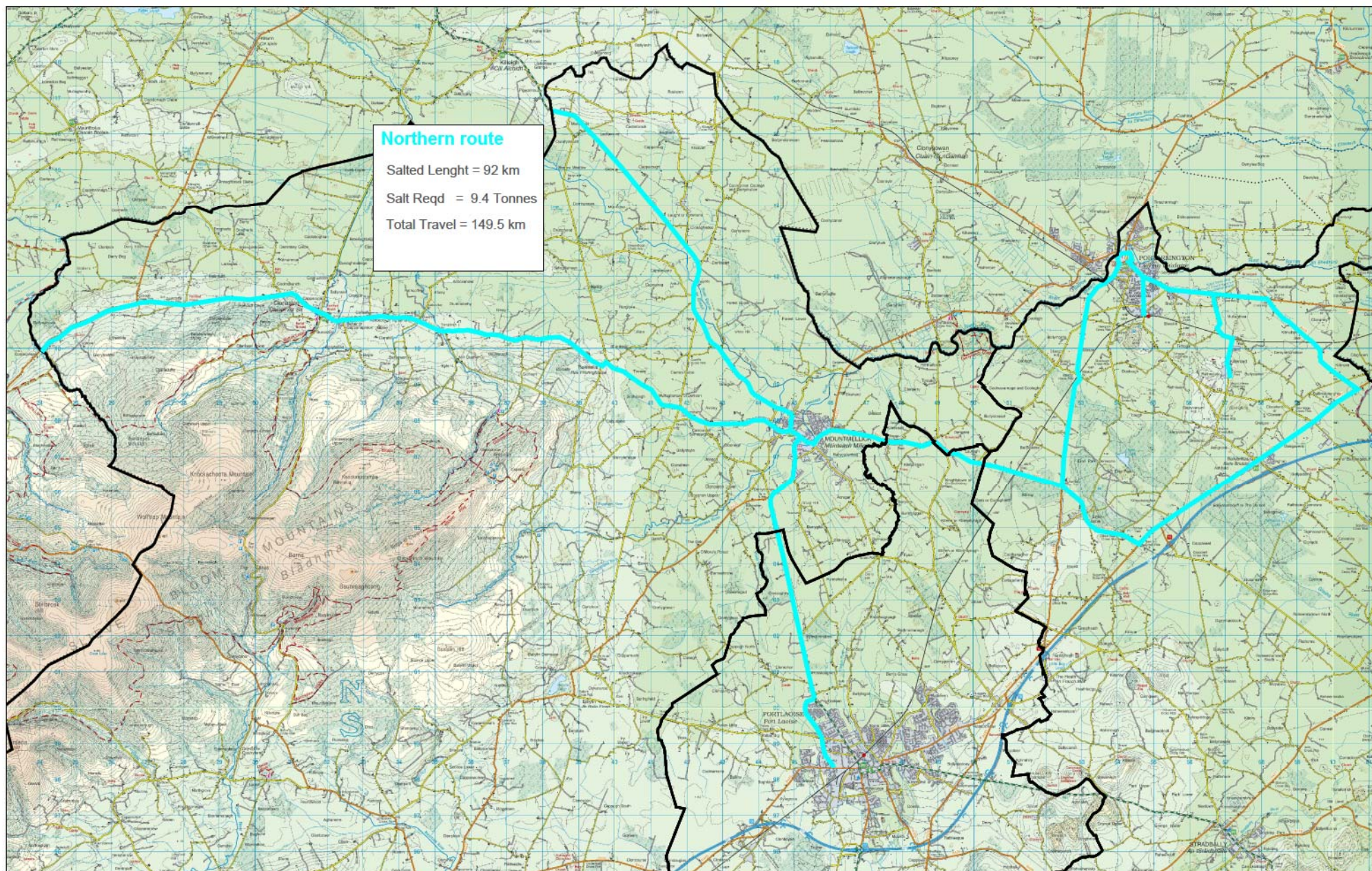
PROJECT
Winter Maintenance Programme
2016/2017

CHECKED PROPOSAL
Edmond Kenny
DRAWN BY: MCGeehan SCALE

ENGINEER APPROVED
Henry Ritchie S.E.E. Roads
REFERENCE TO:



Appendix 3 Winter Service Plan – Route Maps



REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE

Salting of Roads Northern Area 2016 /2017

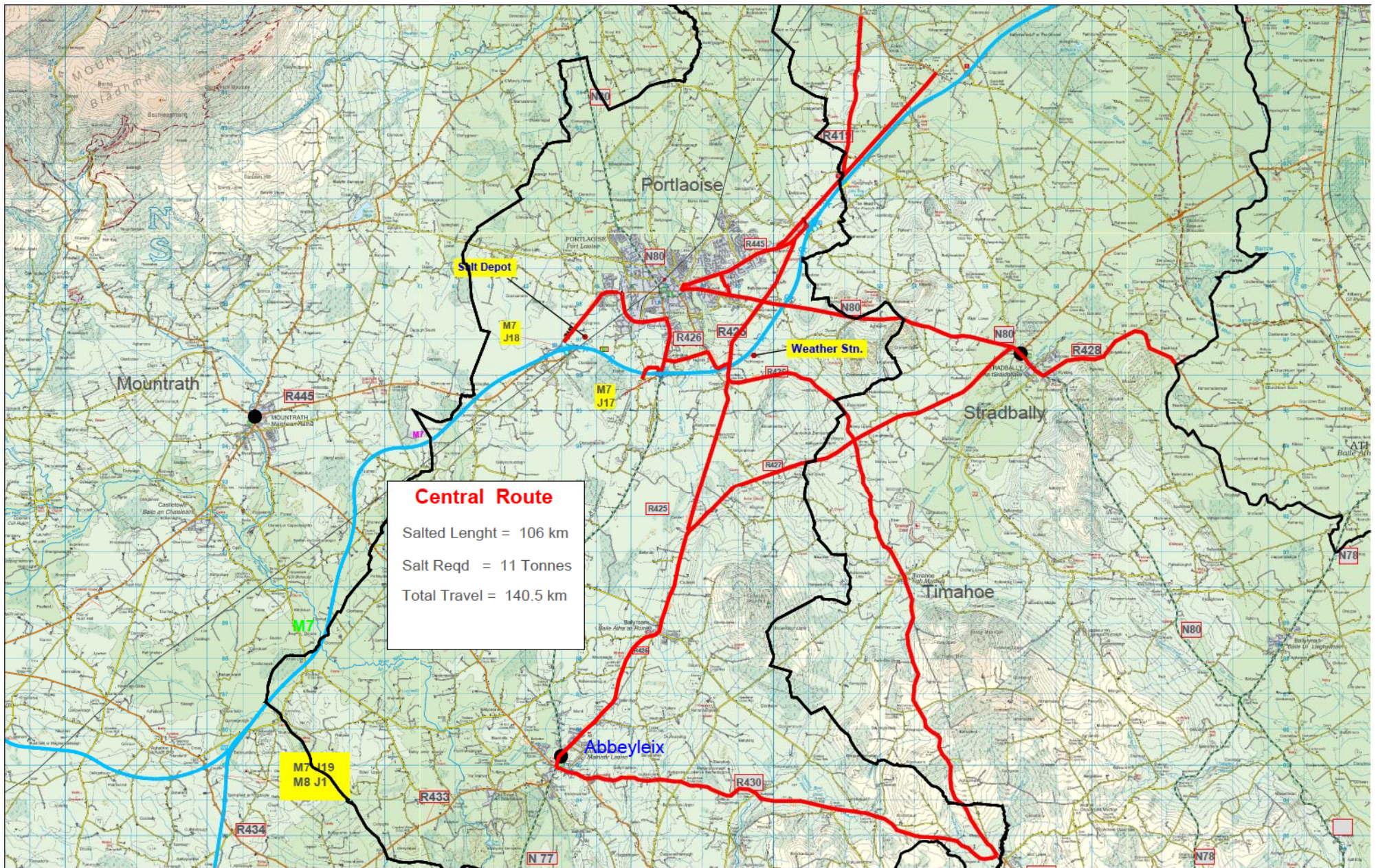
PROJECT
Winter Maintenance Programme
2016/2017

CHECKED PROPOSAL
Simon Kenny
DRAWN BY: MCGee

ENGINEER APPROVED
Henry Ritchie S.E.E Roads
REFERENCE TO:
SCALE



DRG No. 2016/017



REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE

Central Route

2016 /2017

PROJECT
Winter Maintenance Programme
2016/2017

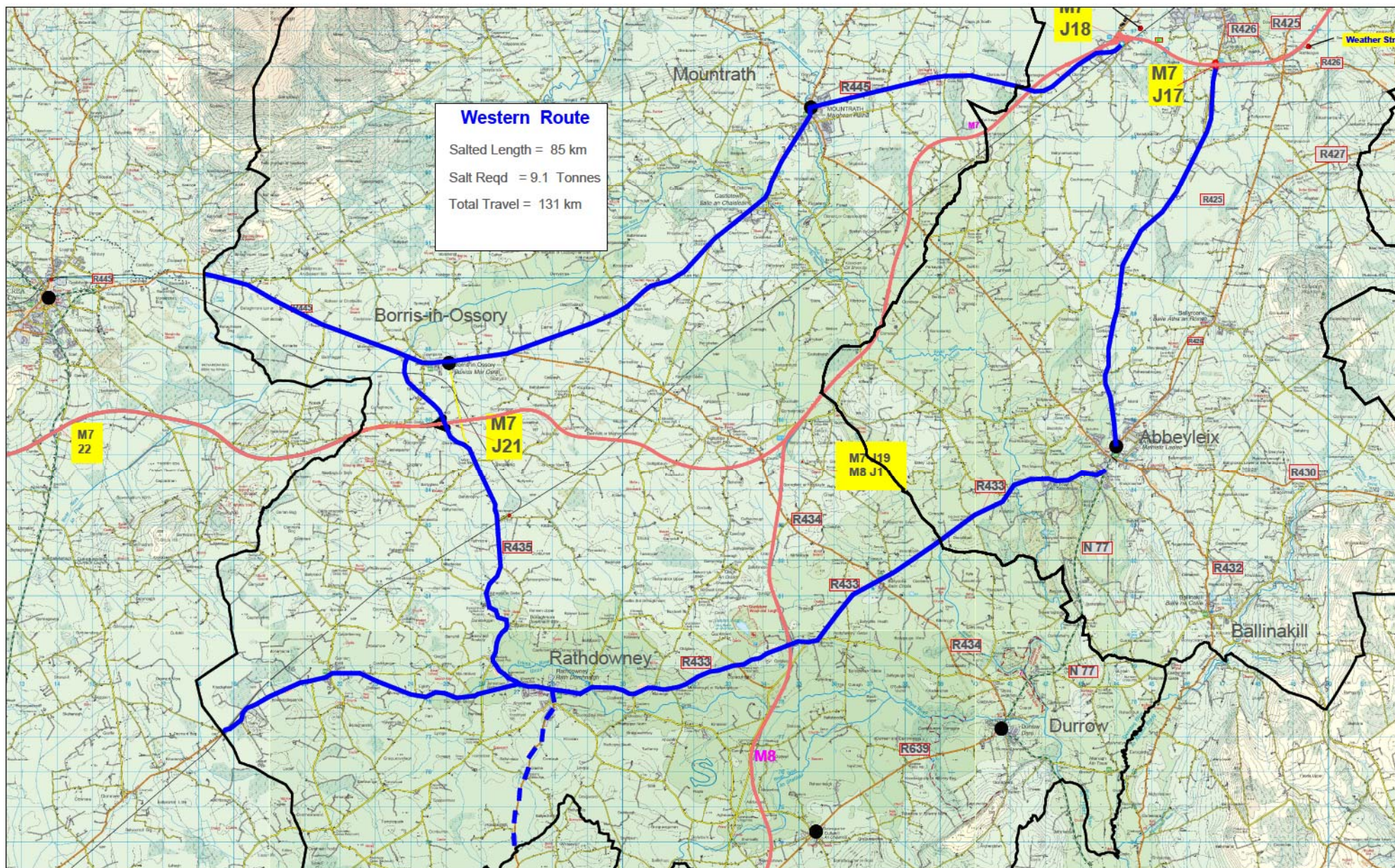
CHECKED/PROPOSAL
Edmond Kenny

ENGINEER APPROVED
Henry Ritzie S.E.E. Roads

REFERENCE TO:



DATE: 2016/01



Salting of Roads Western Route 2016 /2017

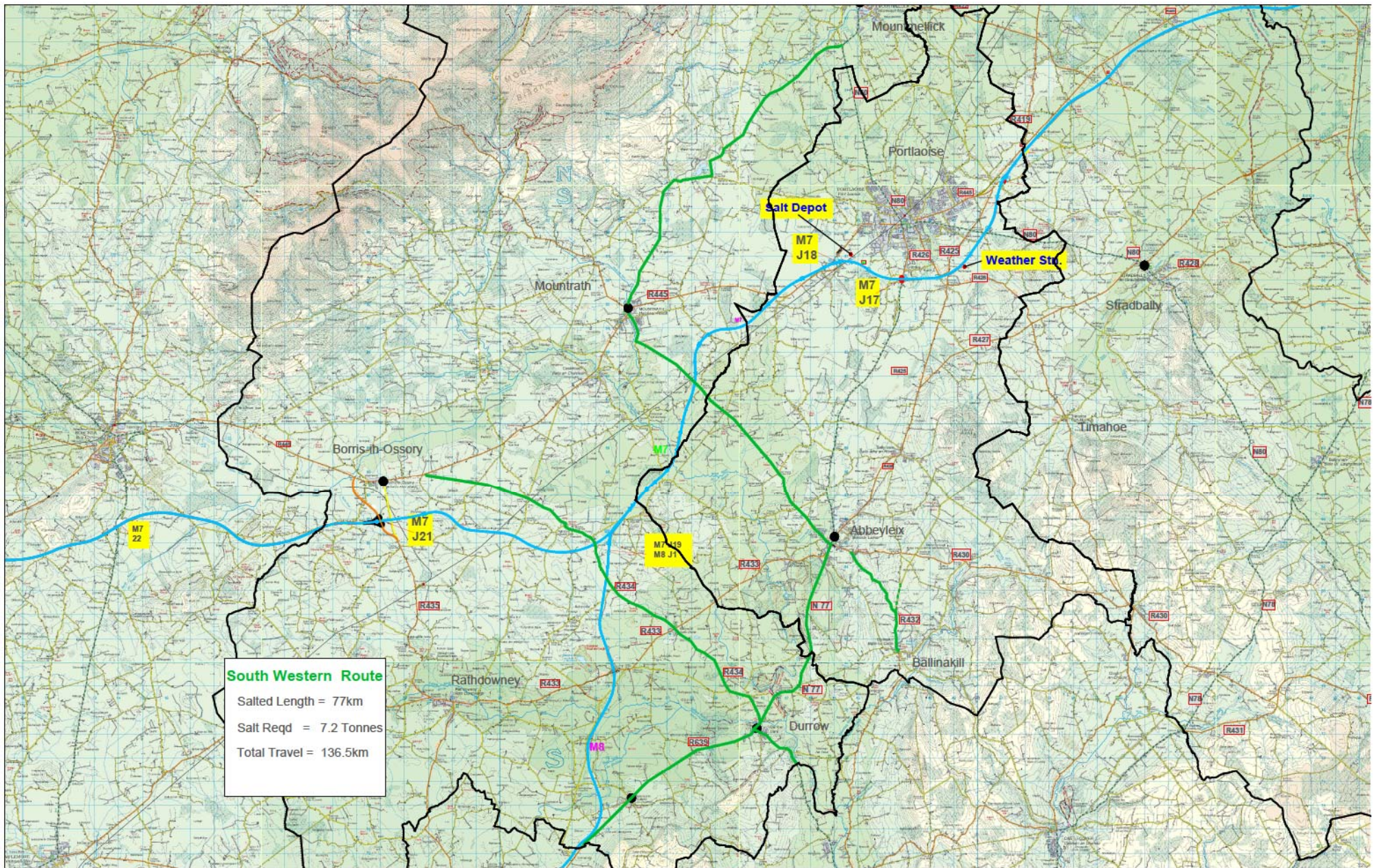
PROJECT
Winter Maintenance Programme
2016/2017

CHECKED PROPOSAL
Edmon Kenny
DRAWN BY: M'Carroll

ENGINEER APPROVED
Henry Ritchie S.E.E. Roads
AS REFERENCE TO:



DWG No. 2016/001 REV. 1



REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE

Salting of Roads South Western Route 2016 /2017

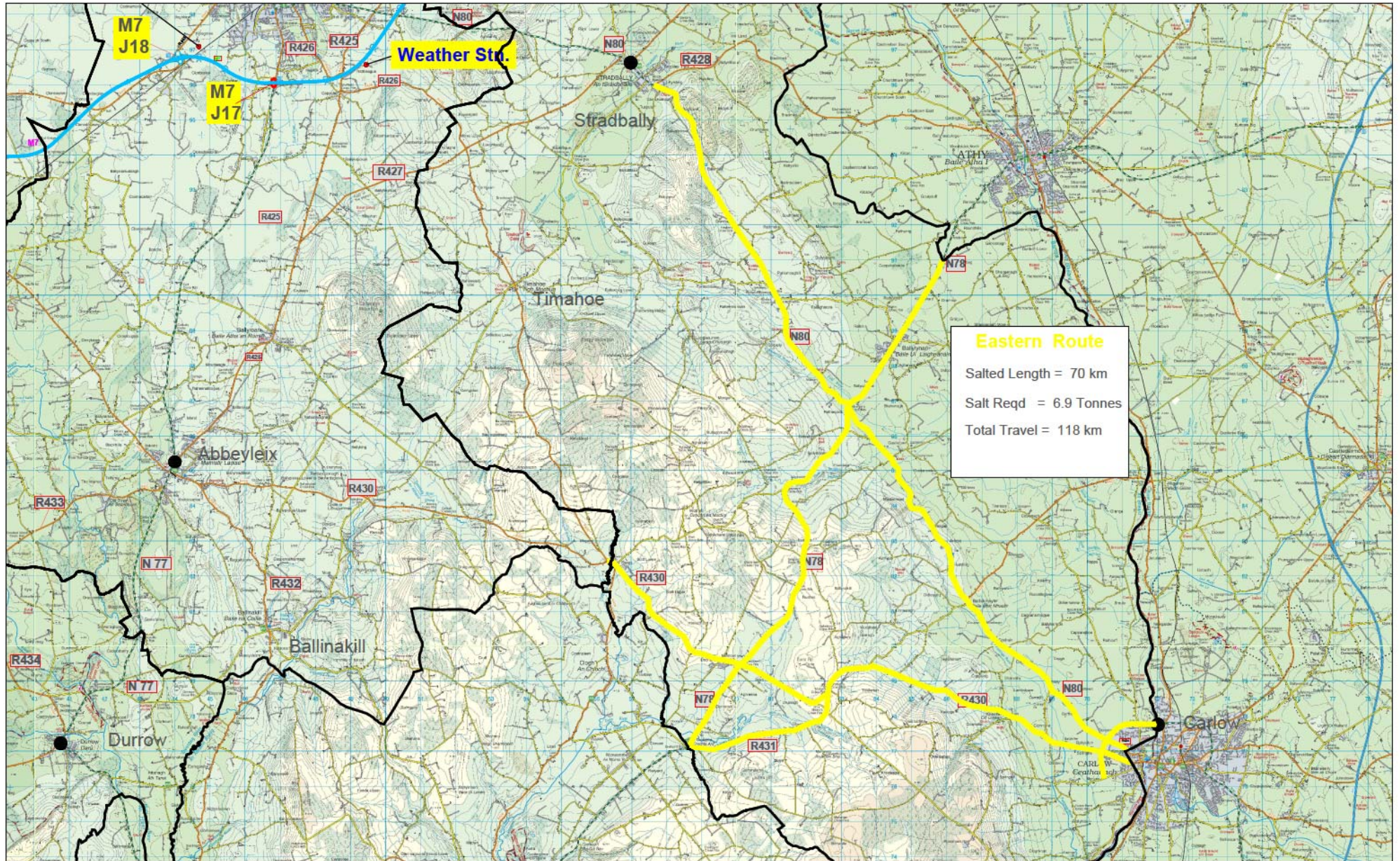
PROJECT
 Winter Maintenance Programme
 2016/2017

CHECKED/PROPOSAL
 Edmon Kenny
 DRAWN BY: M. Gough

ENGINEER APPROVED
 Henry Richey S.E.E. Roads
 REFERENCE TO:



FIG No. 2016001



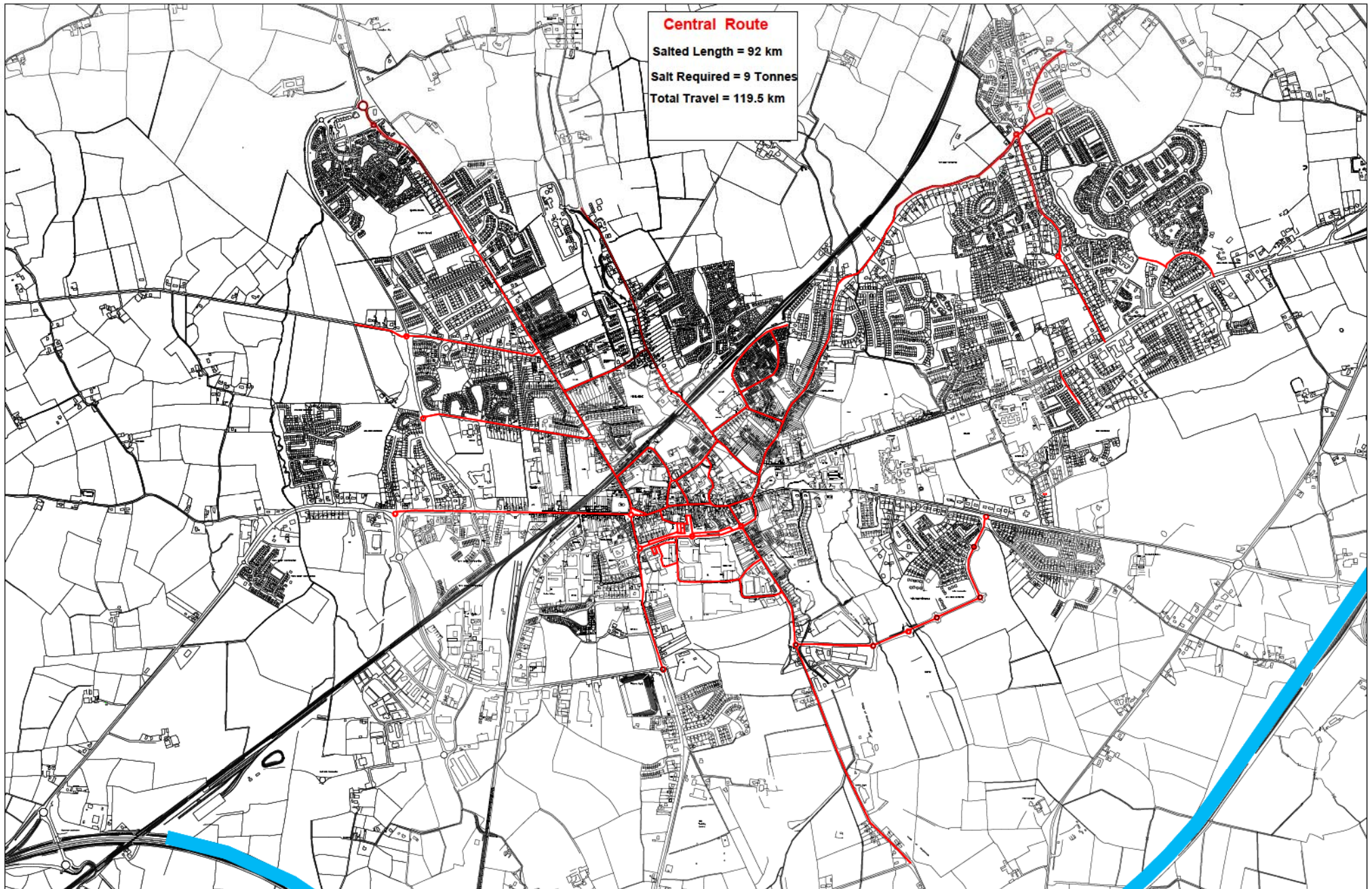
Eastern Route
 Salted Length = 70 km
 Salt Req'd = 6.9 Tonnes
 Total Travel = 118 km

REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE

Salting of Roads Eastern Route 2016 /2017

PROJECT Winter Maintenance Programme 2016/2017		CHECKED PROPOSAL Edmon Kenny DRAWN BY: M Conboy		ENGINEER APPROVED Henry Ritchie S.E.E. Roads REFERENCE TO: DMS No: 2013-001	
SCALE		SCALE		REV. 1	






REV. NO.	DESCRIPTION TO REVISION	REV. BY	DATE

Portlaoise Salting Routes

2016 /2017

					
PROJECT Winter Maintenance Programme 2016/2017		CHECKED PROPOSAL Edmond Kenny	ENGINEER APPROVED Henry Ritchie S.E. Roads		
DRAWN BY: M O'Geen	SCALE	A1	REFERENCE TO: G.000RS15/02/30/2015/2016		
				DRG No. 2016-001	REV. 1

Mountmellick & Portarlington Area

Salted Length = 15 km

Salt Req'd = 1.35 Tonnes

Total Travel = 34 km

Salting of Roads Mountmellick & Portarlington Area 2016 /2017

PROJECT
Winter Maintenance Programme
2016/2017

CHECKED PROPOSAL
Simon Kenny
DRAWN BY: WCG

ENGINEER APPROVED
Henry Ritchie S.E.E. Roads
REFERENCE TO:



DATE: 2016/01