

# **Knowsley Metropolitan Borough Council**



## **Highway Winter Service Policy**

## Document Information

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## Document History

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## 1. Introduction

The purpose of this policy is to set out how Knowsley Council will meet its obligations and duties in respect of the winter service which is delivered through our Streetscene Service. It identifies which categories of road will be treated, in what order and how quickly.

This policy reflects the recommendations of Well-Managed Highway Infrastructure Code of Practice – October 2016. The purpose of the winter service is to provide assistance to road users by treating the highway network to mitigate the effects of snow and ice and to maintain traffic movements.

Knowsley Council recognise that the service is essential for public safety and to the national and local economy in maintaining movement of vehicular traffic and pedestrians. Owing to limited resources and available finance it is essential that provision of winter service reflects the importance of routes. It will not be reasonably practicable to provide the service on all parts of the network or to ensure all surfaces are kept free of ice or snow at all times, even on the treated parts of the network.

## 2. Legislation

There is a statutory requirement for Highway Authorities to maintain the highway network, as set out in Section 41(1A) of the Highways Act 1980. This section was subject to amendment under Section 111 of The Railway and Transport Safety Act 2003. The first part of Section 41 reads:

***a) The authority who are for the time being the Highway Authority for a highway maintainable at the public expense are under a duty, subject to subsections (2) and (3) below, to maintain the highway.***

***b) (1) In particular, a highway authority are under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.***

This is not an absolute duty, given the qualification of “reasonable practicability”. Section 150 of the Highways Act 1980 still imposes a duty upon authorities to remove any obstruction of the highway resulting from “*accumulation of snow or from the falling down of banks on the side of the highway, or from any other cause*”.

It is therefore acknowledged that it would not be practical for a Highway Authority to treat all roads and footways in the event that ice forms or snow falls.

## 3. Objectives

The Policy covers the public highway and the role of the Council as Highway Authority. Roads and footpaths within, for example, the curtilage of schools, community and leisure facilities and public transport facilities should be covered by their relevant resilience plans.



Given the limited nature of the financial and other resources involved in delivering the winter service, it is neither reasonable nor possible to treat the entire public highway asset.

The Policy defines the extent of the winter service that Knowsley Council will provide. The Policy is based on the recommendations contained within the latest Code of Practice – Well Managed Highways which in relation to gritting and snow clearance is the touchstone for every Highway Authority in the country. In addition to the operational benefits, the adoption of the national guidelines contained within the Code of Practice enables the Council to defend itself against litigation.

The aim of the Policy is to provide a winter service which, so far as is reasonably practicable, will permit the safe movement of vehicular and pedestrian traffic on the more important parts of the highway network and minimise delays and accidents accountable to the adverse weather. Good practice is also important to minimise both the environmental impact of salt and affordability implications.

The overall Winter Service period is 1<sup>st</sup> October to 30<sup>th</sup> April - the core Winter Service period is 1<sup>st</sup> November to 31<sup>st</sup> March with extended provision to suit seasonal variations in weather.

#### 4. Decision Making and Control Procedures

Decisions on when to grit are made by the nominated duty managers in accordance with our Operational Plan. These officers form a duty rota to cover the whole of the winter period. All duty managers are required to have received basic weather forecast training prior to commencement of the role and is renewed on an annual basis.

Decisions made throughout the winter period are recorded using the Vaisala DSS monitoring and recording system.

The type of treatment and the extent of the networks to be gritted will be in accordance with the “Treatment Matrix Guide”, as detailed in the national Code of Practice. The decision matrix for precautionary treatments based on road surface conditions and predicted weather conditions is given in the table below;







Table H4 – Precautionary Treatment Decision Matrix				
Road Surface Temperature	Precipitation	Predicted Road Conditions		
		Wet/Damp	Wet Patches	Dry
May fall below 1°C	<u>No</u> rain <u>No</u> hoar frost <u>No</u> fog	Salt before Frost	Salt before frost (see note a)	No action likely, monitor weather (see note a)
Expected to fall below 1°C	<u>Expected</u> hoar frost <u>Expected</u> fog			
	<u>Expected</u> rain <u>BEFORE</u> freezing	Salt after rain stops (see note c)		
	<u>Expected</u> rain <u>DURING</u> freezing	Salt before frost, as required during rain and after rain stops (see note d)		
	<u>Possible</u> rain <u>Possible</u> hoar frost <u>Possible</u> fog	Salt before frost		Monitor weather conditions
	Expected snow (See Section H10)		Salt before snow fall	
<p>The decision to undertake precautionary treatments should be, if appropriate, adjusted to take account of residual salt or surface moisture.</p> <p>All decisions should be evidence based, recorded and require continuous monitoring and review.</p>				

NOTES FOR TABLE H4: (a) Particular attention should be given to the possibility of water running across carriageways and other running surfaces e.g. 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 on other occasions.

(b) When a weather warning contains reference to expected hoar frost, considerable deposits of frost are likely to 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. Close monitoring is required under this forecast condition which should ideally be treated just as the hoarfrost is forming. Such action is usually not practicable and salt may have to be deposited on a dry road prior to and as close as possible to the expected time of the condition. Hoarfrost may be forecast at other times in which case the timing of salting operations should be adjusted accordingly.

(c) If, under these conditions, rain has not ceased by early morning, crews should be called out and action initiated as rain ceases.

(d) Under these circumstances rain will freeze on contact with running surfaces and full pre-treatment should be provided even on dry roads. This is a most serious condition and should be monitored closely and continuously throughout the danger period.

(e) Weather warnings are often qualified by altitudes in which case differing action may be required from each depot.



## REACTIVE TREATMENT

Where conditions of snow and or ice are forecast to persist for 24 hours or longer, and where there are resources available, the council will consider requests in the context of competing priorities. This element of the service is co-ordinated by the nominated duty manager and takes into account programmed gritting operations. A record of all actions taken will be recorded on the service's customer management system.

### 5. Weather Forecasting and Monitoring

Weather information will be obtained from specialist forecasters, roadside monitoring stations and in unpredictable circumstances they may be supplemented by patrol inspections.

The Council maintains a contract with an appropriate forecasting organisation that provides daily weather forecasts that are detailed for Knowsley and updated frequently. In addition, forecasters are available at any time of the day or night to discuss the forecast changes in conditions. Additional real-time data is provided by a number of roadside sensors stations around the borough that report on air temperature, ground temperature, humidity and other related measures. These sources of information will inform all treatment decisions that are made by the duty winter manager.

A 2-5 day forecast is provided on a daily basis giving an indication of the likely conditions for the next 5 days. There is a 24 hour help line direct to the forecast room at MetDesk.

Arrangements have been made to allow access to weather information from weather stations in Liverpool, St Helens, Sefton, Wirral and Lancashire to assist in making decisions with respect to winter maintenance operations.

Forecasts are accessed by a website hosted by Vaisala which are available using a computer in the office, a home computer, tablet, laptop and smartphone device.

### 6. Winter Service Provision

#### Precautionary Treatment

This is the application of de-icers to road surfaces before the onset of freezing conditions (i.e. frost, snow or freezing rain). The purpose of precautionary treatments is to prevent the formation of ice, or to weaken or prevent the bond of freezing rain or snow to road surfaces. It is usually impractical to spread sufficient salt to melt freezing rain or more than a few millimetres of snow. Therefore, in advance of forecast snow or freezing rain, salt is spread to provide a de-bonding layer so that:

- snow is more readily removed by ploughing
- compacted snow and ice are more easily dispersed by traffic

It is very difficult to remove a layer of compacted snow or ice that is bonded to the road surface, so precautionary treatments are essential before heavy snowfall.



The priority is always to grit in accordance with the public highway hierarchy set out in the Code of Practice. Resources do not permit all roads to be treated and therefore a priority network has been established for precautionary gritting.

There are five routes which are reviewed annually taking into account any service requests received or network difficulties encountered in delivering the service during the previous winter season.

In 2018 the gritting routes were optimised to ensure effective and value for money operations.

The Primary Carriageway Network is pre-defined and priority is given to the list of roads in the order in which they appear. The PCN is included at Appendix 1 (attached).

In addition the Primary Footway Network which relates to the 3 main town centre areas of Kirkby, Huyton and Prescot is treated at the same time.

Where necessary and subject to circumstance, consideration will also be given to treating the Secondary Carriageway Network and the Secondary Footway Network (Appendix 2).

Treatment is usually carried out during the evening so as to avoid late afternoon traffic and to limit disruption to operations the next working day due to statutory limits on driver's working hours. There will be some occasions when prevailing weather conditions make late-call or night time treatment unavoidable. All routes are treated at agreed spread rates and using local conditions.

The target response time for the primary network from the point at which gritting is called to the point at which the gritting vehicles leave the depot is 1 hour. The target completion time for each route is 3 hours from the point at which the gritter leaves the depot to point at which treatment is complete.

The majority of winter service treatments (and salt spread) are precautionary. In these circumstances, where the decision is often marginal, significant salt savings can be achieved using the rates given in the Table H5 of Appendix H. This assumes that the salt has been stored in good conditions and that the equipment being used is efficient and properly calibrated. Knowsley has determined that its spreading capability is reasonable as the salt stock is held under cover in a purpose built salt barn.





Table H5 - Spread Rates For Reasonable Spreading Capability (De-icer Spread Rates in g/m <sup>2</sup> )			
Frost or forecast frost Road Surface Temperature (RST) and Road Surface Wetness	Dry salting	Pre-wetted salting (see Note 1)	Treated salting (see Note 2)
RST at or above -2°C and dry or damp road conditions	8	8 (de-icer) 6 (salt)	7
RST at or above -2°C and wet road conditions	8	8 (de-icer) 6 (salt)	7
RST below -2°C and above -5°C and dry or damp road conditions	12	12 (de-icer) 9 (salt)	9
RST below -2°C and above -5°C and wet road conditions	20	21 (de-icer) 16 (salt)	16
RST at or below -5°C and above -10°C and dry or damp road conditions	20	21 (de-icer) 16 (salt)	16
RST at or below -5°C and above -10°C and wet road conditions	2 x 20	2 x 21 (de-icer) 2 x 16 (salt)	32 or 2 x 16
Note 1: Spread rates for pre-wetted salting are the combined weight of dry salt and brine combined in proportion 70:30 by weight with brine of concentration 20 to 23%. Note 2: Weight of salt and additive (approx 3% by weight).			

The following points must also be considered when using the spread rate table;

The rates may be adjusted to take account of variations occurring along routes such as temperature, surface moisture, road alignment and traffic density. The rates may also be adjusted to take account of residual salt levels. All decisions will be evidenced based, recorded and require appropriate monitoring and review.

During periods of sustained freezing and provided that surfaces are well drained and there is neither seepage nor ice present, rates of spread for treatments carried out within six hours of previous treatments may be 50% of the rates stated in the appropriate table.

### Precautionary Treatments before Ice and Snow

To prepare for and facilitate ice and snow treatments the Code of Practice states that the following should be considered:

- When snow is forecast, any ploughs and tractor loading shovels should be prepared and positioned in order that snow clearance can start without any delays and when required.
- To facilitate the breakup and dispersal of ice and snow by trafficking, treatments must be made before snowfall or freezing rain so that sufficient de-icer is present on the surface to provide a de-bonding layer.

- Although it will increase salt usage, before snowfall and where practicable, consideration should be given to spreading salt on as much of the network as possible, (i.e. the secondary network). This will provide a de-bonding layer and facilitate the break up and dispersal of snow by traffic in areas where subsequent treatments may not take place for some considerable time or at all.

Table H7 - Precautionary Treatments Before Snow Or Freezing Rain		
Weather conditions	Light or medium traffic (Category 3)	Heavy traffic (Categories 1 and 2)
Light snow forecast	Spread: <ul style="list-style-type: none"> <li>• 40g/m<sup>2</sup> of dry salt, or</li> <li>• 40g/m<sup>2</sup> of pre-wetted salt, or</li> <li>• 30g/m<sup>2</sup> of treated salt</li> </ul>	Spread: <ul style="list-style-type: none"> <li>• 20g/m<sup>2</sup> of dry salt, or</li> <li>• 20g/m<sup>2</sup> of pre-wetted salt, or</li> <li>• 15g/m<sup>2</sup> of treated salt</li> </ul>
Moderate/Heavy snow forecast	Spread: <ul style="list-style-type: none"> <li>• 20-40g/m<sup>2</sup> of dry salt</li> <li>• 20-40 g/m<sup>2</sup> of pre-wetted salt</li> <li>• 15-30 g/m<sup>2</sup> of treated salt (see Note 1)</li> </ul>	Spread: <ul style="list-style-type: none"> <li>• 40g/m<sup>2</sup> of dry salt, or</li> <li>• 40g/m<sup>2</sup> of pre-wetted salt, or</li> <li>• 30g/m<sup>2</sup> of treated salt</li> </ul>
Freezing rain forecast	<ul style="list-style-type: none"> <li>• 40 or 2x20g/m<sup>2</sup> of dry salt, or</li> <li>• 40 or 2x20g/m<sup>2</sup> of pre-wetted salt, or</li> <li>• 30 or 2x15g/m<sup>2</sup> of treated salt</li> </ul>	
Note 1: The lower rates (e.g. 20g/m <sup>2</sup> for dry salt) can be used if the snow is likely to settle quickly, e.g. when the road surface temperature is below zero, the road surface is not wet and the snow is not wet, and/or there is little traffic after snowfall begins and settles.		

### Post Treatment: Treatments for Snow and Ice

Post treatments involve the ploughing of snow, the application of de-icers and the application of abrasives to ice and snow present on the road surface, or some combination of these. It should be noted that many roads in Knowsley are traffic-calmed, and it is not possible to plough a traffic-calmed road.

The Code of Practice states that it is impractical to spread sufficient salt to melt anything other than very thin layers of snow and ice, and that “ploughing is the only economical, efficient, effective and environmentally acceptable way to deal with all but very light snow”.

Ploughing down to the road surface is preferred. However, snow ploughs should be set to avoid risk of damage to the plough, the road surface, street furniture and level crossings. Ploughing to the road surface minimises salt usage and makes salt treatments more effective. Where possible, drainage should not be obstructed when ploughing. Where resources allow, piles of snow should be removed or be positioned to allow melt water to reach the drains. If necessary, piles of snow should be removed so that melted snow does not overload drainage systems or run back onto the road.

In the event of continual snowfall resulting in accumulations of snow on the ground in excess of 30mm in depth, ploughing operations will be undertaken on those roads detailed in the route



set out at Appendix 3. Where resource allows, snow ploughing operations will then move to the secondary ploughing route (Appendix 4).

## 7. Salt Stocks

Salt is the prime material used for dealing with ice and snow. It is recognised that salt is environmentally damaging and Knowsley have moved to a 'Safecote' treated 6mm product to gain the most economic and environmentally satisfactory solution.

Safecote is a derivative of the sugar production process containing 3% molasses which is mixed into the rock salt. The benefits of this product include:

- Safecote treated salt continues to absorb moisture over a seven day period, ensuring the chlorine remains in the solution and therefore active on the road surface for longer periods than normal rock salt;
- Safecote is a powerful de-icer and is effective at temperatures as low as -10oC whereas dry rock salt will not work below - 6oC;
- The additive binds the finer rock salt particles together, which helps reduce wind borne loss and also cuts down bounce and scatter making the spread more efficient. This enables a reduction in spread rates as there is a confidence that the treated salt is adhering to the surface where it is needed and is not being wasted on verges, therefore, less salt is required - this is particularly important on higher spread rates as due to the improved distribution it can potentially mean that vehicles do not need to return to the depot to be reloaded;
- Safecote reduces the corrosive effects of chloride by up to 80% preventing the corrosion of the gritting vehicles; and
- Safecote improves the distribution of salt on the highway by 35 - 40% when compared to rock salt. The molasses that coats the rock salt particles makes it flow evenly through the vehicle hopper, with little or no clogging to spinners and chutes.

Salt is stored at the Council's Stretton Way Depot in a purpose built salt barn. Knowsley Council holds up to 1,500 tonnes at any one time (a quantity that exceeds the recommended pre-season resilience standard by a considerable margin and provides a strategic reserve for the Council). Salt levels are monitored routinely throughout the winter period and stock levels are maintained at a minimum level of 1,000 tonnes – equivalent to 6 days resilience.

During the severest weather conditions, salt may be rationed via the Salt Cell. This is a body comprised of the Cabinet Office Civil Contingencies Secretariat, Department for Transport, Department for Communities and Local Government, Highways Agency, Welsh Government, Transport Scotland and the Local Government Association. The Salt Cell aims to ensure that salt is allocated according to the greatest need.

In times of Salt Cell operation or other shortages, the availability of salt will be limited. In such conditions, the Council will limit its gritting activity to what is termed "Minimum Winter Network", which in effect restricts gritting activity to those carriageways that are considered to be of strategic importance. The Minimum Winter Network for Knowsley is confined to those carriage ways listed on the Primary Ploughing Network (which is in effect the strategic route network). The Minimum Winter Network is set out at Appendix 5.



Knowsley Council does not have a legal responsibility to provide salt bins on the highway network.

## 8. Performance Monitoring

It is important the Winter Maintenance Policy and the Operational Plan are reviewed annually each spring to identify any lessons learned and areas for improvement during the previous winter season.

During each salting or snow clearance event, the duty officer will keep an accurate record of the operational activities and all decisions taken as to whether or not to salt. The gritting vehicle drivers will also keep a record of their route and any issues that may have prevented treatment or snow clearance.

All vehicles are equipped with a telematics system to monitor location and adherence to gritting routes. Records of salting / snow clearance will be retained in the Vaisala management system.

## 9. Communications

There are strong communication links in place between the Winter Maintenance Duty Manager and other council services to ensure that there is clear coordinated decision making.

Knowsley Council provides regular updates on winter gritting operations via the council website, Twitter and press releases as necessary.

Any disruptions to council services will be included on the website. The website also includes a copy of this policy document and the details of the routes that will be treated.

In prolonged severe weather conditions additional information is made available through all available media.

## 10. Resources

Knowsley Council is responsible for providing all aspects of the winter service including decision making, supervision and monitoring of winter maintenance activity, ownership and maintenance of the winter maintenance fleet.

The service is delivered over a four week rota system using six drivers per week (24 drivers in total) supported each week by one fleet maintenance technician and one operative responsible for loading rock salt into gritting vehicles using a telescopic handler.

A fleet of five 18 tonne gross vehicle mass, specialist gritting vehicles cover the primary gritting routes. A specialist 'insert' gritter is also deployed to treat weight restricted bridges, car parks and smaller locations.

All of the fleet vehicles are calibrated pre-season to BS 1622 1989 Class A1 (specification for spreaders for winter maintenance) and are maintained and serviced by the councils in-house fleet management service.





## Appendix 1 Primary Carriageway Network

<b>PRIMARY CARRIAGEWAY NETWORK - ROUTE A</b>
AINTREE LANE
BANK LANE - A506
BEWLEY DRIVE
BIGDALE DRIVE
BOYES BROW
BRACKNELL AVENUE
BRITONSIDE AVENUE
BROAD LANE
BROOK HEY DRIVE
CAWTHORNE AVENUE
CHERRYFIELD DRIVE
COPPLEHOUSE LANE
COUNTY ROAD - A506
FIELD LANE
GILSECROFT AVENUE
GLOVERS BROW
HALL LANE - A506 (Kirkby Town Centre)
HALL LANE (Tower Hill)
HEADBOLT LANE
HESKIN ROAD
IRLAM DRIVE
JAMES HOLT AVENUE
KIRKBY ROW
LONGMOOR LANE – A506 (Valley Road to Borough Boundary)
MELROSE ROAD (Bank Lane to Jedburgh Drive)
MERCER AVENUE
MILL LANE
MINSTEAD AVENUE
MOORFIELD
NORWICH WAY
OLD ROUGH LANE
PARK BROW DRIVE
PINGWOOD LANE
QUARRYSIDE DRIVE
RAVENHEAD AVENUE
RIBBLERS LANE (Moorgate Road to Heskin Road)
RICHARD HESKETH DRIVE
ROCKFORD AVENUE (Ravenhead Avenue to Cawthorne Avenue)
ROUGHWOOD DRIVE





SAXON WAY
SHEVINGTONS LANE
SHIRDLEY AVENUE
SIMONSWOOD LANE
ST CHADS DRIVE
STOPGATE LANE (Pingwood Lane to Borough Boundary)
TELEGRAPH WAY (Hall Lane to Irlam Drive)
VALLEY ROAD - A506
WEBSTER DRIVE
WELLFIELD AVENUE
WESTHEAD AVENUE
WHITEFIELD DRIVE

<b>PRIMARY CARRIAGEWAY NETWORK - ROUTE B</b>
ABERCROMBIE ROAD
ACORNFIELD ROAD
ADMIN ROAD
AINSWORTH LANE
ARBOUR LANE
ASHCROFT ROAD
BIRCHILL ROAD
BRADMAN ROAD
CADDICK ROAD
CHARLEYWOOD ROAD
COOPERS LANE - A5208
DALE LANE
DEPOT ROAD
DRAW WELL ROAD
EAST LANCASHIRE ROAD - A580
FARADAY ROAD
FREDERICK LUNT AVENUE
GALE ROAD
GELLINGS ROAD
GORES ROAD
HAMMOND ROAD
HASWELL DRIVE
HEATH ROAD
HILLSIDE ROAD
HORNHOUSE LANE
KIRKBY ADMIN BUS TERMINUS
KIRKBY BANK ROAD
KITLING ROAD



KNOWSLEY LANE
KNOWSLEYWOOD LANE - A580
LEACH CROFT
LEES ROAD
MARL ROAD
MOORGATE ROAD - A5207
MOORGATE ROAD SOUTH - A580
MOSS END WAY
MOSS LANE (Arbour Lane to Lees Road)
NEWTET ROAD
NORTH PERIMETER ROAD
NUNTHORPE ROAD
ORMSKIRK ROAD
OVERBROOK LANE
OWEN ROAD
PENRHYN ROAD
PERIMETER ROAD
PRIMROSE DRIVE
RANGLES ROAD
SCHOOL LANE
SCHOOL LANE / RIBBLERS LANE (Access Road to Hotels)
SETH POWELL WAY - A526
SOUTH BOUNDARY ROAD - A5208
STOCKBRIDGE LANE (Knowsley Lane to Seth Powell Way)
STOCKPIT ROAD
SUGAR LANE
TITHEBARN ROAD
VILLIERS ROAD
WATERPARK DRIVE
WEBBER ROAD
WOODWARD ROAD
WOOLFALL HEATH AVENUE
YARDLEY ROAD

<b>PRIMARY CARRIAGEWAY NETWORK - ROUTE C</b>
ALDER ROAD
CABLES WAY
CARR LANE
CRONTON ROAD (Wilson Road to Tarbock Island)
DERBY STREET - A57
HIGH STREET - A57
HOLT LANE



KNOWSLEY EXPRESSWAY - A5300
KNOWSLEY PARK LANE
LIVERPOOL ROAD - A57
MOTORWAY - M62 (Boundary to Boundary)
NEWSTEAD ROAD
OLD LANE (Portico Lane to Alder Road)
OLIVER LYME ROAD
PRESCOT BY-PASS - A58
PRINCESS DRIVE
SCOTCHBARN LANE
SPEKE ROAD (East Bound Slip Road / West Bound Slip Road)
ST HELENS ROAD - A58
ST JAMES ROAD (Warrington Road to Borough Boundary)
STOCKBRIDGE LANE (Seth Powell Way to Liverpool Road)
TARBOCK ISLAND INTERCHANGE
TERMINUS ROAD
TWO BUTT LANE
WARRINGTON ROAD - A57

<b>PRIMARY CARRIAGEWAY NETWORK - ROUTE D</b>
ACKERS STREET
ADSWOOD ROAD (Bluebell Lane to Bakers Green Road)
ARCHWAY ROAD
ASH GROVE
ASPINALL STREET
ATHERTON STREET
ATTLEE ROAD
BAKERS GREEN ROAD
BEECHWOOD GROVE
BLUEBELL LANE
BRICKFIELDS
BRIDGE ROAD (Prescot)
CEDAR ROAD (Cross Lane to Lunt Avenue)
CHARNWOOD ROAD
CHILDWALL LANE
CHURCH ROAD (Bridge Road to Western Avenue)
CHURCH STREET
CIVIC WAY (Including Access Road to Filling Station and all Adjacent Car Parking )
CORONATION DRIVE
COURT HEY AVENUE
CROSS LANE
CUMBER LANE



CYPRUS STREET
DELPH LANE
DERBY ROAD
DINAS LANE
DRAGON DRIVE
DRAGON LANE
ECCLESTON STREET (Atherton Street to Warrington Road)
ELIZABETH ROAD
ELLIS ASHTON STREET
FAZAKERLEY ROAD
FLORIDA WAY
GLADE ROAD
GREENES ROAD (Windy Arbor Road to Pottery Lane)
HALL LANE (Huyton Quarry)
HALL LANE (Prescot)
HARDIE ROAD
HOUGHTON STREET
HUGHES AVENUE
HURST PARK DRIVE
HUYTON BUS TERMINUS (Derby Road)
HUYTON HEY ROAD
HUYTON LANE
KEMBLE STREET
KINGSWAY (Huyton - Liverpool Road to Rupert Road)
KINGSWAY (Prescot)
LANSBURY ROAD
LATHOM ROAD
LATHUM CLOSE (Kingsway to "T" junction)
LINK ROAD
LOGWOOD ROAD (Elizabeth Road to Bus Terminus)
LONGVIEW DRIVE
LONGVIEW LANE
LUNT AVENUE
LYNDHURST WAY (Archway Road to KMBC Car Park)
MANCHESTER ROAD
MANOR FARM ROAD
MARKET PLACE
MEADOW DRIVE
MILTON AVENUE (Whiston)
PLUCKINGTON ROAD
POPLAR BANK
PORTICO LANE



POTTERY LANE
RUPERT ROAD
SALERNO DRIVE
SAUNDERS AVENUE
SEEL ROAD
SEWELL STREET
SHAW LANE
ST JOHNS ROAD
STANLEY ROAD
STELEY WAY
STONEY LANE (Cumber Lane to Borough Boundary)
STRETTON WAY
THE CRESCENT (Huyton)
THOMAS DRIVE
TWIG LANE
VICTORIA ROAD (Huyton Hey Road to Seel Road)
WEST STREET
WESTERN AVENUE
WHISTON LANE
WILLOW GROVE
WILSON ROAD (Huyton)
WINDSOR ROAD (Roby)
WOOD LANE (Huyton Quarry)
WOOD LANE (Prescot - Manchester Road to Wood Green)
YORK ROAD

<b>PRIMARY CARRIAGEWAY NETWORK - ROUTE E</b>
ALDER LANE (Tarbock)
ARNCLIFFE ROAD
BAILEYS LANE
BARNCROFT ROAD
BLACKLOW BROW
BOWRING PARK AVENUE
BRIDGE ROAD (Roby)
CAMBERLEY DRIVE
CAMPBELL DRIVE
CARTBRIDGE LANE
CHAPEL LANE (Cronton Road to Borough Boundary)
CHURCH ROAD (Halewood)
CRAVENWOOD ROAD
CRONTON ROAD - A5080 (Tarbock Interchange to KMBC Boundary at Pex Hill)
CRONTON ROAD - A5080 (Wilson Road to Tarbock Road)





DACRES BRIDGE LANE
FALLOWS WAY
FINCH LANE
FOXS BANK LANE
GERRARDS LANE
GREENSBRIDGE LANE
HALEWOOD ROAD (Lydiate Lane to Borough Boundary)
HALL LANE (Smithy Lane to Cronton Road)
HIGHER ROAD - A562 (Including Slip Roads onto Speke Road)
HILLINGDEN AVENUE (Leathers Lane to Cravenwood Road)
HOLLIES ROAD
LEATHERS LANE
LICKERS LANE
LOWER ROAD
LYDIATE LANE
MACKETS LANE
MARINA CRESCENT
MILTON AVENUE (Roby)
NETHERLEY ROAD
NEW HUTTE LANE
OKELL DRIVE
OLD HUTTE LANE
PENNY LANE
PENNYWOOD DRIVE
PILCH LANE
PILCH LANE EAST
PRESCOT ROAD
ROBY ROAD - A5080
ROSEHEATH DRIVE (Barncroft Road to Leathers Lane)
SMITHY LANE
SPEKE BOULEVARD - A561 (Including all Slip Roads to Car Plant and Higher Road)
SPEKE ROAD - A561 (Including Slip Roads West of Knowsley Expressway Interchange)
STOCKSWELL ROAD
TARBOCK ROAD - A5080
THE AVENUE
THE ROOLEY
THINGWALL HALL DRIVE
THINGWALL LANE
TORRINGTON DRIVE
TUE LANE
TWICKENHAM DRIVE



WATER LANE
WHEATHILL ROAD (Tarbock Road to Borough Boundary)
WHITEFIELD LANE
WINDY ARBOR ROAD
WOOD ROAD

<b>PRIMARY CARRIAGEWAY NETWORK - ROUTE MINI GRITTER</b>
BUTTERMERE ROAD
COURT HEY DRIVE
COURT HEY ROAD
ECCLESTON STREET (Market Place to Atherton Street)
GRIFFITHS ROAD
HALL LANE (Cronton - Smithy Lane to M62 Flyover)
HALSNEAD AVENUE
LYNTON ROAD
NORTH VIEW
RIMMER AVENUE
ST NICHOLAS ROAD
WESTMORLAND ROAD

## Appendix 2 Secondary Carriageway Network

Secondary Carriageway Network Routes A- E	
Street	Feature / Location
ARCHWAY ROAD	Roby Road to Briar Drive
ARCHWAY ROAD	Briar Drive to Bluebell Lane
ARCHWAY ROAD	Derby Road to Poplar Bank
BAILEYS LANE	Church Road to passageway at side of House No. 98
BAILEYS LANE	House no. 98 to Higher Road
BANK LANE - A506	Railway Bridge to Shevingtons Lane
BANK LANE - A506	Shevingtons Lane to Knowsley boundary
BLUEBELL LANE	Liverpool Road to Huyton Lane
BRIDGE ROAD (Prescot)	Kingsway to Warrington Road
CABLES WAY	Carr Lane to Manchester Road
CARR LANE	Wood Lane to Cables Way
CHERRYFIELD DRIVE	Valley Road to Webster Drive
CHERRYFIELD DRIVE	Bus Terminus
CHERRYFIELD DRIVE	Webster Drive to Bewley Drive
CHURCH STREET (Prescot)	Market Place to High Street
COOPERS LANE - A5208	East Lancashire Road to Perimeter Road
COUNTY ROAD - A5208	Moorgate Road to Webster Drive, (Including Roundabout at Broad Lane); North West Bound Carriageway Only
COUNTY ROAD - A5208	Webster Drive to Moorgate Road; South East Bound Carriageway Only
COUNTY ROAD - A5208	Webster Drive to Hall Lane; North West Bound Carriageway Only
COUNTY ROAD - A5208	Old Rough Lane to Webster Drive; South East Bound Carriageway Only
COUNTY ROAD - A506	Hall Lane to Boyes Brow
CRAVENWOOD ROAD	Hillingdon Avenue to Roseheath Drive
CRONTON ROAD - A5080	Dacres Bridge Lane to Tarbock Interchange
CRONTON ROAD - A5080	Tarbock Roundabout to Manley Road
CRONTON ROAD - A5080	Widnes Boundary to House no. 539 (Bears Paw)
CRONTON ROAD - A5080	House no. 539 (Bears Paw) to Lodge Lane
CRONTON ROAD - A5080	Lodge Lane to Dacres Bridge Lane
DELPH LANE	Warrington Road to Portico Lane
DERBY ROAD	Poplar Bank to Bus Station



DERBY STREET - A57	Church Street to Liverpool Road
DRAGON DRIVE	Carrs Hotel to Milton Avenue
DRAGON LANE	Windy Arbour Road to Dragon Drive
DRAGON LANE	Dragon Drive to Warrington Road
EAST LANCASHIRE ROAD - A580	Eastbound from Liverpool Boundary to St Helens Boundary
EAST LANCASHIRE ROAD - A580	Westbound from Liverpool Boundary to St Helens Boundary
GREENSBRIDGE LANE	Bridge to Church Road Including Roundabout
GREENSBRIDGE LANE	Netherley Road to Bridge
HALEWOOD BUS TERMINUS	Cravenwood Road
HALL LANE - A506	Valley Road to County Road (Including Roundabout)
HIGH STREET - A57	Chapel Street to Church Street
HIGHER ROAD - A562	Finch Lane to Baileys Lane; West Bound Carriageway Only
HIGHER ROAD - A562	Baileys Lane to Finch Lane; East Bound Carriageway Only
HIGHER ROAD - A562	Baileys Lane to Mackets Lane
HIGHER ROAD - A562	Old section of Higher Road over Railway bridge from A561 Bridge (East Side) to Junction A562 (Opposite Finch Lane)
HILLINGDEN AVENUE	Cravenwood Road to Leathers Lane
HUYTON BUS TERMINUS	Derby Road to Huyton Hey Road
HUYTON HEY ROAD	Lathom Road to Hall Lane
HUYTON LANE	Longview Drive to Lathom Road
HUYTON LANE	Lathom Rd to Archway Road
HUYTON LANE	Bluebell Lane to Lathom Road
HUYTON LANE	Wood Lane to Whiston Lane
HUYTON LANE	Whiston Lane to Longview Drive
HUYTON LANE	Liverpool Road and Wood Lane
IRLAM DRIVE	County Road to St. Chad's Drive
KIRKBY ROW	Hall Lane to Glovers Brow
KIRKBY STATION INTERCHANGE	Whitefield Drive to Kirkby Station
KIRKBY RAILWAY STATION OVERFLOW CAR PARK	Whitefield Drive to End
KNOWSLEY EXPRESSWAY - A5300	Northbound A562 Roundabout to M57 (South of Tarbock Interchange)
KNOWSLEY EXPRESSWAY - A5300	Southbound M57 (South of Tarbock Interchange to A562 Roundabout)
KNOWSLEY EXPRESSWAY - A5300	Entry Slip - Tarbock Island to Main Carriageway



KNOWSLEY EXPRESSWAY - A5300	Exit Slip to Tarbock Island
KNOWSLEY LANE	Parkway to Primrose Drive
KNOWSLEY LANE	Primrose Drive to Liverpool Road
KNOWSLEY LANE	East Lancashire Road (A580) to Mill Lane
KNOWSLEY LANE	Mill Lane to Home Farm Road
KNOWSLEY LANE	Home Farm Road to Parkway
KNOWSLEYWOOD LANE - A580	Randles Roundabout to East Lancashire Road
KNOWSLEYWOOD LANE - A580	East Lancashire Road to Randles Roundabout
LEATHERS LANE	Baileys Lane to Higher Road
LICKERS LANE	Windy Arbor Road to Pennywood Drive
LIVERPOOL ROAD - A57	Brook Bridge Roundabout to Derby Street; Prescott Bound Carriageway Only
LIVERPOOL ROAD - A57	Derby Street to Brook Bridge Roundabout; Liverpool Bound Carriageway Only
LIVERPOOL ROAD - A57	Huyton Lane to Knowsley Lane, Including Both Roundabouts and Both Carriageways
LIVERPOOL ROAD - A57	Hillside Roundabout to Longview Lane; Liverpool Bound Carriageway Only
LIVERPOOL ROAD - A57	Longview Lane to Hillside Roundabout; Prescott Bound Carriageway Only
LIVERPOOL ROAD - A57	Longview Lane to Seth Powell Way; Liverpool Bound
LIVERPOOL ROAD - A57	Seth Powell Way to Longview Lane; Prescott Bound Carriageway Only
LIVERPOOL ROAD - A57	Seth Powell Way to Twig Lane; Liverpool Bound Carriageway Only
LIVERPOOL ROAD - A57	Twig Lane to Liverpool Boundary at East Prescott Road; Liverpool Bound Carriageway Only
LIVERPOOL ROAD - A57	Liverpool Boundary to Princess Drive; Prescott Bound Carriageway Only
LIVERPOOL ROAD - A57	Princess Drive to Seth Powell Way; Prescott Bound Carriageway Only
LONGMOOR LANE - A506	Copplehouse Lane to Liverpool boundary (Both Carriageways)
MARKET PLACE	Sewell Street to Eccleston Street
MOORGATE ROAD - A5207	East Lancashire Road to County Road; North Bound Carriageway Only
MOORGATE ROAD - A5207	County Road to East Lancashire Road; South Bound Carriageway Only



MOORGATE ROAD SOUTH - A580	Randles Farm Roundabout to East Lancashire Road, Both Carriageways
MOORGATE ROAD SOUTH - A580	Randles Roundabout to East Lancashire Road
MOTORWAY M62	Liverpool CC Boundary to St Helens Boundary
NETHERLEY ROAD	Whitefield Lane to Greensbridge Lane
ORMSKIRK ROAD	East Lancashire Road to Knowsley Lane
PENNYWOOD DRIVE	Lickers Lane to Whiston Station (Adjacent Footbridge)
POPLAR BANK	Archway Road to Derby Road
PORTICO LANE	Delph Lane to Roundabout
PRESCOT BUS STATION	Prospero Place
PRESCOT BY-PASS - A58	Eastbound Carriageway , Liverpool Road A57 to St Helens Road Roundabout
PRESCOT BY-PASS - A58	Westbound Carriageway, St Helens Road Roundabout to Liverpool Road A57
KNOWSLEY WOOD LANE	Randles Road Roundabout
ROBY ROAD - A5080	Liverpool Boundary (House no. 210) to M62 Roundabout
ROBY ROAD - A5080	Roundabout at M62
ROBY ROAD - A5080	M62 Roundabout to Bridge Road
ROBY ROAD - A5080	Bridge Road to Tarbock Road Roundabout
ROSEHEATH DRIVE	House no. 2 to Barncroft Road
SETH POWELL WAY - A526	Liverpool Road to Stockbridge Lane Rdbt
SEWELL STREET	Market Place to Manchester Road
SOUTH BOUNDARY ROAD - A5208	Northbound Carriageway, Coopers Lane Roundabout to Moorgate Road
SOUTH BOUNDARY ROAD - A5208	Lees Road to Coopers Lane Roundabout
SPEKE BOULEVARD - A561	Eastbound Carriageway, Liverpool Boundary to Railway Bridge
SPEKE BOULEVARD - A561	Westbound Carriageway; Railway Bridge to Liverpool CC Boundary
SPEKE BOULEVARD - A561	(Access Slip) Higher Road to Speke Boulevard
SPEKE BOULEVARD - A561	(Exit Slip) Speke Boulevard to Higher Road
SPEKE BOULEVARD - A561	(Fords Access Road) Speke Boulevard to Fords
SPEKE BOULEVARD - A561	(Fords Exit Slip) Factory Gates to Speke Boulevard
SPEKE ROAD - A561	(Access Slip) Finch Lane to End of Slip Road

SPEKE ROAD - A561	(Exit Slip) to Higher Road (Opposite Finch Lane)
SPEKE ROAD - A561	Westbound Carriageway, Cheshire Boundary to Railway Bridge West End
SPEKE ROAD - A561	Eastbound Carriageway; Railway Bridge West End to Ditton Brook; Cheshire Boundary
SPEKE ROAD - A561	(Eastbound Entry Slip) A5300 Roundabout to Ditton Brook
SPEKE ROAD - A561	Speke/Widnes Link and Knowsley Expressway Roundabout
SPEKE ROAD - A561	(Westbound Exit Slip) to A5300 Roundabout
SPEKE ROAD - A561	(Westbound Entry Slip) A5300 Roundabout
SPEKE ROAD - A561	(Eastbound Exit Slip) to A5300 Roundabout
ST CHADS DRIVE	Webster Drive to Irlam Drive
ST HELENS ROAD - A58	Burrows Lane Sub-Station (St. Helens Boundary) to Prescott By-Pass
ST HELENS ROAD - A58	Prescott By-Pass to High Street
STELEY WAY	Manchester Road to Kemble Street
STOCKBRIDGE LANE	Princess Drive to Waterpark Drive
STOCKBRIDGE LANE	Roundabout at Seth Powell Way
STOCKBRIDGE LANE	Roundabout (Seth Powell Way) to Knowsley Lane
STOCKBRIDGE LANE	(Slip Road) to Liverpool Road
TARBOCK ROAD - A5080	Manley Road to Wheathill Road
TARBOCK ROAD - A5080	Wheathill Road to Roundabout at Twickenham Drive
TARBOCK ROAD - A5080	Roundabout at Archway Road
VALLEY ROAD - A506	Southbound Carriageway, from Cherryfield Drive to M57
VALLEY ROAD - A506	Northbound Carriageway, from M57 Roundabout to Cherryfield Drive Roundabout
VALLEY ROAD - A506	M57 Roundabout
VALLEY ROAD - A506	Southbound Carriageway, M57 Roundabout to Coplehouse Lane
VALLEY ROAD - A506	Northbound Carriageway, Aintree Lane to M57 Roundabout
WARRINGTON ROAD - A57	Longview Road to Dragon Lane; Prescott Bound Carriageway

WARRINGTON ROAD - A57	Dragon Lane to Longview Road; Rainhill Bound Carriageway
WARRINGTON ROAD - A57	Dragon Lane to Kemble Street Roundabout
WARRINGTON ROAD - A57	Kemble Street Roundabout to Houghton Street
WARRINGTON ROAD - A57	Houghton Street to Chapel Street
WEBSTER DRIVE	County Road to Cherryfield Drive
WHISTON RAILWAY STATION PARK & RIDE CAR PARK	Pennywood Drive to End
WHITEFIELD LANE	From Centre Line of M62 to Netherley Road
WHITEFIELD LANE	From Cronton Road to M62 Bridge; Centre Line of M62
WILSON ROAD	Cronton Road to Manor Farm Road
WILSON ROAD	Manor Farm Road to Hall Lane
WINDY ARBOR ROAD	Greenes Road to House no. 22
WINDY ARBOR ROAD	House no. 22 to Lickers Lane
WINDY ARBOR ROAD	Lickers Lane to Tarbock Roundabout

## Appendix 3 Primary Snow Plough Routes

<b>Primary Snow Plough Routes</b>
<b>(*Roads Incorporating Traffic Calming)</b>
ARCHWAY ROAD
BAILEYS LANE*
BANK LANE - A506
BEWLEY DRIVE (Valley Road to Cherryfield Drive)
BRIDGE ROAD (Prescot)
CHERRYFIELD DRIVE*
CHURCH STREET (High Street to Prescot Bus Station)
COOPERS LANE - A5208
COUNTY ROAD - A506 & A5208
CRAVENWOOD ROAD (Halewood Bus Station)
CRONTON ROAD - A5080
DELPH LANE
DERBY ROAD (Poplar Bank to Huyton Bus Station)
DERBY STREET - A57
DRAGON DRIVE
DRAGON LANE
EAST LANCASHIRE ROAD - A580
GREENSBRIDGE LANE
HALL LANE - A506 (Kirkby Town Centre)
HIGH STREET - A57
HIGHER ROAD - A562
HILLINGDEN AVENUE (Leathers Lane to Cravenwood Road)
HUYTON BUS STATION
HUYTON HEY ROAD
HUYTON LANE
IRLAM DRIVE
KIRKBY RAIL STATION INTERCHANGE (Whitefield Drive)
KIRKBY ROW*
KNOWSLEY EXPRESSWAY - A5300
KNOWSLEY LANE
KNOWSLEYWOOD LANE - A580
LEATHERS LANE* (Higher Road to Hillingden Avenue)
LIVERPOOL ROAD - A57
LONGMOOR LANE - A506 (Valley Road to Borough Boundary)
M62 MOTORWAY (Liverpool CC boundary to J6 Tarbock Island)
MARKET PLACE





MOORGATE ROAD - A5207
MOORGATE ROAD SOUTH - A580
NETHERLEY ROAD (Greensbridge Lane to Whitefield Lane)
ORMSKIRK ROAD (East Lancashire Road to Knowsley Lane)
POPLAR BANK
PORTICO LANE
PRESCOT BUS STATION (Prospero Place)
PRESCOT BY-PASS - A58
RANGLES ROUNDABOUT - A580
ROBY ROAD - A5080
ROSEHEATH DRIVE (Leathers Lane to Health Centre Access)
SETH POWELL WAY - A526
SEWELL STREET*
SOUTH BOUNDARY ROAD - A5208
SPEKE BOULEVARD - A561
SPEKE ROAD - A562
ST CHADS DRIVE
ST HELENS ROAD - A58
STATION ROAD* (Prescot)
STELEY WAY
STOCKBRIDGE LANE
TARBOCK ROAD - A5080
VALLEY ROAD - A506
WARRINGTON ROAD - A57
WEBSTER DRIVE
WHITEFIELD DRIVE*





## Appendix 4 Secondary Snow Plough Routes

<b>Secondary Snow Plough Routes</b>
<b>(*Roads Incorporating Traffic Calming)</b>
ABERCROMBIE ROAD
ACKERS STREET
ACORNFIELD ROAD
ADMIN ROAD
ADSWOOD ROAD*
AINSWORTH LANE
AINTREE LANE
ALDER LANE (Tarbock)
ALDER ROAD
ARBOUR LANE
ARCHWAY ROAD
ARNCLIFFE ROAD
ASH GROVE
ASHCROFT ROAD
ASPINALL STREET
ATHERTON STREET
ATTLEE ROAD
BAILEYS LANE*
BAKERS GREEN ROAD*
BARNCROFT ROAD
BEECHWOOD GROVE
BEWLEY DRIVE*
BIGDALE DRIVE
BIRCHILL ROAD
BLACKLOW BROW
BLUEBELL LANE
BOWRING PARK AVENUE
BOYES BROW
BRACKNELL AVENUE
BRADMAN ROAD
BRICKFIELDS
BRIDGE ROAD (Prescot)
BRIDGE ROAD (Roby)
BRITONSIDE AVENUE
BROAD LANE*
BROOK HEY DRIVE
BUTTERMERE ROAD



CABLES WAY
CADDICK ROAD
CAMBERLEY DRIVE*
CAMPBELL DRIVE
CARR LANE
CARTBRIDGE LANE
CAWTHORNE AVENUE
CEDAR ROAD
CHAPEL LANE
CHARLEYWOOD ROAD
CHARNWOOD ROAD
CHERRYFIELD DRIVE*
CHILDWALL LANE
CHURCH ROAD (Halewood)
CHURCH ROAD* (Roby - Bridge Road to Dinas Lane)
CHURCH STREET
CIVIC WAY (Including Access Road to Filling Station and all Adjacent Car Parking Areas up to and Including Taxi Rank off Archway Rd.)
COPPLEHOUSE LANE*
CORONATION DRIVE
COURT HEY AVENUE
COURT HEY DRIVE
COURT HEY ROAD
CRAVENWOOD ROAD
CROSS LANE*
CUMBER LANE
CYPRUS STREET
DALE LANE
DELPH LANE
DENES WAY
DEPOT ROAD
DERBY ROAD
DINAS LANE*
DRAGON DRIVE
DRAGON LANE
DRAW WELL ROAD
ECCLESTON STREET
ELIZABETH ROAD* (Huyton)
ELLIS ASHTON STREET
FALLOWS WAY
FARADAY ROAD
FAZAKERLEY ROAD



FIELD LANE
FINCH LANE
FLORIDA WAY
FOXSBANK LANE
FREDERICK LUNT AVENUE
GALE ROAD
GELLINGS ROAD
GERRARDS LANE
GILSECROFT AVENUE
GLADE ROAD*
GLOVERS BROW*
GORES ROAD
GREENES ROAD
GREENSBRIDGE LANE
GRIFFITHS ROAD
HALEWOOD BUS TERMINUS
HALEWOOD ROAD
HALL LANE (Cronton)
HALL LANE (Prescot)
HALL LANE (Tower Hill)
HALL LANE* (Huyton)
HALSNEAD AVENUE
HAMMOND ROAD
HARDIE ROAD
HASWELL DRIVE*
HEADBOLT LANE
HEATH ROAD
HESKIN ROAD
HILLINGDEN AVENUE (Cravenwood Rd to Leathers Lane)
HILLSIDE ROAD
HOLLIES ROAD*
HOLT LANE
HOMER ROAD
HORNHOUSE LANE
HOUGHTON STREET
HUGHES AVENUE
HURST PARK DRIVE
HUYTON BUS TERMINUS (Derby Road)
HUYTON HEY ROAD
HUYTON LANE
IRLAM DRIVE
JAMES HOLT AVENUE



KEMBLE STREET
KINGSWAY (Prescot)
KINGSWAY* (Huyton - Liverpool Road to Rupert Road)
KIRKBY ADMIN BUS TERMINUS
KIRKBY BANK ROAD
KIRKBY ROW*
KITLING ROAD
KNOWSLEY LANE
LANSBURY ROAD
LATHOM ROAD
LATHUM CLOSE (Hill Section only from Kingsway to "T" junction)
LEACH CROFT
LEATHERS LANE*
LEES ROAD
LICKERS LANE*
LINK ROAD
LOGWOOD ROAD
LONGVIEW DRIVE*
LONGVIEW LANE
LOWER ROAD
LYDIATE LANE
LYNDHURST WAY
MACKETS LANE*
MANCHESTER ROAD
MANOR FARM ROAD
MARINA CRESCENT
MARKET PLACE
MARL ROAD
MEADOW DRIVE
MELROSE ROAD
MERCER AVENUE
MILL LANE
MILTON AVENUE (Whiston)
MILTON AVENUE* (Roby)
MINSTEAD AVENUE
MOORFIELD
MOSS END WAY
MOSS LANE*
NETHERLEY ROAD
NEW HUTTE LANE*
NEWSTET ROAD
NORWICH WAY



OKELL DRIVE
OLD HUTTE LANE
OLD LANE
OLD ROUGH LANE*
OLIVER LYME ROAD
OVERBROOK LANE
OWEN ROAD
PARK BROW DRIVE
PENNY LANE
PENNYWOOD DRIVE
PENRHYN ROAD
PERIMETER ROAD
PILCH LANE EAST
PINGWOOD LANE
PLUCKINGTON ROAD
POPLAR BANK
PORTICO LANE
POTTERY LANE
PRESCOT ROAD
PRIMROSE DRIVE
PRINCESS DRIVE
QUARRYSIDE DRIVE
RANGLES ROAD
RAVENHEAD AVENUE
RIBBLERS LANE
RICHARD HESKETH DRIVE
RIMMER AVENUE
ROCKFORD AVENUE
ROSEHEATH DRIVE
ROUGHWOOD DRIVE*
RUPERT ROAD*
SALERNO DRIVE
SAUNDERS AVENUE
SAXON WAY
SCHOOL LANE (Including Access Roads to Hotels)
SCOTCHBARN LANE
SEEL ROAD
SEWELL STREET*
SHAW LANE
SHEVINGTONS LANE*
SHIRDLEY AVENUE
SIMONSWOOD LANE*





SMITHY LANE
ST CHADS DRIVE
ST JAMES ROAD (Prescot)
ST JOHNS ROAD*
ST NICHOLAS ROAD
STANLEY ROAD*
STELEY WAY
STOCKBRIDGE LANE
STOCKPIT ROAD
STOCKSWELL ROAD
STONEY LANE
STOPGATE LANE
STRETTON WAY
SUGAR LANE
TELEGRAPH WAY
TERMINUS ROAD
THE CRESCENT (Huyton)
THE ROOLEY
THE WITHENS
THINGWALL HALL DRIVE
THINGWALL LANE*
THOMAS DRIVE
TITHEBARN ROAD
TORRINGTON DRIVE*
TUE LANE
TWICKENHAM DRIVE*
TWIG LANE*
TWO BUTT LANE
VICTORIA ROAD
VILLIERS ROAD
WATE R LANE
WATERPARK DRIVE*
WEBBER ROAD
WEBSTER DRIVE
WELLFIELD AVENUE
WEST STREET
WESTERN AVENUE*
WESTHEAD AVENUE
WESTMORLAND ROAD
WHEATHILL ROAD
WHISTON LANE
WHITEFIELD DRIVE*







WHITEFIELD LANE
WILLOW GROVE
WILSON ROAD (Huyton)
WINDSOR ROAD(Huyton)
WINDY ARBOR ROAD
WOOD LANE (Huyton Quarry)
WOOD LANE (Prescot)
WOOD ROAD*
WOODWARD ROAD
WOOLFALL HEATH AVENUE
YARDLEY ROAD
YORK ROAD

## Appendix 5 Minimum Winter Network

<b>Minimum Winter Network</b>
ARCHWAY ROAD
BAILEYS LANE
BANK LANE - A506
BEWLEY DRIVE (Valley Road to Cherryfield Drive)
BRIDGE ROAD (Prescot)
CHERRYFIELD DRIVE
CHURCH STREET (Part from High St to Prescot Bus Station)
COOPERS LANE - A5208
COUNTY ROAD - A506 & A5208
CRAVENWOOD ROAD (Halewood Bus Station)
CRONTON ROAD - A5080
DELPH LANE
DERBY ROAD (Poplar Bank to Huyton Bus Station)
DERBY STREET - A57
DRAGON DRIVE
DRAGON LANE
EAST LANCASHIRE ROAD - A580
FIRE STATION ROAD
GREENSBRIDGE LANE
HALL LANE - A506 (Kirkby Town Centre)
HIGH STREET - A57
HIGHER ROAD - A562
HILLINGDEN AVENUE (Leathers Lane to Cravenwood Road)
HUYTON BUS STATION
HUYTON HEY ROAD
HUYTON LANE
IRLAM DRIVE
KIRKBY RAIL STATION INTERCHANGE (Whitefield Drive)
KIRKBY ROW
KNOWSLEY EXPRESSWAY - A5300
KNOWSLEY LANE
KNOWSLEYWOOD LANE - A580
LEATHERS LANE (Higher Road to Hillingden Avenue)
LIVERPOOL ROAD - A57
LONGMOOR LANE - A506 (Valley Road to Borough Boundary)
M62 MOTORWAY (Liverpool CC boundary to J6 Tarbock Island)
MARKET PLACE





MOORGATE ROAD - A5207
MOORGATE ROAD SOUTH - A580
NETHERLEY ROAD (Greensbridge Lane to Whitefield Lane)
ORMSKIRK ROAD (East Lancashire Road to Knowsley Lane)
POPLAR BANK
PORTICO LANE
PRESCOT BUS STATION (Prospero Place)
PRESCOT BY-PASS - A58
RANGLES ROUNDABOUT - A580
ROBY ROAD - A5080
ROSEHEATH DRIVE (Leathers Lane to Health Centre Access)
SETH POWELL WAY - A526
SEWELL STREET
SOUTH BOUNDARY ROAD - A5208
SPEKE BOULEVARD - A561
SPEKE ROAD - A562
ST CHADS DRIVE
ST HELENS ROAD - A58
STATION ROAD (Prescot)
STELEY WAY
STOCKBRIDGE LANE
TARBOCK ROAD - A5080
VALLEY ROAD - A506
WARRINGTON ROAD - A57
WEBSTER DRIVE
WHITEFIELD DRIVE

