

## POLICIES AND PROCEDURES

Office of the Director Department of Public Works Town of Goffstown New Hampshire	Effective Date:  June 27, 2011	Policy Number:  3-4
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Subject:  Road Posting Policy	Supersedes:  N/A	Approved By:  Board of Selectmen

### **PURPOSE:**

Each spring, as frost thaws, many roads in Goffstown experience significant loss of strength due to excess water being trapped in the roadway's base materials. This trapped water reduces the ability of the roadway to carry heavy loads without damaging the asphalt surface. We have also experienced periods of intense flooding which weakened our road bases. In order to prevent roadway damage and to protect the large infrastructure investment the Town must employ load/weight restrictions in accordance with RSA 231:191.

The Town recognizes that the economy of our area depends on trucks hauling various types of freight over our roads. The Town intends this policy to try to be fair to the trucking industry while protecting our infrastructure investment.

The Director of Public Works and/or his assignee will be responsible for carrying out this policy and a copy of this policy will be available in the Selectmen's Office and by request at the Department of Public Works.

### **AFFECTED EMPLOYEES:**

All Department of Public Works employees.

### **POLICY:**

- 1) Roads to be included in this posting policy are attached at Attachment 2. Roads on this list as well as roads to be added in the future will be evaluated for the following criteria for inclusion in the list.
  - a) Surface Thickness (pavements less than 2 inches)
  - b) Type of Subgrade (excessive fine materials, ie. a reclaimed base)
  - c) DPW experience relating to ground water table, observed moisture and pavement distress, and
  - d) Surface Deflections
- 2) Roads will be posted in accordance with limits established in Attachment 1 unless a more stringent restriction already exists on the road. If there is already a load restriction the posting will reduce the load by 50% of the

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normal restricted load if the restriction is due to roadway construction conditions.

- 3) The timing for posting roads will be based on the methodology developed by the Washington State Transportation Center and outlined in Guidelines For Spring Road Use Restrictions published by the UNH Technology Transfer Center. Cumulative Freezing Degree Days (CFDD) will be measured and tracked throughout the winter using the table attached as Attachment 3.
- 4) In the spring, when it is clear that the maximum CFDD has been reached then Cumulative Melting Degree Days (CMDD) will be measured and tracked on the same form as CFDD. Notices of road posting will be distributed through the newspaper and a form letter will be mailed to all local trucking companies in the Goffstown area when the CMDD reaches 10. The posting signs will be erected when the CMDD reaches 25. This methodology estimates when thawing will reach the bottom of the base course.
- 5) The removal of the restriction and the posted signs will be made based on the following formula:

$$\text{CMDD} = \alpha \times \text{CFDD}_{\text{MAX}}$$

$\alpha$  will be 0.4. In the event that weather conditions warrant an earlier lifting of the posting the Director of Public Works will use his/her judgement to lift the posting at the appropriate time.

- 6) Posted Highway Use Permit can be obtained from the Department of Public Works which will allow a truck to travel on posted roads for a limited circumstance. The Posted Highway Use Permit will be made out in triplicate with the original accompanying the driver in the truck. One copy will be forwarded to the Goffstown Police Department and one copy will be kept on file in the Department of Public Works.
  - a) Examples of special circumstances would include running out of heating fuel, an overflowing septic tank, etc.
  - b) Municipal vehicles with emergency or public health purposes (ie. trash trucks, snow response) are exempt from the posting policy, however, drivers are instructed to use care when traversing posted roads.
  - c) The intention is that Posted Highway Use Permits will only be issued for early morning loads after a very cold night (ie. below mid-twenties) unless there is an emergency situation.
- 7) The Town reserves the right to make trucks that have been issued a Posted Highway Use Permit cross the Transfer Station truck scales for verification of weight.

# ATTACHMENT 1

## Spring Posting Load Restrictions

	<b>Legal Load Limit</b>	<b>Proposed Restriction (50% of legal load)</b>
Tire Load (lb/inch of tire width)	600	300
Single Axle (lbs)	20,000	10,000
Single Axle w/ 2 tires (over 10k lbs)(lb/in)	500	250
Tandem Axle (lbs)	34,000	17,000
Gross Vehicle Weight	105,500	N/A

	<b>GVW Limit (lbs)</b>	<b>GVW Limit (tons)</b>
Truck Type		
2-axle trucks	20,000	10
3-axle trucks	27,000	14
4-axle trucks	37,000	19
5-axle trucks	44,000	22

## ATTACHMENT 2

*OLD 2011 ROAD LIST ATTACHMENT DOES NOT APPLY.*

*SEE UPDATED ANNUAL ROAD LIST ON TOWN WEBSITE  
AS APPROVED BY BOARD OF SELECTMAN*

## ATTACHMENT 3

## Guidelines for Spring Road Use Restrictions

### Degree-Days Log

A	B	C	D	E	F	G	H	I	J
Month	Day	High Temp	Low Temp	Avg. Temp (C-D)/2	FDD 32-Avg.	Cumu- lative FDD	MDD Avg.-29	Cumu- lative MDD	Notes
	1								
	2								
	3								
	4								
	5								
	6								
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FDD = Freezing Degree Days  
MDD = Melting Degree Days