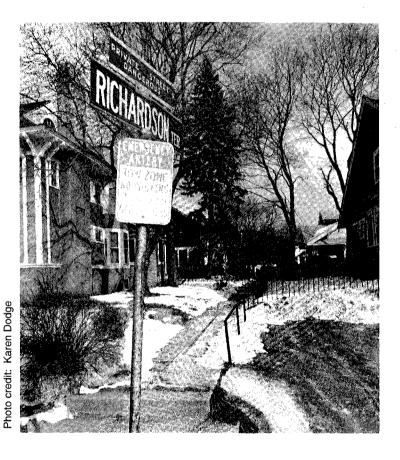
RERCHANGE

Volume 8, Number 2

Winter 1994



Private Ways in Your Town

Are You Liable?
Are Plowing and Deicing
Allowed?
Can Potholes be Filled?

As with most questions of a legal nature, the answer to all three questions is maybe. It seems that every town in the state has numerous private ways that need repair. Drainage is often poor and surfaces rough. The people living on these streets don't understand why you won't fix their problems and they don't want to hear it when you tell them they must repair the road themselves. What are you spending their tax money on anyway? Does this sound familiar?

Well, there are a few things you can do to not only resolve liability issues, but to improve public relations

Continued on Page 2

When Push Comes to Shovel

Maintenance Tips for Snow Equipment

Both in-season and off-season maintenance checks can help keep snow equipment operating and in good condition. Ray Schulte of Little Falls Machine, Inc., has the following tips for better maintenance of snow equipment:

In-Season. In spite of its rugged appearance, equipment must be cared for and maintained regularly in-season. Daily or rep-route inspection and maintenance are necessary. Failure to do so may seriously affect the efficiency or safety of your equipment.

While in use, it is recommended to re-torque all bolts after the first 8 hours of use and to regularly check for loose or missing bolts, nuts, or washers.

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Local Technical Assistance/Technology Transfer Center (800) 374-ROAD or (413) 545-2604

Temporary Repairs to Private Ways

If you make temporary repairs to the private ways in your town you could be liable for that way for six years after the repairs are made. The courts have considered even the filling of potholes to be a temporary repair.

So what can you do? The Massachusetts General Law provides a way for your town to perform temporary repairs and also to limit its liability.

Chapter 40 Section 6N of the Massachusetts General Laws states that if you adopt an ordinance or bylaw that determines:

" (a) the type and extent of repairs;

(b) if drainage shall be included;

- (c) if the repairs are required by public necessity;
- (d) the number of percentage of abutters who must petition for such repairs;
- (e) if betterment charges shall be assessed;
- (f) the liability limit of the city or town on account of damages caused by such repairs;
- (g) if the ways shall have been opened to public use for a term of years; and
- (h) if a cash deposit shall be required for said repairs. "

you can make temporary repairs to a private way.

The towns of Georgetown and Oxford have adopted just such a bylaw. A copy of the Georgetown bylaw is included in the free information packet I will mention again later.

Snow Removal and the De-Icing of Private Ways

This is a separate issue governed by separate statutes. The Massachusetts General Law, Chapter 40, Section 6C says that the City Council or Selectmen can authorize money for snow removal of private ways open for public use and within the town limits. This authorization will not constitute the temporary repair of a way if the authorization of money is accepted by the town.

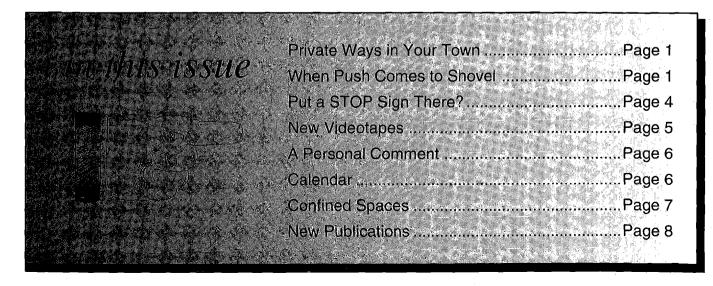
To be accepted by the town the city council or selectmen must follow "in the manner provided in Chapter 40 Section 6D."

Section 6D requires that "Section 6C shall be submitted for acceptance to the registered voters of a city at a regular city election if the city council thereof so votes, and of a town at an

annual town election upon petition of two hundred registered voters or of twenty per cent of the total number of registered voters, substantially in the form of the following question, which shall be placed on the official ballot used for the election of officers at such city or town election." The section then goes on to give the exact wording of the question and to say that, if approved by the majority of voters, the section will take effect.

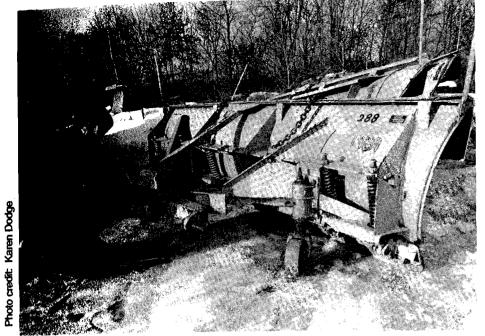
So, upon acceptance by the town, your liability will be limited for the plowing or sanding of the private ways for which funds were authorized and accepted.

Continued on Page 3



repairs and also

to limit its liability.



Richard Scott, Mechanic, Department of Public Works, Northampton

When Push...continued from Page 1

Because of the environment in which snow equipment is expected to operate, hydraulic lines, fasteners, wearable or replaceable items (such as wear shoes, cables, and cutting edges), and warning decals may become damaged by snow, ice, and road debris. These items must be inspected daily and replaced immediately to avoid equipment damage or personal injury.

Lubrication of cable sheaves and other sliding or rotating parts is important. Because exposure to snow, ice, salt, and road debris will wash away lubrication quickly, it may be necessary to inspect and reapply lubrication more than daily.

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Private Ways...continued from Page 2

Other Considerations:

Before you rush right out and adopt these laws, be sure to spend some time considering any and all ramifications of their passage.

For instance, for a developer to gain frontage on a private way, he may have to prove both that the way is open to public use and that the way is maintained and repaired by the town. By adopting a bylaw you could be opening previously closed land to development. Depending on your situation, that may be good or bad.

You could also be opening a can of worms. Residents on private ways may demand more and more of your services, stretching your thin resources even thinner.

The Disclaimer and a Thank You

First the disclaimer. *I am not* an attorney and thus cannot give a competent legal opinion. There is some pertinent case law and a number of details in the law which I did not mention here. In addition, there may be aspects specific to your town which I cannot address. Therefore, use this article only as an introduction to this subject.

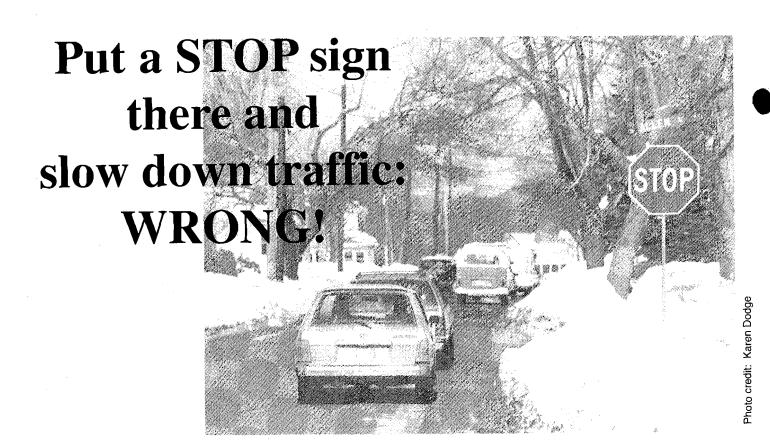
I cannot stress enough the need to contact and work with your town counsel to develop and implement the ordinances and bylaws needed to deal with these important issues.

My thank you goes to Michael Nimblett who is the Pavement Management Coordinator for the Merrimack Valley Planning Commission. Michael recently sent me a very informative packet of information which was the basis for this article.

This 22 page packet contains information from several sources including: The Massachusetts General Law, the town of Georgetown, and The Municipal Advocate.

If you would like a copy of this information packet, call me. We have copies ready and will gladly send it to you at no cost.

This article was written by Chris Ahmadjian, Program Manager for the Baystate Roads Program. Quoted material is from Massachusetts General Laws, Chapter 40.



Many local and county officials are often pressured by constituents to put in STOP signs at intersections where the citizens of the neighborhood want to interrupt traffic, either by making the vehicles stop or by making it an inconvenience so that the traffic will use more expedient routes. This is a bad practice and will usually create more problems than they solve.

Studies from around the country show that there is a high incidence of intentional violations where the STOP signs are installed as a speed deterrent. These studies showed that the speed was reduced in the immediate vicinity of the sign but the speeds were actually higher between intersections than they would have been if the signs had not been there.

When installed correctly, a STOP sign will tell the driver and pedestrian who has the right of way. The Federal Highway Administration's Manual on Uniform Traffic Control Devices contains criteria which must

be met in order to justify the installation of stop signs as well as traffic control signals. Among other things, these criteria consider traffic speed, sight distance, traffic volume and the frequency of gaps that occur in the traffic that would allow for safe vehicle entry or pedestrian crossing.

Most drivers are reasonable, but when faced with unreasonable restrictions, may violate them and develop contempt for other traffic controls. Not only is this dangerous for the driver but for the responsible agency as well. Unwarranted or substandard traffic control devices contributing to an accident can sometimes be grounds to award a judgment against an agency involved in a lawsuit.

This article was written by David Whitworth, Safety Engineer, FHWA, and has been reprinted with permission.

Did you know...

Standard doses of over-thecounter antihistamines (allergy and cold medications) can impair driving, vehicle handling, and equipment handling as much as several alcoholic drinks.

Reaction time more than doubles in some drivers who take antihistamines, slowing to levels associated with a blood alcohol level of 0.1+.

This problem could be disastrous for heavy equipment operators who have at their command an immense amount of iron.

Reprinted with permission from Technology Transfer Update, February 1991, San Francisco, CA.

MASS INTERCHANGE

When Push...continued from Page 3

Off-Season. Check all bolts. Care should be taken not to mix or misplace them when the snow plow or snow wing is removed during the off-season. Be sure to replace any fasteners that have damaged threads.

All hydraulic cylinders should be fully retracted when stored during the off-season to prevent damage, corrosion, or contamination. The remaining exposed shaft surface must be coated with a moisture displacement, such as a thick grease, which should be removed before returning to regular service.

When disconnecting hydraulic lines, valves, and so forth, make sure that dirt and other forms of contamination do not enter the system. Use caps for covering hydraulic hose fittings and install plugs in hydraulic ports. Contamination as fine as talcum powder can do extensive damage to today's hydraulic systems.

This article has been reprinted with permission from "Better Roads", August 1993.



DC-140 Road Oyl.

A sampling of four projects illustrating several construction procedures using resin modified emulsion on unpaved roads.

DC-141 Road Construction Ahead



An action packed video for kids! A step-by-step look at how a road is built using earth-moving and construction equipment.

DC-142 Concrete Bridge Railings Modified Thrie Beam Guardrails Cable Guardrails

Concrete Bridge Railings evaluates various concrete bridge railings based on crash test results. AASHTO 1989 specifications are used.

Modified Thrie Beam Guardrails developed from a need for higher performance guardrails in some situations. Similarities to and differences from the standard thrie beam guardrail and the W-beam guardrail are highlighted.

Cable Guardrails shows the results of recent research efforts to improve the performance and reduce the costs of cable guardrail systems.

PA-143 The Idea Store VIII

A hard hat medical decal is an alternative to the medical alert metallic chain, which could get caught in machinery or conduct electricity. This videotape describes this new idea, as well as others: A Maintenance Awareness Program which emphasizes snowplow safety for the general public, the installation of special warning lights to enhance garage safety, and the use of a scrap truck wheel to mount a winged snowplow.

and already in our video library...

MO-120 Plow Power

This videotape provides a training experience for snow plow drivers. The tape shows the proper techniques for residential and local highway plowing. Actual plowing scenes from Massachusetts depict the use of one-way, reversible, wing, and tandem plowing procedures for roads and cul-de-sacs. Responsibility to the public and safety issues are stressed.

5

A Personal Comment From an Embarrassed Editor

I have some advice for any of you who ever find yourself publishing a newsletter. Follow the advice you give in that newsletter. In this case, I am referring to the article "Lifting Basics" on Page 7 in our last issue of *Mass Interchange*.

As I write this, I'm flat on my back at home with the computer on my stomach. My wife said to me this morning that she wished she could stay home in bed. I told her I wished I could go to my office. It seemed ironic at the time.

One week ago, I bent over at the waist to pick up my shoes - with my knees straight - and my back spasmed badly. Luckily, I was next to the bed and fell over onto it and not the floor. After a few minutes I was able to stand, sort of, and my wife took me to the doctor. We waited forty minutes for the doctor so he could examine me for thirty seconds and confirm that I had indeed strained my back. The doctor then redeemed himself by prescribing painkillers and muscle relaxants.

Today I can get around again, albeit slowly, and my wife is thrilled because she was getting sick of bringing me food in bed.

From now on I will follow my own advice. When lifting even the smallest object I will bend my knees. In addition, I will be doing back exercises and stretching daily. I hope everyone learns from my mistake by reviewing page 7 of our last newsletter and remembering to lift smart.

- Chris Ahmadjian



Seventh Annual Mountain of Demonstrations

June 10, 1994

Sponsor: New Hampshire Road Agents Location: Waterville Estates, N.H. Contact: T2 Center, Univ. of N.H.

(603) 862-2826

Don't miss this day filled with static displays and working demonstrations of equipment, materials, and construction methods related to municipal road programs. Over 900 people involved with local road maintenance, repair, and construction are expected. Lunch is free, too! (Registration in advance is requested. You must register in advance for lunch).

National Open House/Technical Workshop on Continuously Reinforced Concrete Pavement

April 19-20, 1994

Sponsor: The Concrete Reinforcing Steel Institute

Location: Rosemont, IL

Contact: Paula Comeaux, (708) 517-1200

Transportation Solutions for "Today, Tomorrow and Beyond" 4th National Conference for Small and Medium-Sized Areas

May 25-27, 1994

Sponsor: Transportation Research Board, U.S.

DOT, MN/DOT

Location: Duluth, MN

Contact: Kathy Briscoe, MN DOT, (612) 296-1614

CONFINED SPACES

Work Smart, Stay Safe

Working in a confined space may be a regular part of your job, or it may be a one-time emergency. Always think of confined spaces as dangerous. You can protect yourself. Learn their hidden hazards and use safe practices. It's the smart way to stay safe.

Few Openings

Confined spaces have few or very small openings. They're not meant for workers to stay in. Ventilation is usually poor.

Boilers, storage tanks, pipelines: they don't have to be small to be confined.

Four Dangers

There are four main dangers in confined spaces. First, there may not be enough oxygen to breathe. Rust, sewage, or chemicals can use it up. Even if there's enough oxygen when you enter, it can be used up by your presence and your work more quickly than you might think.

Second, fire and explosions can both use up oxygen quickly enough to prevent escape and cause death within minutes. Chemicals and gases can explode suddenly, from cigarettes, static electricity, sparks, or heat.

Third, in confined spaces there is the danger of poisonous ("toxic") elements in the air. They can harm your breathing and nervous system. Often, you cannot see or smell them.

Some gases, vapors and dusts can burn or smother you quickly. Others don't have obvious effects and so are especially dangerous. Fourth, there are physical dangers such as loud noise, intense heat, and falls. These can be very hazardous in confined spaces.

Class A, B Or C

Confined spaces are classified by how dangerous they are for your health. This depends on oxygen levels, fire dangers ("flammability"), and poison dangers ("toxicity"). Class A confined spaces are very dangerous. Their oxygen levels may be low. Explosions may be likely. They may have high levels of toxic gases or chemicals.

Class B spaces present dangers if proper safety steps are not followed. Class C spaces have possible hazards, but special work procedures are not necessary.

Only trained people should decide whether a space is Class A, B or C.

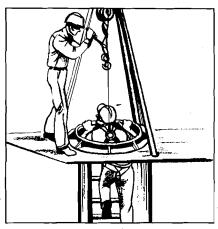
Prepare Carefully

Always prepare before entering a confined space, no matter how great an emergency it is. Use the right ventilation and Personal Protective Equipment. Make sure all equipment is tested and grounded.

Cut off gas, power, steam or water lines into the confined space. Post a permit stating that you are inside.

Have a qualified person test the air for oxygen, flammability, and toxicity. Test high, low and in the corners.

Have at least one "buddy" outside, connected to you by lifeline. Your buddy should know cardiopulmonary resuscitation ("CPR"), first



Confined spaces have few or small openings and poor ventilation.



Testing must *only* be done by qualified, trained persons.

aid, and how to use safety equipment. Stay in contact with your buddy.

Stay alert and don't smoke or eat while in a confined space.

Work Quickly

Do your job as quickly and safely as possible. Then leave the space. You'll protect yourself from the dangers of confined spaces.

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Concrete Information, Portland Cement Association. A compilation of seven articles including Recvcling Failed Flexible Pavements with Cement, Joint Design for Concrete Highways, and Patching Concrete Pavement.

Design, Construction, and

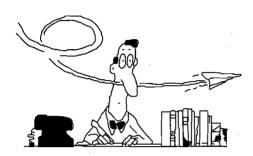
Quality Control Guidelines for Stress Laminated Timber Bridge Decks, U.S. DOT/FHWA, 1993. This publication presents background information on timber bridge materials and their quality control, a step-by-step design procedure, and guidelines for construction, field monitoring, inspection, and maintenance procedures.

New **Publications**

Highway Utility Guide, U.S. DOT/FHWA, 1993. This guide presents state-of-the-knowledge information on the better practices being employed to address the full array of issues which can arise from highway and utility facilities sharing common right-of-way. Planning and coordination, design, permits, legal and safety issues, and notification procedures are addressed.

Improving Operational Safety on Local Roads and Streets,

U.S. DOT/FHWA. A general guide to effective. low cost methods of improving and enhancing operational highway safety. The examples in this publication are based on actual situations and observations. They reflect actual needs and opportunities for highway safety improvements existing on many local roads and streets.



The Baystate Roads Program, which publishes Mass Interchange each quarter, is a Technology Transfer (T2) Center created under the Federal Highway Administration's (FHWA) Local Technical Assistance Program (LTAP). FHWA is joined by the Massachusetts Highway Department, the Department of Civil and Environmental Engineering at the University of Massachusetts/ Amherst, and local public works departments in an effort to share and apply the best in transportation technologies.

In addition to publishing Mass Interchange, the Baystate Roads Program facilitates information exchange by conducting workshops, providing reports and publications and videotapes on request, and offering one-to-one technical assistance on specific roadway issues. Because the program relies on input from many sources, inquiries, articles, and ideas are encouraged.

To contact the Baystate Roads Program, call (800) 374-ROAD (in state) or (413) 545-2604.

MASS INTERCHANGE 8 **WINTER 1994**

BAYSTATE ROADS PROGRAM

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