

DATE: February 16, 2006

TO: John Szerlag, City Manager

FROM: Brian Murphy, Assistant City Manager/Services  
Timothy Richnak, Public Works Director

SUBJECT: Agenda Item – Load Restrictions

Each year during the spring thaw we post load restrictions on asphalt roads to prevent damage to the road surface.

The Michigan Vehicle Code (Act 300, P.A. 1949) allows local governments, by ordinance or resolution, to prohibit the use of trucks or other commercial vehicles, or to impose weight limitations of trucks and commercial vehicles on certain streets. Chapter 94, Axle Load Ordinance, allows the Public Works Director or his authorized representative discretionary power to reduce normal axle loads on specified streets.

The roads of concern are listed as Attachment "A". The specific limits to be posted are 6,000 lbs. per axle, 8,500 lbs. per tandem axle assembly. This limitation would be in effect during periods prescribed in Chapter 94 of the City Code for "frost law" limitations. Exceptions to these limitations would include the City's refuse hauler, school buses, and emergency vehicles.

We request approval of the reduced axle load limits for the streets listed on Attachment "A".

cc: Superintendent of Streets & Drains

Attachment

Prepared by: Ann Tyrrell, Office Coordinator

## City of Troy Frost Law Load Restrictions

**Concrete Streets:** 25% reduction from normal loadings

**Asphalt or Gravel Streets:** 35% reduction from normal loadings (unless otherwise posted)

Tabulation of allowable gross axle loads when restrictions are in force

Spacing between axles	Normal Load	25% Reduction	35% Reduction
9 Feet or over	18,000 lb	13,500 lb	11,700 lb
More than 3 ½ feet but less than 9 feet	13,000	9,750	8,450
Less than 3 ½ feet, the combined weight shall not exceed	18,000	13,500	11,700
** When part of a tandem axle assembly	16,000	12,000	10,400
Maximum Load on any wheel shall not exceed (lbs/inch of tire)	700	525	450

**\*\* Note:** On any legal combination of vehicles, only one tandem axle assembly shall be permitted, on such designated highways at the gross permissible weight of 16,000 pounds for any such axle, and no other tandem axle assembly in such combination of vehicles shall exceed a gross weight of 13,000 pounds for any such axle.

***No overweight permits will be issued while frost laws are in effect.***

## Typical Front Axle Loads

Tire Size	Normal Load	25% Reduction	35% Reduction
7.50 x 20	10,500 lb	7,875 lb	6,750 lb
8.25 x 20	11,550 lb	8,662 lb	7,425 lb
9.00 x 20	12,600 lb	9,450 lb	8,100 lb
10.00 x 20	14,000 lb	10,500 lb	9,000 lb
11.00 x 20	15,400 lb	11,550 lb	9,900 lb
Duplex Type	18,000 lb	13,500 lb	11,700 lb

**NOTE:** For allowable load calculations use 2 x tire size x allowable load per inch of tire. (For 9.00 x 20 on 35% Reduction Street, use 2 x 9.0 x 450 = 8100 #/axle.)

## Guide for Permitted Loads During Frost Laws

### Frost Law Axle Loads

Concrete Streets - O.C.R.C. Class A Rest. - 25% Reduction  
 Asphalt or Gravel - O.C.R.C Class B Rest. - 35% Reduction  
 Special Posted Streets - 6000 #/axle, 3500 #/tandem assembly

Concrete Trucks	Concrete Streets	Asphalt or Gravel	Streets Posted 6000 #/axle 8500 #/tandem
Tandem Axle	4 yards	3 yards	no load
Tri Axle	5 yards	3 yards	no load
Quad Axle	6 yards	4 yards	no load

Vehicles allowed on streets posted 6000 #/axle, 8500 #/tandem:

1. Fuel trucks for delivery to residents
2. Refuse trucks
3. Milk, bread, or grocery delivery to residents
4. Delivery of furnishings when relocating to a new and/or unoccupied home
5. Septic tank cleaning trucks
6. Emergency repair or rescue vehicles
7. School buses

**NOTE:** The above vehicles should travel the shortest possible distance on these streets.

Attachment "A"

Streets to be posted are:

Section 1	Burdic Chancery Edith Evanswood Gulliver Harned Jarman Ravenna Stirling	Section 6	Anslow Beach Bretby Chalgrove Charnwood Clockgate Circle Dalesford Donegal Dublin Fair Erin Way Galloway Bay Glyndebourne Killarney Lake Charnwood Limerick Malvern Meath Hunt Circle Ramsbury Tewksbury Tutbury Windrush
Section 2	Atkins Barabeau Cadmus Cambria Eckerman Hartwig Shelldrake		
Section 3	Booth DeEtta Donaldson Hannah Hurst Lesdale Lovell Marengo Montclair Norton Ottawa Peacock Quill Creek Westaway	Section 7	Arlund Way Beach Rabben Sussex Ct.
		Section 9	Blanche Daniels Fabius Habrand Haldane Houghten McKinley Niles Stalwart Virgilia Wright
Section 4	Aspinwall Blackwall Canmoor Elmoor Fredmoor Herbmoor Houghten Hurst Lovell Niles Scone Troyvally Vernmoor	Section 10	Creston Cutting Somerton Sylvanwood Trinway
		Section 11	Abbotsford Hilmore

Section 11	Larayne Philatha Viking	Section 19	Cheswick Eastbourne Hampton Henhawk Kent Kingsley Lanergan Myddleton Newgate Oakhill Oxford Paddington Palmerston Sunridge Tothill Townhill Upton Weathervane
Section 13	Forsyth		Wembly Wendover Woodman
Section 14	Bradley Eleanor Glaser Lamb Rockfield		
Section 15	Belhaven Belzair Crestfield Dorshire Evaline Hanover Leetonia Tallman – Eckford to Thurber Wilton	Section 20	Alpine Banmoor Boulan McClure McManus Muer
Section 16	Hart Lange Paragon Virgilia Webb	Section 21	Finch Kirk Lane Muer Muerknoll Ruthland Wendleton
Section 18	Beach Bronson Butternut Hill Chestnut Hill Hylane Juniper Court Pine Hill Rouge Circle Valley Vista Valley Vista Circle Walnut Hill	Section 22	Colebrook Ellenboro Frankton Harris Hartland Helena Jennings Kilmer Louis Talbot Trombley Troy Troywood Vanderpool
Section 19	Avonhurst Beach Binbrooke Bolingbroke Caswell Chelsea Chestnut Hill Court		

Section 23  
Boyd  
Daley  
Hartland  
Torpey  
Urbancrest

Section 28  
Biltmore  
Cloveridge  
Forthton  
Regents  
Shepherds

Section 24  
Orpington

Section 36  
Dashwood  
Iowa  
Lovington  
Minnesota  
Wisconsin

Section 25  
Garry  
Isabell  
Milverton  
Vermont  
Virginia

Section 27  
Alganssee  
Arthur  
Beech Lane  
Birchwood  
Cherry  
Chopin  
Cook Court  
Eastport  
Enterprise  
Hartshorn  
Hickory  
Kelly  
Kirkton  
Larchwood  
Lydia  
Mastin  
Plum  
Robinwood  
Starr  
Van Courtland  
Vermont  
Westwood  
Woodslee