



MAYO.IE

COMHAIRLE CONTAE MHAIGH EO
MAYO COUNTY COUNCIL

**WINTER SERVICE PLAN
2019/2020**

CONTENTS

1. Winter Service Policy	2
2. Winter Service Limitations	4
3. Treatment Routes	5
4. Weather Prediction.....	7
5. Personnel & Equipment.....	9
6. De-icing Material	10
7. Communication & Publicity.....	12
Appendix	14

Document Control			
Rev	Status	Amended By	Date
A		Peter Mcloughlin	10 th Oct 2017
B		C Sexton	8 th Oct 2018
C		P Mcloughlin	3 rd Oct 2019

1. WINTER SERVICE POLICY

The aim of this winter service plan is to set out how the winter service for ice and snow conditions will be provided for County Mayo. The winter service plan may be amended as necessary during the winter season.

Winter service is not an emergency service in the traditional sense in that low temperatures, ice and snow are regular, frequent and reasonably predictable occurrences. This plan does not deal with other extreme winter weather events such as flooding and high winds.

This plan is primarily concerned with a typical winter (**Normal Winter Weather**) with consideration given to how a harsher winter (**Severe Winter Weather**) will be handled. If the severity or duration of a cold spell is exceptional (**Extended Severe Winter Weather**) management of the winter service will be by Mayo County Council senior management team and it may be necessary to enact Mayo County Council's Major Emergency Plan.

The council's policy is to provide an effective and efficient winter maintenance service within the resources available to;

Allow the safe passage of vehicles and pedestrians

Minimise delays due to winter weather

Ensure operations are undertaken safely.

It is the aim of Mayo County Council to treat the public road network at strategic locations including;

- Hospitals & Westdoc facilities
- Fire Stations
- Airport
- Train Stations
- Bus Depots
- Major Industries

Winter maintenance on national roads is carried out by Mayo County Council for the TII and is funded by the TII. Winter maintenance on local and regional roads is funded from the discretionary maintenance grant.

The winter maintenance season is from:

Monday 14th October 2019 to Thursday 30th April 2020

There will be a limited winter service on Christmas Day.

Following snowfalls, the council will endeavor to clear snow from the carriageways, town streets and footways as soon as possible, and starting with P1 routes.

2. WINTER SERVICE LIMITATIONS

Given the scale of the resources involved in delivering the winter maintenance service it is not possible to provide the service to all parts of the road network. 18% of regional roads and 97% of local roads are not routinely salted. It also may not be possible to ensure surfaces are kept free of ice or snow at all times on the treated parts of the network.

In Ireland there are a high proportion of marginal nights when the temperatures are very close to zero. This makes it more difficult to accurately predict frost than in colder countries. As a consequence, Met Éireann can only guarantee 80% accuracy in their forecasts. This may lead to untreated icy roads on occasions.

It can take up to 4 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 the case of extended severe weather events, the road network salted may have to be reduced to Priority 1 routes.

3. TREATMENT ROUTES

The current treatment routes and their priority are shown on the attached maps. These are the routes which are ordinarily treated and receive precautionary treatment, treatment routes are subject to continuous optimisation.

Precautionary treatment is where salt is spread following warnings of expected low temperatures to reduce the likelihood of ice forming on the road.

Ice treatment is where salt is applied to remove ice that has formed on the road.

Snow clearance is the removal of snow from the road network using ploughs and assisted with the application of salt and/or grit where required. The soonest possible ploughing of snow yields the best results.

Priority 1 routes are national primary and national secondary routes. As well as the regional road R376 leading from the N17 to Ireland West Airport Knock. These routes are ordinarily treated and receive precautionary treatment.

Priority 2 routes are the strategically important regional and local routes. These routes are ordinarily treated and receive precautionary treatment, however in the event of a de-icing material or resource shortage the ordinarily treated routes may be reduced to priority 1 only.

Priority 3 routes are footpaths in urban centres, cycleways and other regional and local roads. These routes do not receive precautionary treatment but will be considered for treatment by the District Engineer once priority 1 & 2 routes are treated and resources allow.

Mayo County Council ordinarily treats 1,075 km of road across 23 treatment routes which equates to 100% of the national primary network, 100% of the national secondary network, 82% of regional roads and 3% of the local road network.

During extended severe winter weather stockpiles of grit may be made available for use by the public when resources allow. These stockpiles will be placed at strategic locations and these locations will be available on the Mayo County Council website.

The table below shows a summary of when treatments will be applied for the different weather conditions.

Treatment Summary				
Weather Condition	Treatment Type	Route Priority		
		1	2	3
Normal Weather	Precautionary	✓	✓	✗
	Ice Treatment	✓	✓	✗
	Snow Clearance	✓	✓	✗
Severe Weather	Precautionary	✓	✓	✗
	Ice Treatment	✓	✓	✓(a)
	Snow Clearance	✓	✓	✓(a)
Extended Severe Weather	Precautionary	✓	✓(a)	✗
	Ice Treatment	✓	✓(a)	✓(a)
	Snow Clearance	✓	✓(a)	✓(a)
(a) When resources allow				

Figure 1: Treatment Summary Table

4. WEATHER PREDICTION

The TII procures bureau weather services to assist Mayo County Council in predicting when frost, ice or snow may occur on the road network. These services are currently provided by a combination of Met Éireann and Vaisala.

The weather forecast information as well as the weather station measurements are available to the On Call Duty Engineer. Duty Engineers have access to 4 weather stations in County Mayo as well as 4 other weather stations in neighbouring counties.

The Duty Engineer will review the forecast information each day (usually available at 2.30pm). The Duty Engineer will then make and record the treatment decisions for the following 24 hours.



Figure 2: Vaisala weather station graph

The winter service operation is a planned response and late changes are not possible to implement as there is no on-call arrangement with winter service crews. Events requiring late changes are rare. In the event of unexpected changes in conditions outside of planned operations the Council will endeavour to Mobilize required gritting crews as soon as practicable after road inspection and confirmation is received from MD Staff that gritting is required.

It is the aim of Mayo County Council to complete morning treatments by 8.30 am. Precautionary evening treatments will generally commence at 7.00pm. However these times may change dependant on weather conditions.

The diagram below illustrates typical operation for winter service practice.

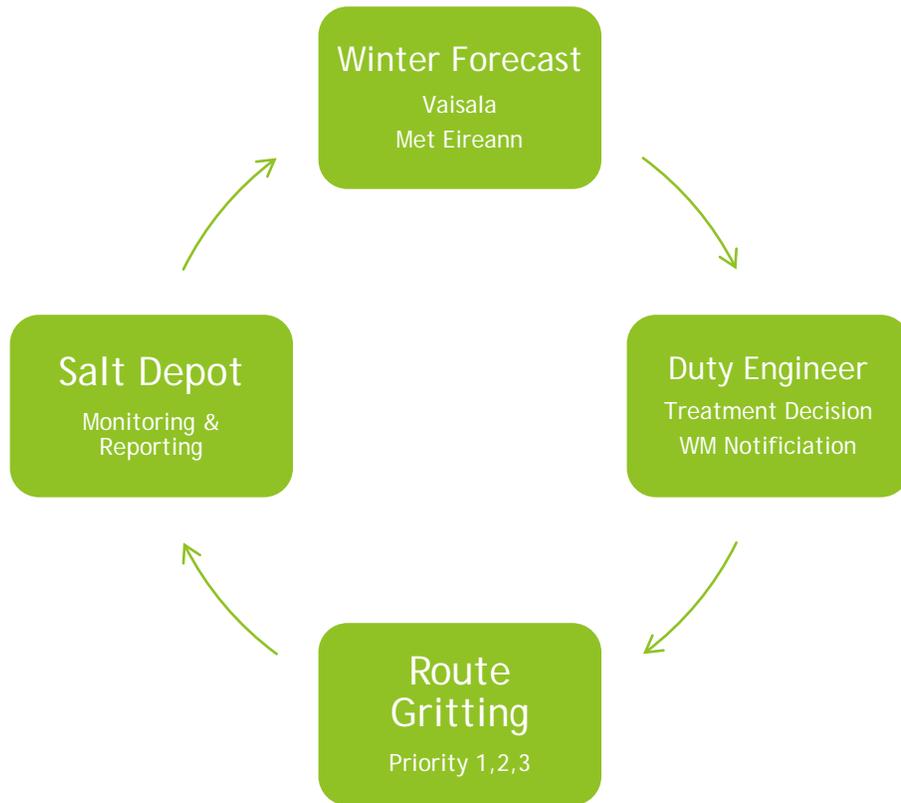


Figure 3: Typical Winter Maintenance Service

5. PERSONNEL & EQUIPMENT

There are over 60 staff involved in the provision of the winter service during normal winter weather including Winter Service Manager, Duty Engineers, District Engineers, District Supervisors and Winter Service Operatives. This number is increased during severe weather as resources allow.

Mayo County Council will operate 2 No. 9m³ salt spreaders, 12 No. 6m³ salt spreaders, 6 No. 2m³ spreaders and 3 No. tractor spreaders on the 23 treatment routes for the **2018/2019** season.

The spreaders are generally the demountable type with the 9 & 6m³ mounted on machinery yard trucks and the 2m³ mounted on Area pick-ups. The trucks carrying the 9 & 6m³ salt spreaders can also be fitted with ploughs for snow clearance when required.



Figure 4: Demountable salt spreader

6. DE-ICING MATERIAL

Rock salt is the most commonly used de-icing material and is the most suitable for Mayo County Council's equipment. Marine and vacuum salt are also readily available and are a suitable alternative.

Salt should comply with BS 3247:1991 'Salt for spreading – Coarse Rock Salt'.

Salt is used to either break the bond of ice to the road surface or to prevent it from forming by lowering the freezing point of water. Salt is used in its dry condition where it has a natural moisture content of about 4%. It melts ice and snow at temperatures as low as -21°C , but below -5°C the effectiveness of the salt is reduced and below -10°C the amount needed increases to become environmentally and economically undesirable.

Grit should not generally be used in the salt spreaders, because of the excessive wear on equipment, except in the treatment of hard-packed snow and ice which cannot be removed by ploughing.

Salt will be stored in barns (Ballina, Castlebar, Claremorris & Kilkelly) or other designated indoor storage sheds (Ballinrobe & Westport) where possible. Otherwise salt should be stored outdoors in designated compounds (Achill & Belmullet).



Figure 5: Salt storage barn

TII also maintain Strategic Maintenance Depots located at:

- Balbriggan
- Ennis
- Kinnegad
- Cahir

Salt procurement and distribution is managed nationally by the TII. Each storage location will be filled at the beginning of the season and again prior to the Christmas shutdown depending on the availability of salt

It is endeavoured to maintain a minimum salt stock level of 4,000 tonnes storage in Mayo. One applications of normal pre-treatment equates to 72 tonnes of salt. i.e. at a spread rate of 10g/m².

7. COMMUNICATION & PUBLICITY

The winter service plan will be distributed as follows;

Internal

- Cathaoirleach & Members of Mayo County Council
- Chief Executive & Senior Management Team
- Strategic Policy Committee on Roads and Transportation
- Major Emergency Management Committee
- Mayo County Council Winter Service Personnel
- Chief Fire Officer – Mayo Fire Service
- Civil Defence Officer
- CampWest
- Road Safety Officer, Communications Department

External

Road users via Mayo County Council Website

- An Garda Síochána
- TII
- HSE West Ambulance Service
- Department of Transport
- Met Éireann
- Directors of Services Roads, Sligo, Roscommon & Galway Co. Co.
- Ireland West Airport Knock
- Bus Éireann – Sligo

For the duration of the winter season the Mayo County Council website shall contain this plan and treatment network maps showing the priority 1 and priority 2 routes. The website shall also contain safe winter driving tips. The Road Safety Officer may run a safe winter driving campaign during the winter season.

During severe weather the website will contain frequently updated information on road conditions in the County as available.

During extended severe weather locations of Public Grit Stockpiles may be included on the Mayo County Council Website.

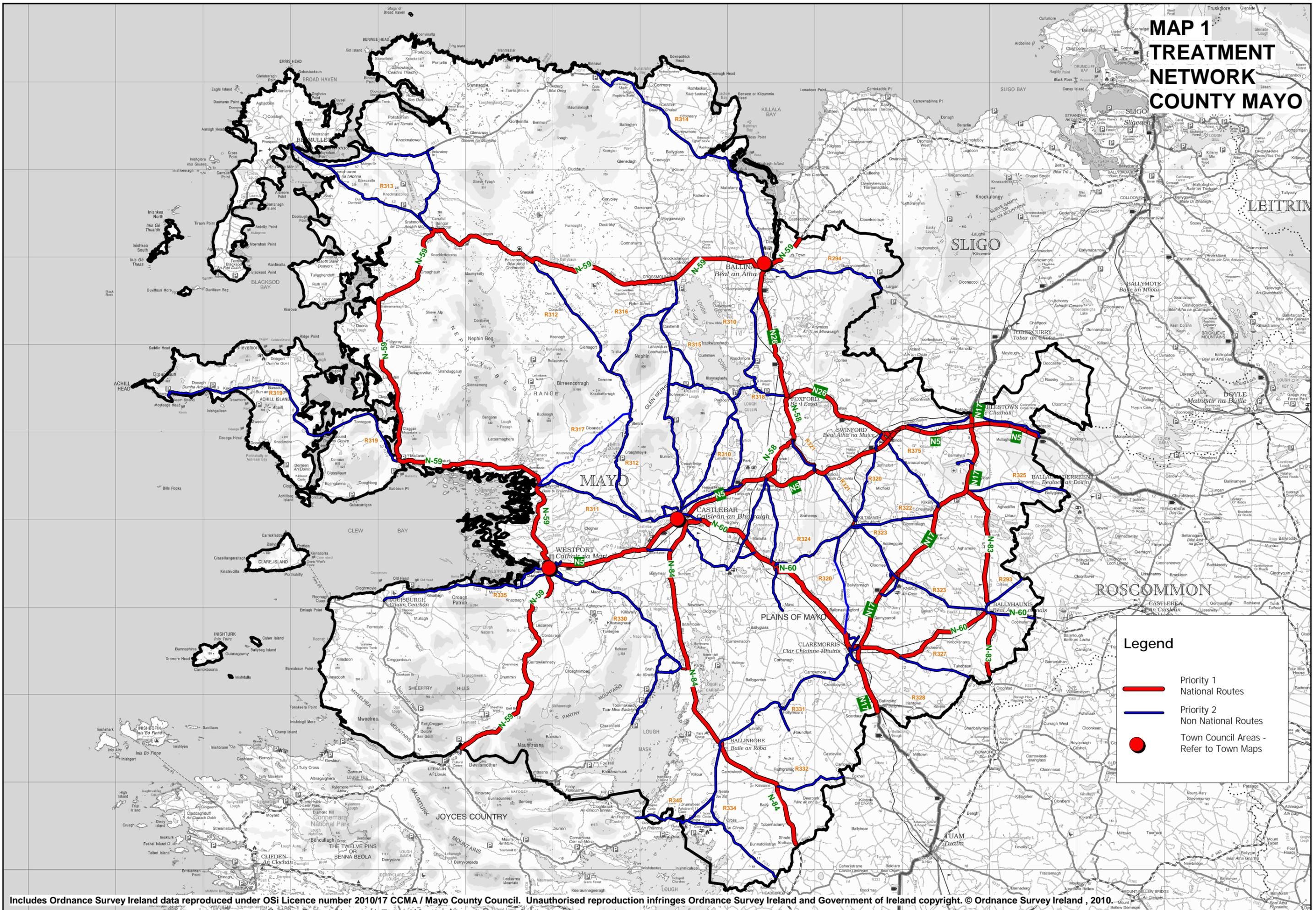
During extended severe weather Mayo County Council may provide and advertise an emergency phone number to the public.

Mayo County Council welcomes comments on our Winter Service performance and these should be emailed to winterservice@mayococo.ie . While every effort will be made to address concerns within the resources available, a response is not guaranteed and particularly during severe weather.

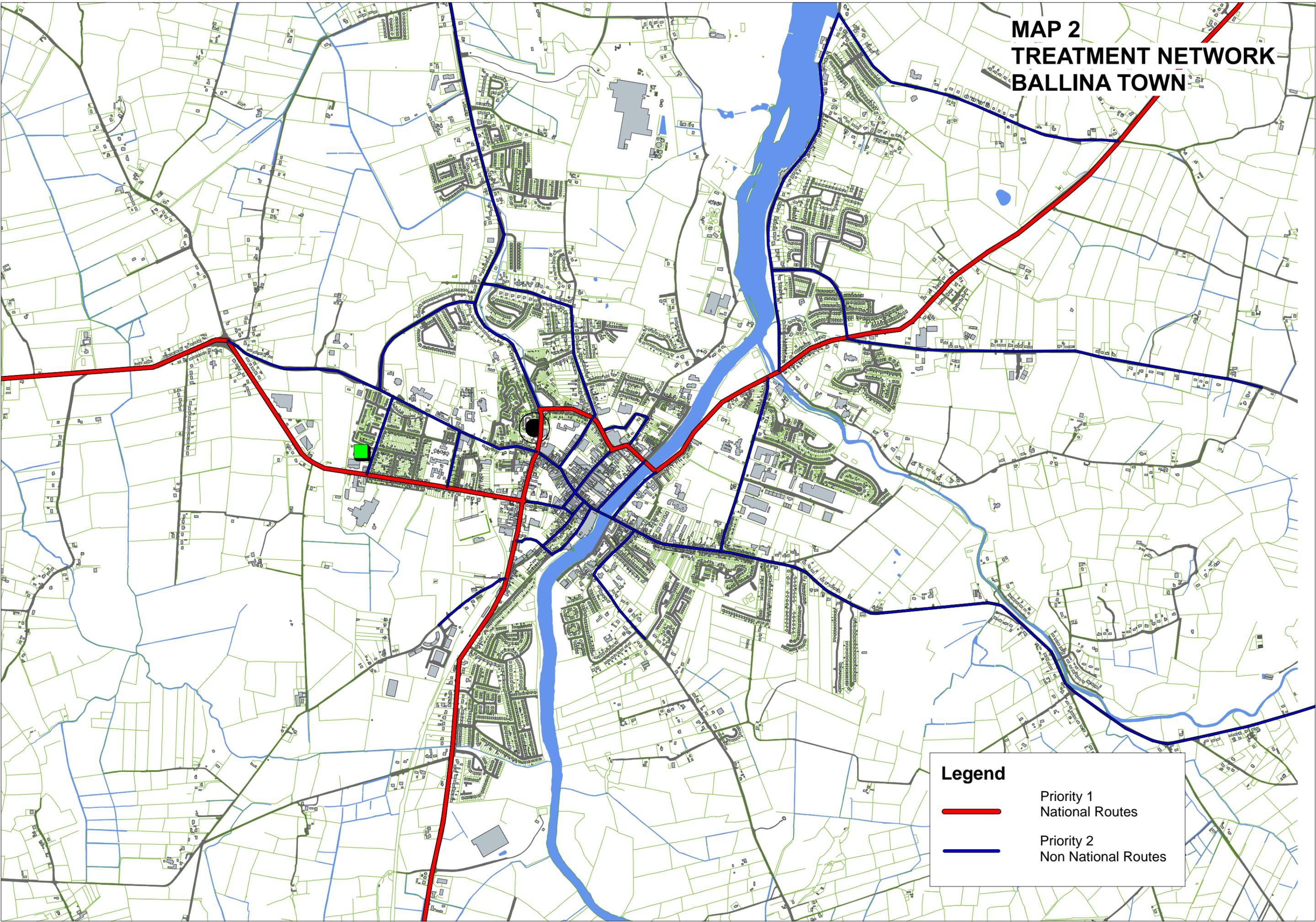
APPENDIX

- **Map 1 – Treatment Network County Mayo**
- **Map 2 – Treatment Network Ballina Town**
- **Map 3 – Treatment Network Castlebar Town**
- **Map 4 – Treatment Network Westport Town**

MAP 1 TREATMENT NETWORK COUNTY MAYO



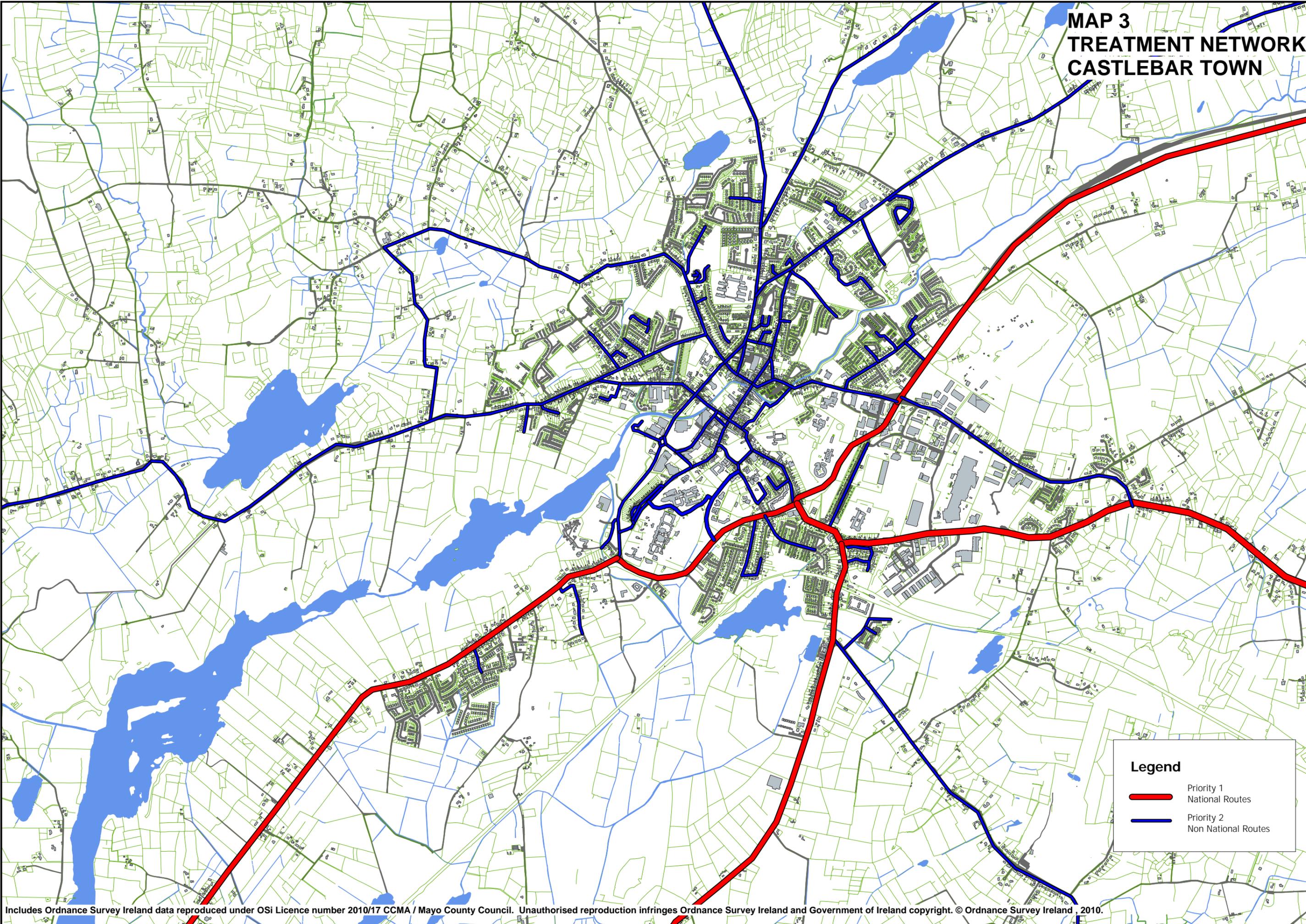
MAP 2 TREATMENT NETWORK BALLINA TOWN



Legend

-  Priority 1 National Routes
-  Priority 2 Non National Routes

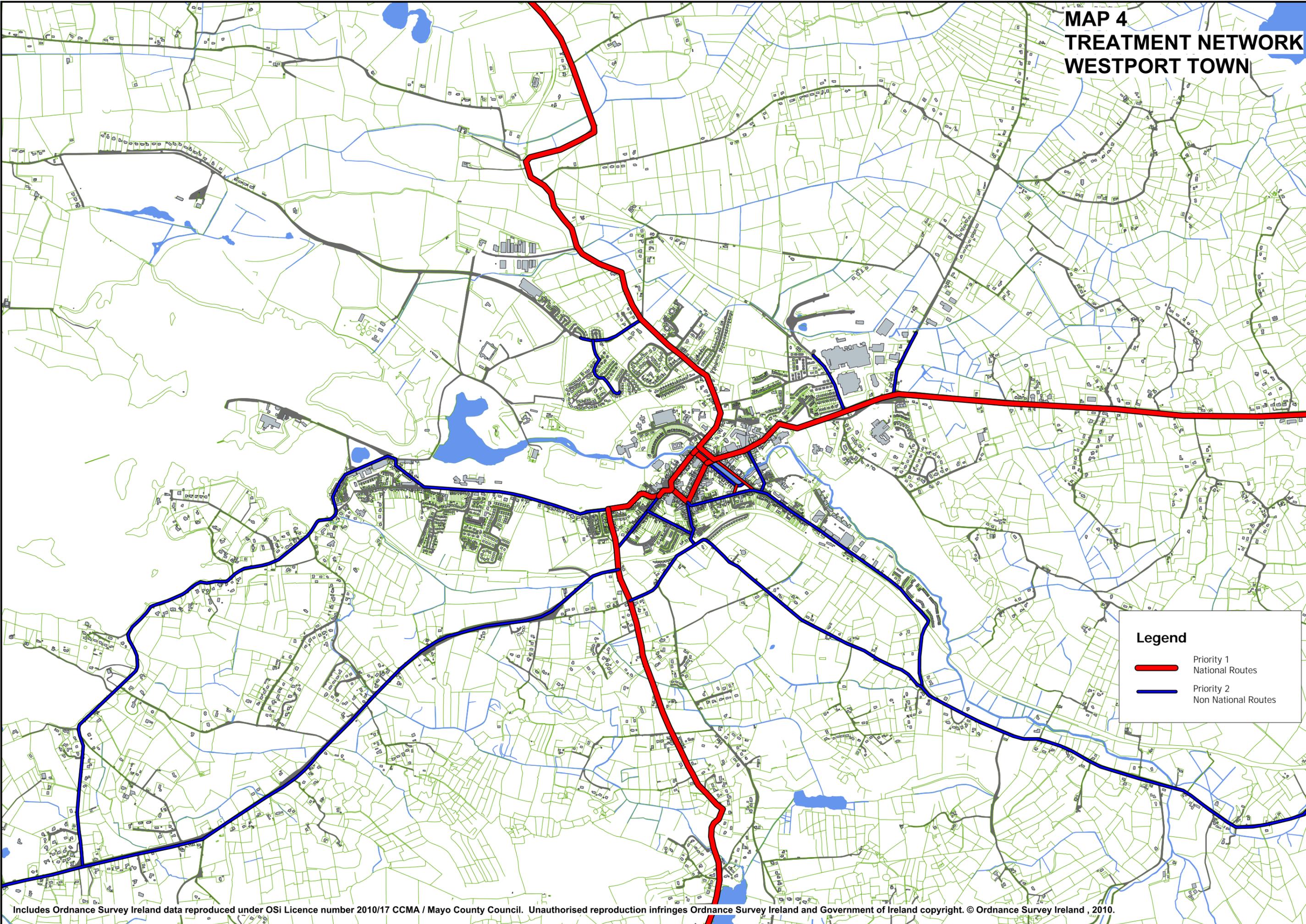
MAP 3 TREATMENT NETWORK CASTLEBAR TOWN



Legend

-  Priority 1 National Routes
-  Priority 2 Non National Routes

MAP 4 TREATMENT NETWORK WESTPORT TOWN



Legend

- Priority 1 National Routes
- Priority 2 Non National Routes