

Merthyr Tydfil County Borough Council

Winter Service Operation Plan

2023 – 2024



Cyngor Bwrdeistref Sirol
MERTHYR TUDFUL
MERTHYR TYDFIL
County Borough Council

Version 1	MW	Sept 2015
Reviewed & Updated 2	DC	Sept 2018
Reviewed & Updated 3	DC	Sept 2019
Re-written & Updated 4	DC	22 nd May 2020
Reviewed & Updated 5	DC	6 th October 2021
Reviewed & Updated 6	DC	5 th October 2022
Reviewed 7	DC	28 th September 2023

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1.0 Introduction

This document explains the Council's, responsibilities, and operational procedures in respect of the management and maintenance of Merthyr Tydfil's County Borough Councils highways network during the winter period, covering precautionary salting operations, network resilience and clearance of ice and snow.

2.0 Aim

The Directorate's aim is, so far as resources permit, to maintain or reinstate free and safe traffic flow, on all routes as quickly as possible during the winter period and to ensure that vehicles and pedestrians can use them with safety.

In icy conditions, priority will be given to;

- Major and Strategic roads - A and B roads (as detailed in the precautionary salting network) vehicular routes to Hospitals, Fire Stations, Ambulance Stations and Emergency Centres, followed by C routes and bus routes
- These will be followed by through routes in built up areas and roads to isolated farms.
- This is done by utilising Precautionary Salting Routes (A, B & C), prior to the onset of icy conditions.
- Any other routes will not be dealt with by the use of these routes, but on an adhoc basis as determined by requests via the Highway Customer Care Centre.

In order to achieve these objectives, the Council's "Winter Service Operational Plan" is divided into three distinct areas.

These areas are:

- a) Precautionary salting prior to the formation of ice or accumulation of snow.
- b) Post-treatment following the formation of ice or accumulation of snow.
- c) Provision of salt bins at strategic locations on the network.

3.0 Application

This "Winter Service Operational Plan" provides a guide to the Council's staff and workforce who may be involved in any winter maintenance operations.

4.0 Winter Maintenance Period

The specific winter services described in this plan are provided over the period from 1 October to 30 April to take in those months where the likelihood of ice formation or snowfall is at its greatest. Outside of this period any incidence of snow or ice formation would be treated on a reactive basis in accordance with the general principles set out in this document

5.0 Levels of Service

During normal working hours the Highways Manager or designated members of his team will on receipt of a daily weather forecast during the winter period determine what precautionary action shall be undertaken on the highway network. Outside normal working hours the decision is delegated to the Standby Officer.

5.1 Weather Forecasts

Daily weather forecasts will be received by email between the 1st Oct and the 31st March from the Weather Forecast Provider, each day at 6.00 am, 11.00am and 18.00. The email will be sent to the Lifeline and will be subsequently transmitted to the Highways Maintenance Section during the normal working day. Outside the normal working day the Standby Officer will log onto the weather portal for the most up to date weather information. The Highways Manager or his representative will decide the appropriate action and relay their instructions to the Highway Operation Team, emailing the information to the Standby Officer, the Weather Forecast Provider, the South Wales Police Authority and all neighbouring Council's.

GREEN	No road surface hazards are expected and in most cases road surface temperatures will be above +10C. Road surface temperatures may fall to zero or slightly below in exceptionally dry conditions with low humidity
AMBER	Road surface temperatures are expected to be close to zero and there is a possibility of damp or wet road surfaces or slight falls of snow. In the majority of cases there will be a degree of uncertainty about the lowest temperature or road wetness. It will usually be advisable to obtain an updated forecast later in the day before determining a course of action.
RED	Road surface temperatures are expected to fall to or below zero and hazards will exist on untreated roads.

Any update to a forecast will be emailed to Lifeline and forwarded to the appropriate location, depending on the time of day. The Highways Manager, his deputy or officer on call will, if appropriate, subsequently contact the Highway Operation Team with a revised plan of action. Clarification of further information can always be sought as necessary by using the Weather Forecast Provider's consultancy service; the telephone number is ex-directory and for use of appropriate personnel only. The update is recorded on the Winter Maintenance Action Form.

The information issued by the Weather Forecast Provider is shown on the following pages.

5.2 Road Weather Stations / Ice Sensors

Merthyr Tydfil CBC have four weather sensors which are located within the County boundary, these and others in nearby Councils are available to the forecast provider to assist in making and monitoring forecasts.

<u>Route</u>	<u>Location</u>
	Fiddlers Elbow, Quakers Yard
	Moriah Street, Bedlinog
	A4102, Cresta Run
	Heol Gerrig Road

Throughout the winter period these weather sensor sites are remotely contacted by the forecaster to determine the local weather conditions. The parameters measured by the system are the deep temperature, air temperature, humidity, road surface temperature, salt concentration and the surface condition which can be wet, dry, or icy. The weather forecast provider monitors the actual conditions reported by the sensors and will amend the forecast and inform the Council if they consider that changes may be required to the planned action

5.3 Level of Precautionary Arrangements

Precautionary salting is carried out to a defined portion of the highway network (Route Plans detailing the sequence of salting routes are included in Appendix 1, 2 & 3). The objective is to complete a precautionary application of salt to the P.S.N. prior to the predicted time for the onset of snow, frost or ice forming conditions. The P.S.N. within the County Borough has been developed with due regard to route classification, use and risk to the general public.

Operational instructions will be issued by the Highways Manager or his deputy and will be in the following format:

5.3.1 Precautionary Salting Action

On receipt of the weather forecast, using experience and local knowledge the designated officer will determine what precautionary action will be undertaken and these decisions will generally fall into one of the following forms of weather service responses.

- No action.
- Crews to attend depot and await instructions.
- Patrol / Update – the Highways Manager or Standby Officer will maintain regular contact with the forecaster and will organise patrols of the network to determine the actual conditions as necessary.

- Precautionary Salting with or without ploughs fitted as described below :-
- Full Network – The whole PSN is salted.
- Wet Spot – at a number of locations water seeps onto the PSN from the adjoining land but the locations of such seepage vary. When road temperatures are expected to fall below freezing but moisture is not expected to be present elsewhere on the network the whole route that may be affected by subzero temperatures will be travelled with any wet spots identified by the driver treated at 30g/m².
- A Critical Salting Network is also defined. This network is brought into operation of times of salt shortage emergencies or the most severe widespread conditions. It comprises the minimum vital links required to keep a basic network available in order to accommodate inter-town travel and keep the emergency services operational, food deliveries arriving, etc. This reduced level of service is only introduced alongside a widespread publicity campaign to inform road users

It is important to note that precautionary salting will not always prevent snow accumulating on the highway but will minimise the chance of a layer of ice forming below the snow and will greatly assist the snow clearance operation. The decision will be recorded on the winter action sheet which can be accessed on the DTN meteo-group portal. A screen shot can be found in Appendix 4, which will details the type of action, salt spread and timing of the action.

5.3.2 Pre-salting Mobilisation and Route Target Times

It is aimed to mobilise vehicles undertaking precautionary salting within an hour of an instruction to salt being issued if necessary.

As actions are carried out at different times of day, in differing traffic conditions and at various spread rates, the time taken from the vehicles leaving the depot to completion of the salting treatment will vary. At off peak traffic times whilst spreading at 20g/m² the treatment time is approximately 3 ½ hours, however at peak traffic times or when spreading at 30g/m² the treatment time may rise to five hours.

Precautionary salting in advance of frost or ice will be undertaken at 20g/m², higher applications may be needed if conditions are particularly severe or if there is the likelihood of salt being washed off the road by precipitation. In these circumstances precautionary salting will be carried out at 30g/m²

A spread rate of 30g/m² will be required in advance of snow in order to delay settlement for as long as possible and to make subsequent ploughing easier.

5.4 Post Treatment

Every effort is made to keep the PSN free of ice and snow but under certain conditions such as heavy snow or snow preceded by rain that prevents timely treatment, accumulations of snow may be unavoidable

Wherever frost, ice or snow has developed or accumulated on the highway the Council will prioritise and appropriately treat the affected areas as detailed

5.4.1 Post Treatment of Ice/Frost

Post treatment of ice and / or frost is prioritised and treated in accordance with the guidance table below, where ice has already formed it will be treated at a spread rate of 40g/m².

Item	Surface Condition	Treatment
1	Localised Sheet Ice (water leak etc.)	Hand or machine salt depending on the scale of the incident
2	Widespread or Localised Black Ice or Hoar Frost present	Salt at 40 g/m ²

5.4.2 Snow Clearance

It is often the case that snow affects only certain geographic locations, the higher routes, or drifts across roads in exposed areas. Under these circumstances a targeted response is required. In a widespread snow scenario, clearance will generally follow the pre-salting priorities, but consideration will be given by the designated officer to the onset of drifting snow, the blocking of roads by accidents or other special circumstances that can only be judged by the supervisor on the spot. To best utilise available resources, Mountain roads may be closed in advance of snow and action targeted elsewhere on the network when significant accumulations are forecast.

5.4.3 Carriageways

In times of persistent ice or snow the A and B classified roads are generally cleared first, followed by the rest of the PSN. Other carriageways and footways are treated as resources become available having regard to the likely duration of the conditions.

Apart from the reservations identified above the general order of priority should be as follows:

- Strategic routes and distributor roads carrying industrial traffic, access to hospitals, fire stations and emergency centres.
- Local interconnecting and other Class III roads linking villages to the above.
- Accesses to sources of fuel and food.
- Bus routes
- Industrial estate roads.
- Through routes in built up areas
- "Short cut" routes.
- Lanes to isolated farms.
- Any other routes not listed.

While it is the intention to keep all highways, open to traffic at all times it may be necessary to assess whether the deployed resources are achieving their aims.

Under the most severe conditions it may be necessary to instruct a cessation of the operation and withdraw resources until weather conditions improve. Liaison with neighbouring highway authorities is essential when cessation of operations is being considered. Where requests from members of the public for clearance of snow and ice are received, they will be prioritised by the designated officer using the above hierarchy and with regard to the availability and location of resources, the predicted weather conditions and any special circumstances such as the need for emergency services to attend a site.

5.4.4 Footways & Cycle Routes

Salt is not spread on footways / cycle routes on a precautionary basis. However, where a white is called footways, and having due regard to conditions, forecast and available resources, footways and cycle routes will be generally cleared in accordance with following priorities:

- Pedestrianised areas and main town centres
- Other main shopping areas
- Main pedestrian routes, including routes to schools, access to hospitals, footways near sheltered housing and residential homes, links to main urban bus routes, footbridges on main routes
- Access to other public buildings, surgeries and clinics, cemeteries etc.
- Steep sections of footway, residential underpasses, and associated steps.
- Other busy pedestrian routes
- Other residential areas
- Industrial estates
- Low use rural footways, surfaced footpaths, off road cycleways

Unsurfaced footpaths, public rights of way and private footways will not be treated. Availability of resources is likely to mean that only in the most severe conditions will footways in the lower categories receive treatment.

5.4.5 Salt Bins

A network of salt bins will be maintained to facilitate local self-help. Salt Bins will be filled at the start of the winter season and following prolonged periods of winter activity. Open salt heaps are not utilised due to environmental considerations. Salt levels in the bins are monitored throughout the winter period and bins are refilled as necessary. A list of locations where salt bins are provided is maintained by the Highways Operation Team and is available on request. On an annual basis, requests for salt bins at new locations are assessed and prioritised by the Highways Operation Team using a point scoring system and additional bins placed subject to available resources. Anyone who requests a salt bin list will be sent an up-to-date list.

5.4.6 Action When Thaw Comes

To reduce instances of flooding, road gullies and water outlets should be opened up to permit free flow of water and all main culverts to be checked for operation. Salt bins should be refilled as soon as practicable.

6.0 Roles and Responsibilities

The Council's own staff and workforce carry out all Winter Service activities. The Highways Manager is responsible for all aspects of the Winter Service and has assigned roles and responsibilities to:

6.1 Highways Manager

The Highways Manager assisted by the Highways Team to deal with the Winter Service on a day-to-day basis and is responsible for;

- Precautionary weather forecasting services.
- Receiving daily weather forecasts during the winter period and determining the precautionary action to be taken. During normal working hours this responsibility is delegated to the Highways Operation Team and outside normal working hours delegated to the Standby Officer.
- Liaising, when necessary, with the weather forecasting provider.
- Monitoring ice prediction information received from the weather forecasting provider.
- In the event of deteriorating conditions, particularly major blockages of the primary route network due to severe or drifting snow liaising with various emergency services, neighbouring Councils etc.
- Liaison with adjacent Highway Authorities regarding the closure of mountain roads in anticipation of heavy snow falls.
- Liaison with Emergency Services.
- Passing of factual information on road conditions to the Council's Corporate Communications, local media, or general public as and when required.
- Providing accurate and timely information to the Council's Call Centre.
- Monitoring the levels of salt stockpiles and replenishing when necessary.
- Defining the Pre-salting the Highways Network.
- Defining salt bin locations.
- Maintenance of ice stations.
- Records of weather forecasts and actions

6.1.1 Highways Client & Operations Team

All Highways Operational Staff associated with decision making of Winter Service operations are suitably trained and experienced refer.

6.1.2 Notification of Proposed Action

Notification of proposed Winter Service action including “no action” decisions will be clear and precise and, in the format, detailed in Appendix 4, transmitted via email as soon as practicable to the various interested parties.

6.2 Highways Manager – Operational Management

The Highways Manager assisted by his team based at Unit 5 is responsible for:

- Receiving and implementing action instructions and weather forecasts from Highways Manager or his designated staff.
- Arranging for specialist vehicles and equipment to be available throughout the winter period. Directing all salting and snow clearing resources.
- Monitoring actual road conditions.
- Arranging for the work to be carried out, monitoring treatments and amending instructions when necessary due to changing road or weather conditions.
- Assessing the need to carry out post salting or snow clearance and ensuring the works are carried out when necessary.
- Assessing the priorities for snow clearing operations, allocating and directing available resources accordingly.
- Prioritising planned and reactive treatments during prolonged periods of wintry conditions. Maintaining a list of contractors with plant suitable for snow clearing purposes and hiring such plant when necessary.
- Maintaining comprehensive records of all Highway Winter Service activities.
- Ensuring that the service is delivered in the most economic, efficient and effective way.
- Maintaining the salt stockpiles and taking reasonable precautions to minimise damage to structures, vegetation etc during storage and loading.
- Ensuring that arrangements are in place for a vehicle fitter to be available on 24 hour call to deal with any serious mechanical breakdowns.
- Ensuring that salt spreading equipment is checked and calibrated.
- Ensuring all operatives receive adequate and appropriate training in Winter Service activities and that drivers are issued with “route cards”.
- Ensuring all operatives complete the shift report form on completion of their duties.
- Maintenance and filling of salt bins.

6.2.1 Standby Officer

To manage issues in relation to the highway network, which arise outside normal office hours. Highways provide standby cover, which at any time includes a Standby Officer supported by two Highways operatives 12 months of the year and an extra three Highways operatives to driver winter maintenance vehicles from October to March. The Standby Officer is responsible for the co-ordination all Winter Service activities outside normal working hours.

6.3 Other Authorities and Organisations

Liaison with other authorities and organisations will be undertaken by the Highways Team staff during normal working hours and by the Standby Officer outside of normal working hours

6.3.1 Adjacent Highways Authorities

The following highway authorities share boundaries with Merthyr Tydfil County Borough Council;

- Welsh Assembly Government
- Rhondda Cynon Taf County Borough Council
- Neath Port Talbot County Borough Council
- Caerphilly County Borough Council
- Powys County Council

6.3.2 Emergency Services

The following emergency services operate within the County Borough refer to;

- South Wales Police
- South Wales Fire & Rescue Service
- Ambulance Service
- Cwm Taf NHS Trust
- National Blood Transfusion Service

6.3.3 Other Authority / Bodies

In addition to the above contact details of the following bodies are;

- Network Rail
- Meteogroup
- Natural Resources Wales
- Welsh Assembly Government

7.0 Special Sites or Features

7.1 Traffic Calming Sites

Traffic calming features such as road humps, build outs etc may not be immediately apparent in snow conditions and damage may be caused to the traffic-calming feature, winter maintenance plant or operatives if collision occurs. Operatives will remain vigilant at all times to identify any such obstructions in the carriageway

8 Organisational Arrangements and Personnel

8.1 Duty Schedules, Rotas and Standby Arrangements

A Standby Officer is on call at all times outside of normal working hours. The Standby Officer is issued with a mobile telephone Emergency call will be passed to the Standby Officer from Lifeline. The Highways manager manages the Standby Officer and Winter operations staff rotas are managed by the Highways Supervisor.

The operations staff on standby consists of:

- 1 Standby Officer 12 months
- 1 Shadow Standby Officer for 4 months of the winter
- 3 Highways operative for 12 months
- 3 Salter drivers for 6 months

8.2 Training and Development

All winter maintenance operations staff are suitably trained and qualified personnel. Standby Officers and all Salter drivers are qualified to City & Guilds 6159.

9 Facilities, Plant Vehicles, Equipment and Compounds

The Winter Service operation is conducted from Abercynon depot and have adequate welfare and communication facilities.

9.1 Fleet

A schedule of all winter service plant including, capacity and its operating depot is shown in Appendix 5 In addition to the winter service plant, all other plant available to the Highways Team can be made available for winter service activities as required.

The day-to-day maintenance of the winter maintenance fleet is carried out by ECON's Fleet Team. Annual servicing, calibration and major maintenance of salters is carried out by Econ Engineering Ltd (calibration certificates are held by the Highways & Fleet Manager).

9.2 Salt

10mm coarse grade ground rock salt complying with BS3247 is used in all precautionary and reactive salting operations. Stocks of de-icing salt for machine spreading are held at Pengarddu depot. This salt will be will be monitored by the Highways Operational Team to ensure good rotation of stock and may be used for restocking of the Unit 5 depot if necessary for stock rotation purposes. Stockpiles are brought to maximum capacity during the summer to take advantage of off-season prices. The pre-winter stock holding is: Pengarddu 2,500t

Purchase and monitoring of salt stock levels throughout the winter period is carried out by the Highways Operational Team.

9.3 Supply of Salt to Others

Salt and salt bins are supplied to other Council departments on a rechargeable ad hoc basis. Other than the above, exception salt is not normally supplied to non-Council bodies or individuals, however, in emergency situations every effort will be made to accommodate requests for salt from emergency services, hospitals etc.

10.0 Information and Publicity

10.1 Public Information

Copies of this document will be available on request. All appendices except salting routes will be omitted from public release as they contain contact details or information intended for internal operational use only.

10.2 Local Press and Broadcast Information

In the event of significant snow or ice events, the Councils Corporate Communications Team will be supplied with information as required to provide the local media with updates on conditions, details of any specific problems and guidance for the public.

11.0 Operational Procedures

11.1 General

Winter maintenance operations must be undertaken in a realistic and practical manner, having due regard to the basic requirements.

Simplicity	Concise instructions must be issued at all levels.
Labour	Only trained operatives will be engaged on routine winter maintenance operations. Operatives must receive pre-winter training and be familiar with the routes they will be asked to treat.
Plant	Sufficient first- and second-line equipment should be available to meet the demands of the operation. Plant shall be fully serviced and calibrated prior to the onset of the winter season.
Material	Maximum stocks of de-icing salt must be available at Unit 5 and Pengarnddu depot by the start of the winter.

11.2 Precautionary Salting

Precautionary salting means the application of salt to the predefined precautionary salting network prior to the onset of freezing conditions in order to lower the freezing point of water. Operatives carry out salting of each route in accordance with the agreed routes unless local conditions such as obstructions or accidents prevent this, compliance with the agreed routes is monitored using on-board GPS systems. The reasons for any variations from the route must be reported to and recorded by the Supervisors. Salting vehicles travel at a speed recommended by the manufacturer of the spreading equipment wherever possible and observe speed limits at all times whilst taking account of road and traffic conditions. The width of spread will be adjusted as appropriate by the driver dependent upon the width of the road and the presence of parked vehicles, all front-line vehicles are fitted with tracking devices able to record location, control settings to determine speed and salt spread etc.

At the end of each salting action a report form must be completed by the operator, certified as correct by the duty supervisor and returned to Highways Supervisor on the next working day. If, during the course of precautionary salting operations, the weather deteriorates, and snow or rain starts falling and accumulating the drivers

must report back to the Supervisors who will liaise with the Highway & Fleet Manager or Standby Officer and any amendment to the level of action will be considered and instructed as appropriate.

11.3 Post Treatment

Requests for the reactive treatment of highways affected by severe weather will be logged and the sites inspected to establish validity and to determine priorities. Except in emergencies, treatment will only be carried out once resources can be released from treatment of the P.S.N.

11.4 Snow Conditions

The winter service is managed within Highways however during periods of severe weather, when extreme conditions prevail over an extended period the Council's Emergency Planning Officer will provide appropriate advice and the relevant parts of the Councils' "Emergency Plan" will be implemented if necessary.

11.4.1 Treatment of Snow

Ploughing will commence as snow depths reach 30 to 40mm, each pass of the plough may be supplemented by salt spread at the rate of 10 grams per square metre. This will prevent snow from compacting and so ease the passage of ploughs. Ploughing aided by light salting has the advantage that winter maintenance vehicles require less reloading. Should the temperature drop whilst Ploughing operations continue it is important to carefully monitor the air temperature so that spreads rates may be increased up to 40g/m² if necessary. At no time, even under the worst conditions, should it be necessary to spread at rates in excess of 40g/m². Where there is deep snow beyond the capabilities of snow ploughs, it may be necessary to effect clearance using snow blowers, dozers, loaders and tippers etc., to remove the obstacle in bulk.

11.5 Organisation of Emergency Works

Detailed records of instructions given, reports from supervisors, drivers, Police, and public, etc. and requests for assistance will be kept. Staff must regularly report the severity of conditions back to the Highways & Fleet Manager, Standby Officer or Supervisors as appropriate. If necessary, depots will be opened and additional staff may be called in.

In the event of an emergency projected to last more than 5 days or at the request of the Chief Officer for Neighbourhood Service Highways will instigate an Emergency Winter Service Group consisting of Chief Officers and Officers from Neighbourhood Services, Highways, Procurement, Finance, Emergency Planning and the Press Office to determine the Councils reaction to the developing situation.

11.5.1 Additional Labour

If the need for additional labour resources arises the Head of Engineering & Highways will liaise with the Highways Manager and assistance will be sought from other service areas.

11.6 Closure of Mountain Roads

On receipt of a forecast of heavy or drifting snow a decision may be taken by the Highways Manager and communicated to the Traffic Manager to close one or more of the Bedlinog and Bogey mountain roads well in advance of the onset of precipitation. The date and time of the closure will be noted on an emergency closure notice. Closure of the Bedlinog and Bogey routes will only be implemented following consultation with Caerphilly County Borough Council. When considering the closure of mountain routes close liaison will be maintained with the Emergency Services and the Forestry Commission will be advised. The media and public will be advised via the Merthyr Tydfil County Borough Council's Corporate Communications Team. At the appointed time the road(s) will be physically closed with barriers. As soon as the roads are closed, a single patrol will be undertaken to ensure that no vehicles are stranded on the mountain.

11.7 Closure of Other Roads

The Head of Engineering & Highways, Highways Manager or Standby Officer may decide to close any road as they see fit in emergency situations, either acting alone or in partnership with the Police. This process will be discussed with the Streetworks Manager prior to implementation. Where the road to be closed crosses into a neighbouring authority close liaison will be maintained.

11.8 Deployment of Equipment

Front line gritting vehicles will be deployed on the strategic and main distributor network to plough and salt as necessary. This action will continue until the situation is under control. Second line machinery will attend to other roads in accordance with the priorities as identified should it be determined that they are not required on the strategic and main distributor network.

11.8.1 Hired Equipment

Operators of hired equipment will be given precise instructions and directions. A responsible employee of Merthyr Tydfil County Borough Council will be designated to direct work, to keep a log of hours worked and to note any incidents that may occur. No hired plant is to be deployed unsupervised.

11.9 Traffic Calmed Streets

Extra care should be exercised when ploughing in areas of traffic calming to avoid damage to plant, the calming features and operatives. Operatives will remain vigilant at all times to identify any such obstructions in the carriageway.

11.10 Operational Monitoring

Operational monitoring will be undertaken via action report forms, electronic recording devices and supervision of activities.

All winter service action sheets issued out of normal working hours and action report forms will be forwarded to the Highways Supervisor on the next working day following the action.

11.11 Operational Record Keeping and Reporting

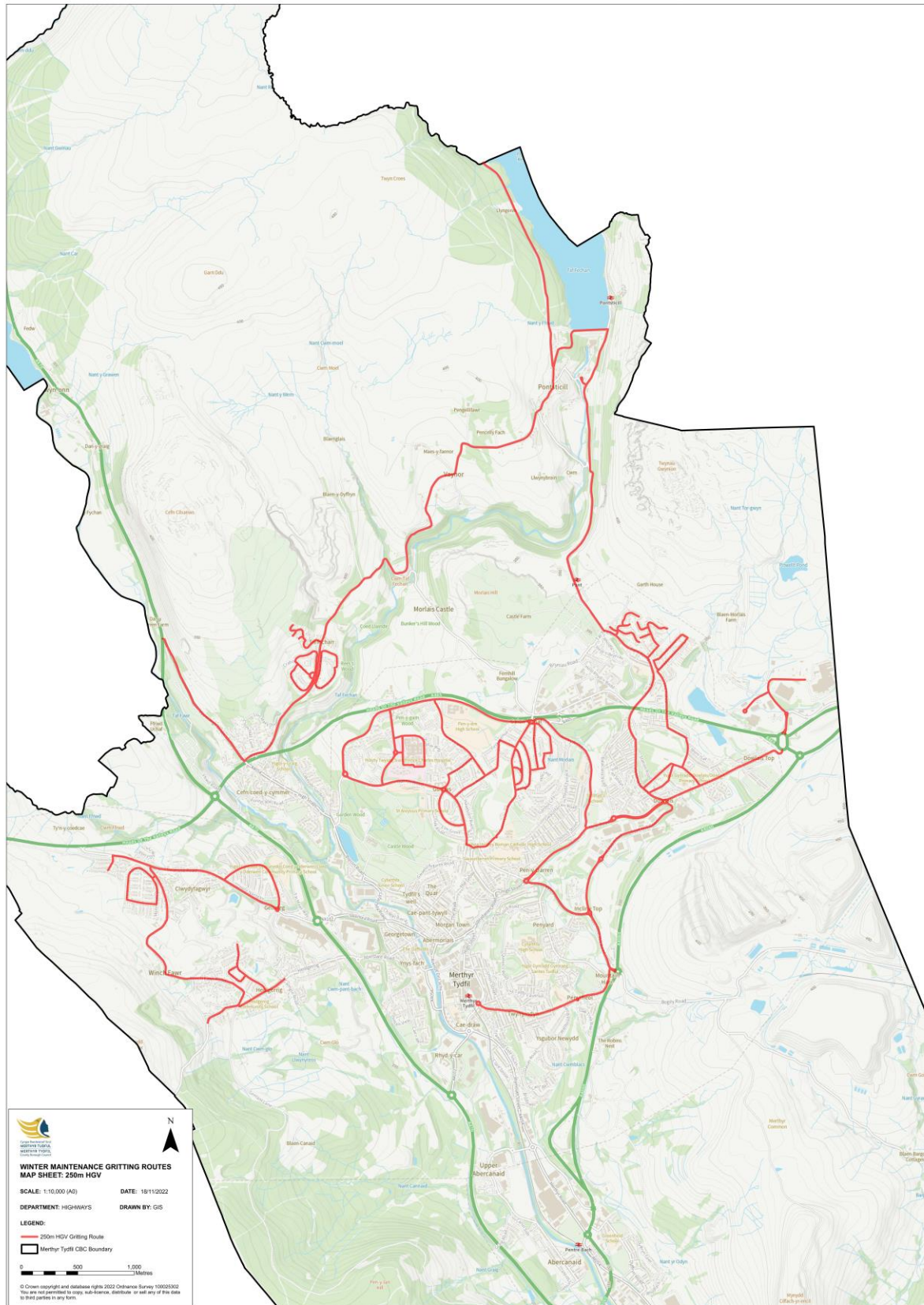
All forecasts and instructions will be held on Meteo-group web portal. Action report forms will be completed by the supervisors/standby officer at the completion of any precautionary salting action and will be signed by the driver.

12.0 Well Maintained Highways

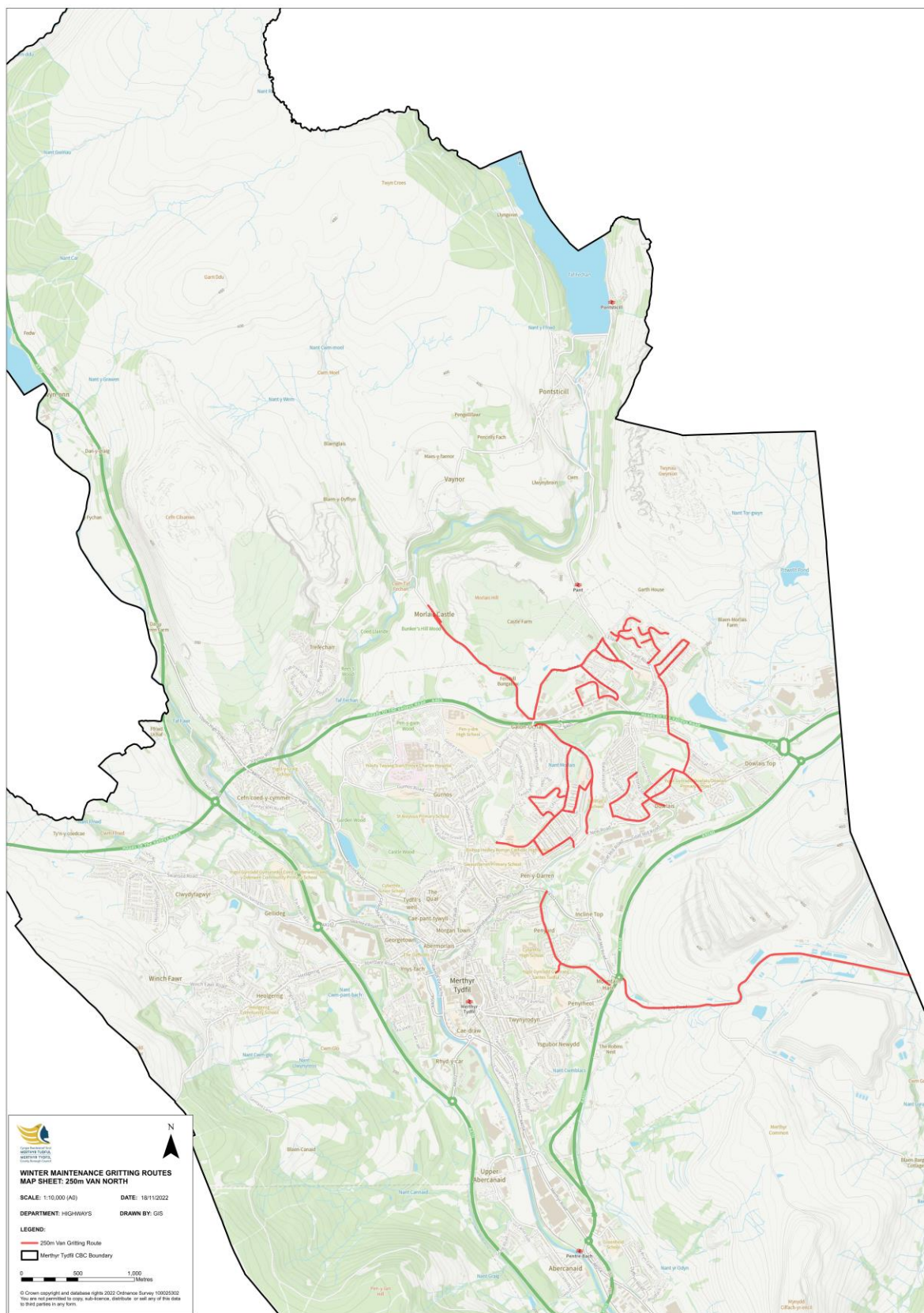
Revised winter service guidance, contained within Appendix H of well-maintained Highways was issued in September 2013. This guidance was considerably more detailed and onerous to implement than the previous update in 2011.

Following comments and concerns by many Winter Service providers nationally a review of this document was proposed and, together with other Welsh Authorities, the proposals were not fully adopted, until the completion of the review.

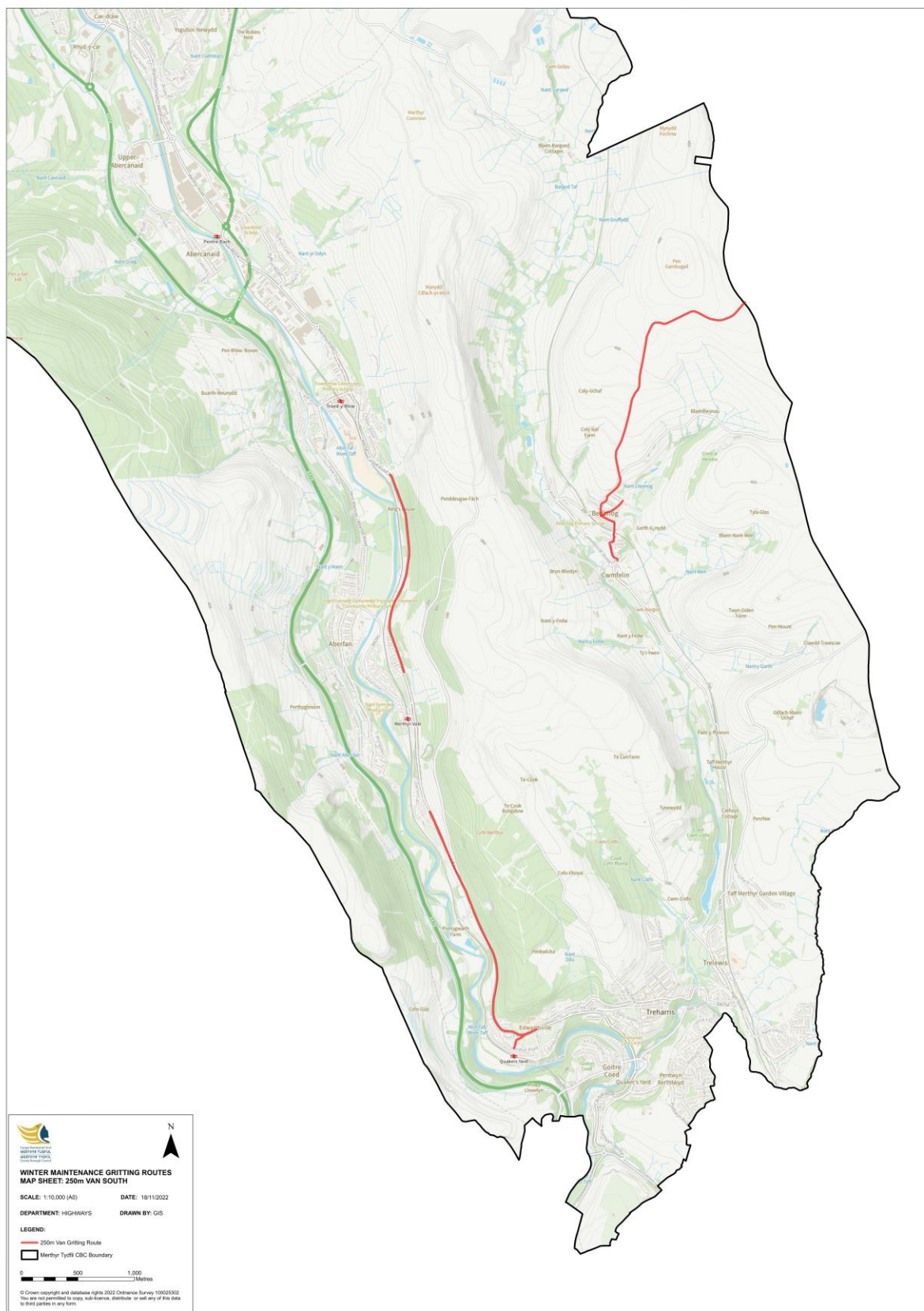
This guidance has now been revised as part of the update to the Code of Practice of Well Maintained Highways. Welsh Highway Authorities have engaged in this appraisal and provided feedback to the document through the Welsh County Surveyors Society. The new document was issued in September 2016 and the latest guidance will be considered in collaboration with Welsh counterparts via CSS Wales as part of the Authorities updating of future Winter Maintenance Plans.



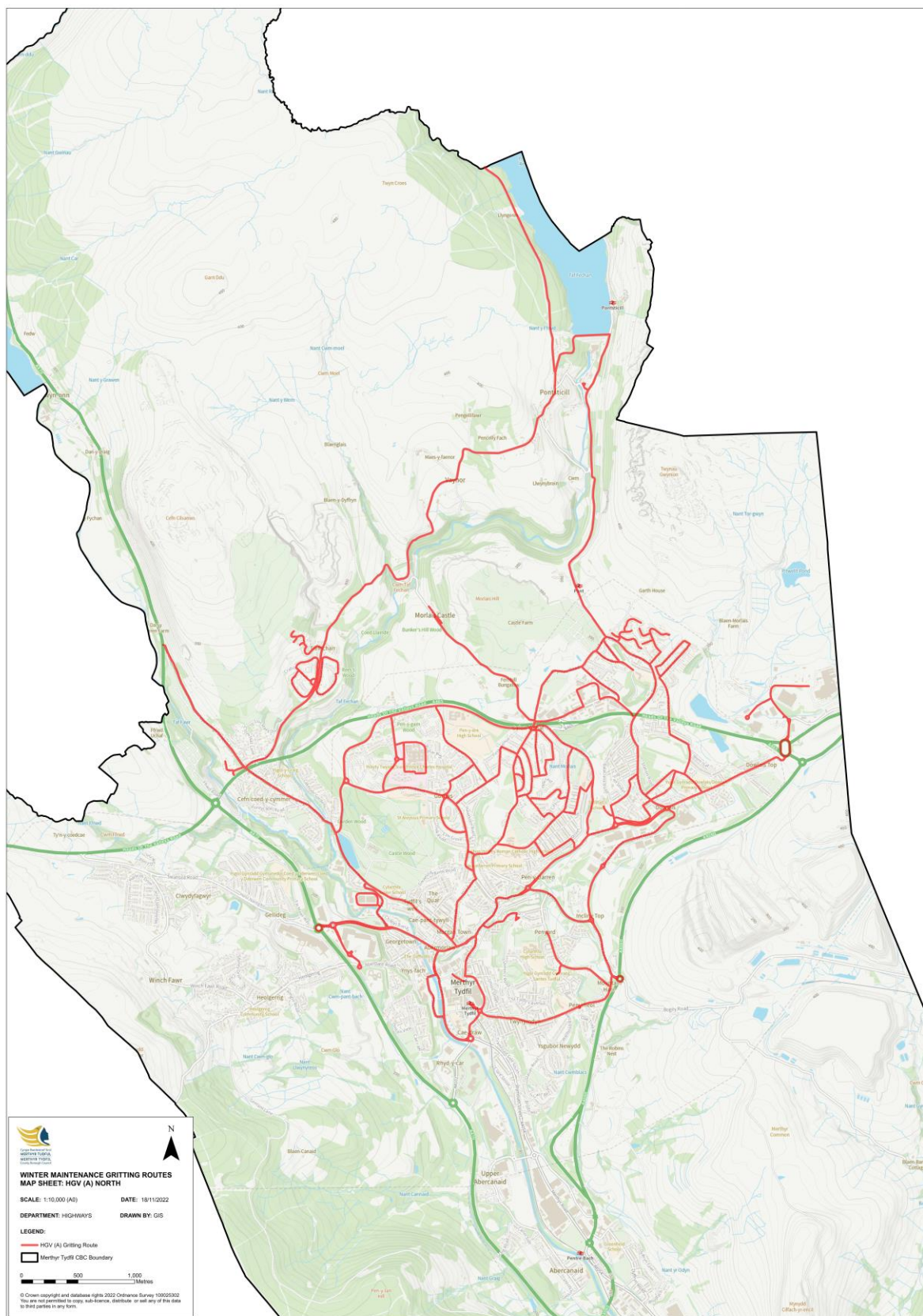
Appendix 2 - +250m Elevation Van North Gritting Route



Appendix 3 - +250m Elevation Van South Gritting Route



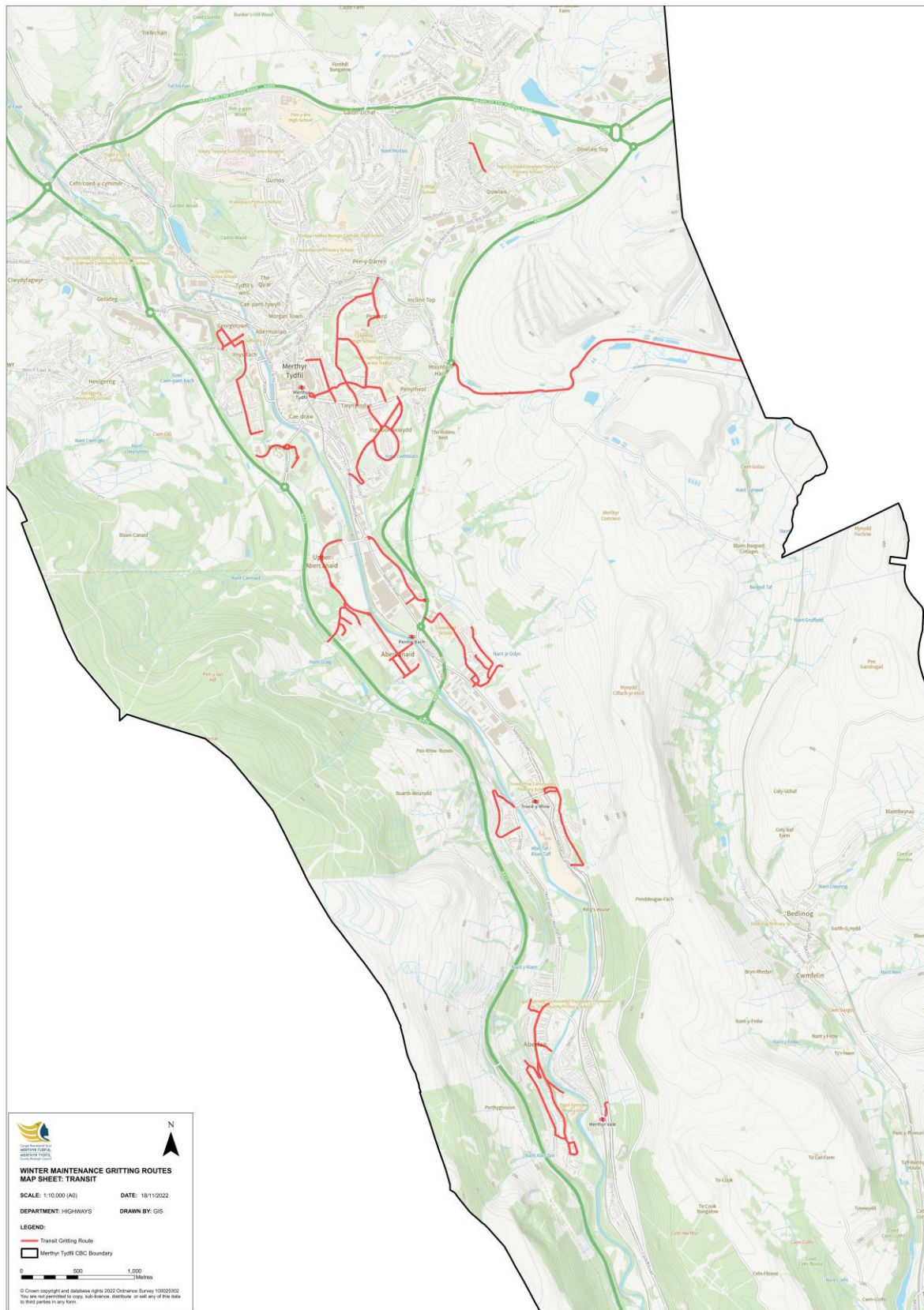
Appendix 4 - HGV (A) North Gritting Route



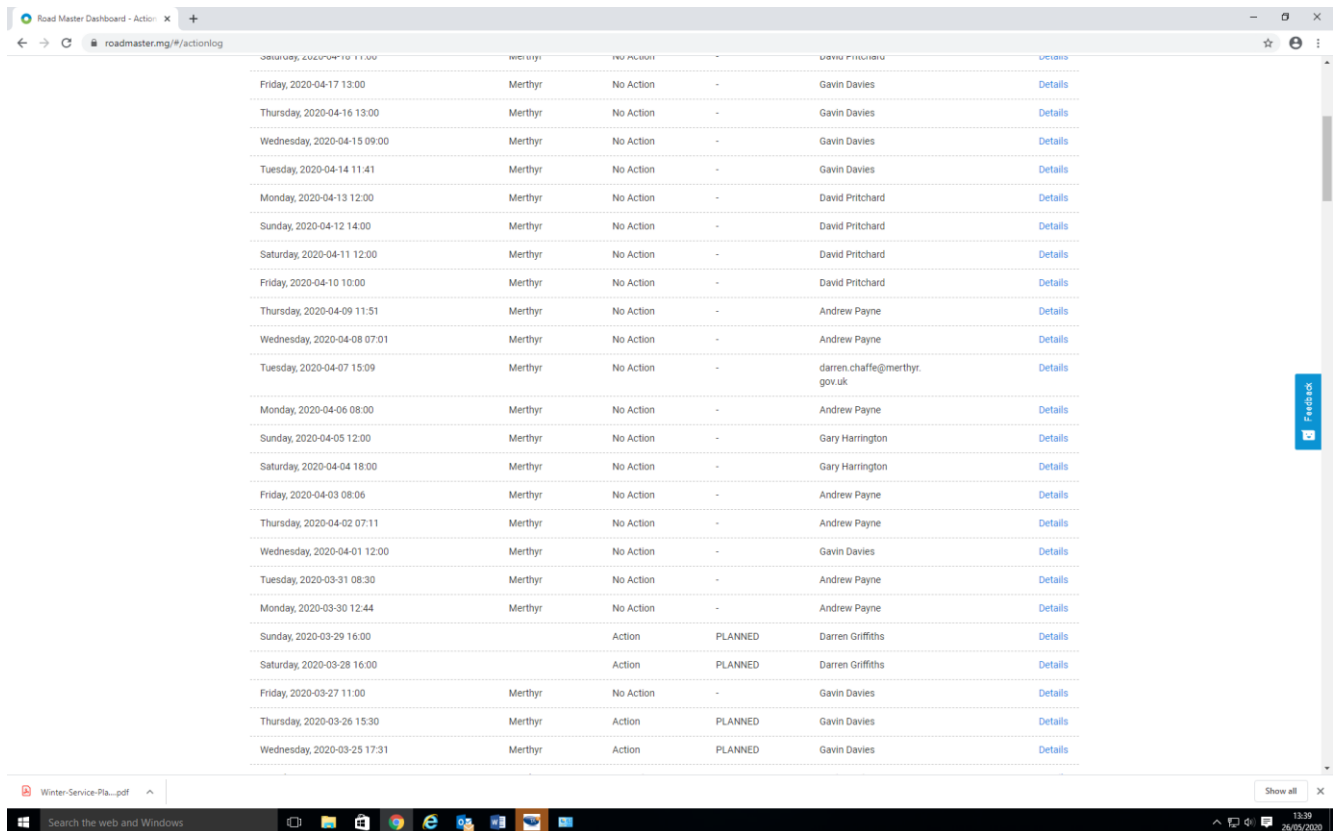
Appendix 5 - HGV (B) South Gritting Route



Appendix 6 - Transit Gritting Route

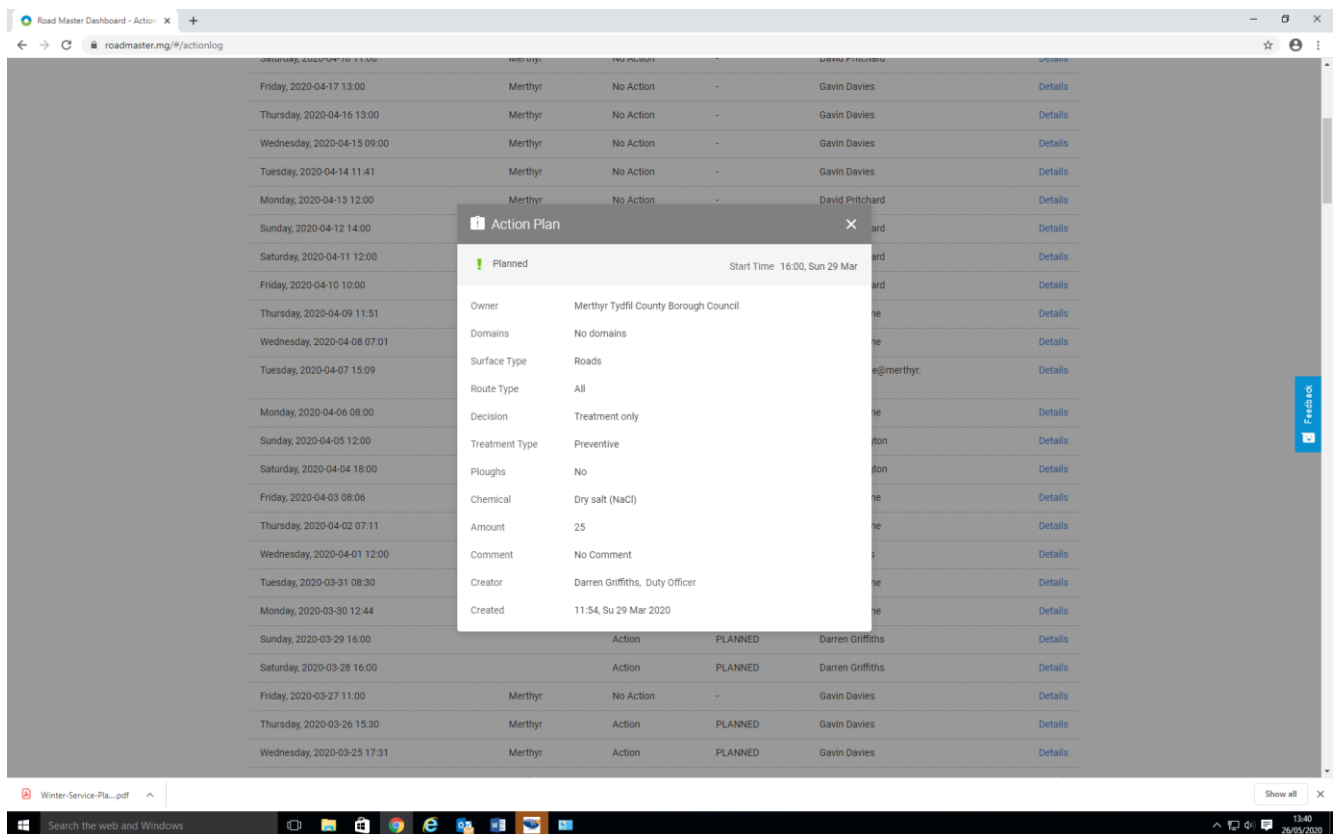


Appendix 4



The screenshot shows a web browser window with the URL `roadmaster.mg/#/actionlog`. The page displays a table of actions. The table has columns for Date, Location, Action, Status, and User. The data is sorted by date in descending order. The table is partially obscured by a 'Winter-Service-Plan.pdf' download notification at the bottom.

Date	Location	Action	Status	User
Friday, 2020-04-17 13:00	Merthyr	No Action	-	Gavin Davies
Thursday, 2020-04-16 13:00	Merthyr	No Action	-	Gavin Davies
Wednesday, 2020-04-15 09:00	Merthyr	No Action	-	Gavin Davies
Tuesday, 2020-04-14 11:41	Merthyr	No Action	-	Gavin Davies
Monday, 2020-04-13 12:00	Merthyr	No Action	-	David Pritchard
Sunday, 2020-04-12 14:00	Merthyr	No Action	-	David Pritchard
Saturday, 2020-04-11 12:00	Merthyr	No Action	-	David Pritchard
Friday, 2020-04-10 10:00	Merthyr	No Action	-	David Pritchard
Thursday, 2020-04-09 11:51	Merthyr	No Action	-	Andrew Payne
Wednesday, 2020-04-08 07:01	Merthyr	No Action	-	Andrew Payne
Tuesday, 2020-04-07 15:09	Merthyr	No Action	-	darren.chaffee@merthyr.gov.uk
Monday, 2020-04-06 08:00	Merthyr	No Action	-	Andrew Payne
Sunday, 2020-04-05 12:00	Merthyr	No Action	-	Gary Harrington
Saturday, 2020-04-04 18:00	Merthyr	No Action	-	Gary Harrington
Friday, 2020-04-03 08:06	Merthyr	No Action	-	Andrew Payne
Thursday, 2020-04-02 07:11	Merthyr	No Action	-	Andrew Payne
Wednesday, 2020-04-01 12:00	Merthyr	No Action	-	Gavin Davies
Tuesday, 2020-03-31 08:30	Merthyr	No Action	-	Andrew Payne
Monday, 2020-03-30 12:44	Merthyr	No Action	-	Andrew Payne
Sunday, 2020-03-29 16:00		Action	PLANNED	Darren Griffiths
Saturday, 2020-03-28 16:00		Action	PLANNED	Darren Griffiths
Friday, 2020-03-27 11:00	Merthyr	No Action	-	Gavin Davies
Thursday, 2020-03-26 15:30	Merthyr	Action	PLANNED	Gavin Davies
Wednesday, 2020-03-25 17:31	Merthyr	Action	PLANNED	Gavin Davies



The screenshot shows the same 'Road Master Dashboard' as above, but with an 'Action Plan' modal window open. The modal displays details for a planned action on Sunday, 29 March 2020 at 16:00. The background table is dimmed.

Planned	
Start Time: 16:00, Sun 29 Mar	
Owner	Merthyr Tydfil County Borough Council
Domains	No domains
Surface Type	Roads
Route Type	All
Decision	Treatment only
Treatment Type	Preventive
Ploughs	No
Chemical	Dry salt (NaCl)
Amount	25
Comment	No Comment
Creator	Darren Griffiths, Duty Officer
Created	11:54, Su 29 Mar 2020

Appendix 5

2	4x4 16 tonne Gritter Lorry - Oct to March
1	4x4 16 tonne Gritter Lorry – Jan to March
1	2x4 2.5 tonne Gritter Van
2	Tractor with Ploughs and Bunce
1	Quad