# CITY OF HAVRE SNOW AND ICE CONTROLL



#### **MISSION STATEMENT**

TO PROVIDE ACCESS TO DESIRED DESTINATIONS

SUCH AS EMPLOYMENT, SHOPPING, AND COMMUNITY SERVICES

OR OTHER FACILITIES IN A QUICK, CONVENIENT, SAFE, AND COMFORTABLE

MANNER FOR ALL POPULATIONS GROUPS IN THE COMMUNITY WITH A

MINIMUM OF HARMFUL EFFECTS ON THE ENVIRONMENT.

PREPARED BY

PUBLIC WORKS DEPARTMENT

CITY OF HAVRE

#### **FORWARD**

The purpose of this Snow and Ice Control Plan is two-fold: (1) to provide the general public and city officials with and insight into the complexity of snow and ice control operation; and (2) to summarize policies and procedures to be followed by city personal.

Snow and ice control is frequently a matter of choosing between two evils. For example, plowing snow off the side of the street may clear the center, but it often covers sidewalks and blocks driveways. Plowing to a windrow down the center of the street may alleviate these problems, but may create others by impeding left turns and restricts traffic flow. The purpose of this plan is to set forth the issues and to establish policy and procedural guidelines.

This plan addresses four areas of concern: Level of Service, Priorities, Operational Procedures and Special Requests.

**LEVEL OF SERVICE** is controlled by balancing the resources committed.

**SETTING PRIORITIES** recognizes that streets cannot all be cleared simultaneously.

<u>OPERATIONAL PROCEDURES</u> are aimed at implementing the plan as effectively and efficiently as possible.

**SPECIAL REQUESTS** for service are an inherent part of snow and ice control efforts and must be addressed.

Snow and ice control is a matter that is taken very seriously. It is an area that involves safety, liability, economic and energy conservation issues. This Snow and Ice Plan, recognizes the unacceptability of snow clogged, ice covered, unsafe and impassable roadways.

Finally, snow and ice control is addressed as an uncertain activity. Snow fall rate, temperature, wind velocity and storm duration affect response.

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#### I. LEVEL OF SERVICE

The range of services possibilities vary from "curb – to – curb bare asphalt" removal of snow and ice on every street, alley, sidewalk and pedestrian crosswalk in the City to a policy of "do nothing" to wait for chinook winds to melt it. The first extreme is not in the realm of practicality and second is unacceptable to the residence of Havre. A snow and ice control program includes varying levels of service for city streets, depending on a variety of factors such as traffic volumes, emergency access, public safety and available equipment. A list of available equipment is provided in Appendix I.

The primary objective of the Public Works Department is to provide for the safe and orderly movement of vehicular traffic throughout the City during all weather conditions including severe winter storms. Although City streets, including major arterials, may be temporarily closed during extremely severe conditions, the department will use available resources to prevent closing or to keep the duration of closures to a minimum. The Public Works Department will strive to keep all lanes of traffic moving during extreme conditions, travel may be limited to one lane of vehicular traffic in each direction.

Sidewalks and driveways are also concerns:

 The Department will not clear sidewalks nor attempt to "dig out" private driveways during snow emergencies.

Recognizing that it is not possible for the Department to remove all the snow from the streets concurrently, the level of service to be provided is summarized below:

The Public Works Department shall use available resources to keep public streets in the City open for vehicular travel during all but the most severe weather conditions.

When extreme weather conditions severely restrict or halt traffic movement, the Department may operate on extended hours, clearing streets in the order of priority provided in this plan.

These operations will continue, although the level of effort may decline as progress is made on the priority list, until vehicular traffic movement has been restored to safe and acceptable level throughout the City.

In order to assist the efforts of the Department, property owners or building occupants are prohibited from placing snow and ice on public streets and alleys. Driveways, alleys and parking areas in any area shall be cleared so that snow and ice from such areas are not placed in the public streets.

#### II. PRIORITIES

The City of Havre receives an annual average snowfall of ~40 inches.

Snowfall is often accompanied by winds in excess of 30 mph and subzero temperatures. This plan recognizes that it is not possible to remove all of the snow simultaneously from all the streets. Factors effecting snow and ice control operations include snowfall rate and accumulation, moisture content, temperature, time of day, night or week, wind velocity, and the duration of the storm. Priorities must be established so that major arterials and other collector streets are cleared first in order that vehicular traffic may continue to move safety and effectively on the City's street network.

This plan established and defines the following priorities (See Appendix II for colored coded maps.)

# **PRIORITY ONE:** Emergency Snow Routes (Red)

Streets designated as emergency snow route and signed as such, with specific road signs placed within the street right-of-way.

The purpose of this designated and signage is to alert the public that these streets are to be kept clear of parked vehicles which may interfere with snow and ice control operations.

Upon declaration of a snow emergency, declared be the public Works Director or his/her designated representative, vehicles left unattended on the emergency snow route shall be removed at the owner's expense.

Emergency Snow Routes are given Priority One designation as they provide a network system for emergency services operation.

# **PRIORITY TWO:** Major Arterial (Blue)

Streets intersecting high volume streets and completing the major street network with particular attention to schools, hospitals and business areas.

Major arterial streets are given Priority Two designation as they serve as a major street network within the City.

# **PRIORITY THREE:** Selected Collector Streets (Orange)

Hillside additions including but not limited to: Sunset Hill Addition, Skyline Addition, Morningside Addition and South Park Heights Addition.

# **NON-PRIORITY:**

Most residential streets and others not mentioned above. These streets will not normally be cleared unless impassable and ordered by the Public Works Director or his/her designated representative.

# **OTHER:** State (Yellow) – County (Magenta)

Streets maintained by the Montana Department of Transportation are color coded brown. Streets maintained by the Hill County Road Department are Color-coded yellow.

After operations on priorities **one (1), two (2) and three (3)** have been accomplished, special requests will be responded to once the need is verified by the Public Works Department. The requests will depend on resource availability (manpower, equipment, Etc.) and backlog of the requests.

# III. OPERATIONAL PROCEDURES

The street Maintenance Division Supervisor will respond to advance notice of an approaching storm by taking the following steps:

- 1. Ordering plows and / or sanders to be installed on trucks
- 2. Closely monitoring weather developments
- 3. Alerting crews that they may be called back to work at any time, due to possible weather conditions.

When snowfall or freezing rain is possible, the Street Maintenance Division Supervisor will direct crews to begin operations when, in the supervisor's opinion, one or more of the following conditions exists:

- 1. Icing of streets is occurring or likely to occur, creating a hazard to vehicular traffic.
- 2. Snowfall accumulation which exceeds five inches (5") on emergency snow routes is imminent or occurring.
- 3. Snowfall has accumulation on non-priority streets in amounts sufficient to halt or block traffic. This typically means an accumulation exceeding eight inches (8") on the streets.

#### A. PLOWING PROCEDURES

For each of the three conditions described below, the following practices will be used.

#### **CONDITION 1:**

Slick or icy spots will be sanded to reduce the hazard or danger to vehicular traffic. Particular attention will be given to areas near stop signs, traffic signals and hills especially those on or adjacent to streets on the emergency snow route system.

#### **CONDITION 2:**

When snow depth exceeds five inches (5), snow removal crews will commence plowing on emergency snow routes. The goal is to keep these streets open to travel so that emergency services vehicles can reach all parts of the city with minimal delay. Snow will be plowed to the curb line on emergency snow routes and residential streets.

#### **CONDITION 3**

Plowing of residential streets will be from curb to curb. Plowing of residential streets will not typically begin until after emergency snow routes, high traffic volume streets, hospitals and public schools accesses, business districts and city parking facilities have been cleared of snow accumulations.

All plowing will normally be done by pushing snow toward the side of the street. Care shall be exercised by operators to minimize the blocking of driveways, cars, mail boxes and burying of sidewalks. The Street Maintenance Division Supervisor, however, recognizes that blocking driveways, cars and mailboxes and burying of sidewalks is at times unavoidable. The burden is then with property owner or occupant to clear them.

# **B. SALT PROCEDURES**

The City's salt policy calls for a minimum amount of salt to be used to achieve as safe a street surface as possible. The material is mixed with sand at a 5 - 10 % salt to sand ratio to keep the sand from freezing and becoming unworkable.

Reduced corrosion deicers may be used on pedestrian crosswalks in the business district and on high traffic volume intersections when normal sanding may not effectively improve driving conditions.

### c. Snow removal

The fact of plowing snow to the center of the street where it is loaded into trucks with loaders is limited due to high cost and manpower demands associated with this process. It is done selectively using the following criteria:

- Access parking
- Provide additional snow storage
- Facilitate traffic movements

This operation is not started until plowing of all **Priority One** routes has been completed.

#### IV. SPECIAL REQUESTS

Persons who have questions about snow and ice control or unsafe winter driving conditions should contact the Public Works Department, 265-4941. Calls received by the Street Maintenance Division or Public Works Department Office during or after a winter storm will be logged in order to provide a record thereof.

Since the Street Maintenance Division receives a large number of special requests during and after a winter storm, it is not possible to dispatch snow and ice control equipment immediately upon requests. Examples of special requests are driveways clearing, mail delivery plowing, and drainage or parking issues. The Supervisor shall substantiate special requests by means as:

- 1. Radio messages from equipment operators:
- 2. Information from field personal:
- 3. Multiple requests from the same general area.

Once a request is determined to be valid, the Supervisor shall respond. Unless directed otherwise by higher authority, special requests shall not be given priority over planned schedule.

The response action will depend on resources availability and number of special requests to be dealt with.

# **APPENDIX I**

# **CITY OF HAVRE**

**SNOW AND ICE CONTROL EQUIPMENT** 

# CITY OF HAVRE SNOW AND ICE EQUIPMENT

Two motor graders

Two truck mounted snow plow

(Plow is a sander/plow combination unit)

One sand spreader

One front-end loader

Two backhoes

Two skid steers

4 - 5 yard dump trucks

# **APPENDIX II**

# **SNOW AND ICE CONTROL MAP**

# **COLOR CODES:**

Red -Priority One

Blue -Priority Two

Orange -Priority Three

Yellow -Montana Department of Transportation

Magenta -Hill County

#### **PRIORITY ONE ROUTES**

**12<sup>TH</sup> Ave** from (17<sup>th</sup> St to Hwy 2)

**17<sup>TH</sup> St.** from (12<sup>th</sup> Ave. to 5<sup>th</sup> Ave.)

10<sup>th</sup> St. & 11<sup>th</sup> St. West from (5<sup>th</sup> Ave. to 16<sup>th</sup> Ave. West)

**13<sup>th</sup> St.** from (5<sup>th</sup> Ave to 11<sup>th</sup> St. via Wilson Ave.)

Beaver Creek Blvd, Ridge Road and 1<sup>st</sup> Ave. from (5<sup>th</sup> Ave. to 13<sup>th</sup> St.)

