

Drainage, Drainage, Drainage

»A Roads Scholar Training Activity • Basics Subject Area, 5 Hours«

September 1, 2009 -- Concord

Purpose: To describe the importance of roadway drainage, and how to install and maintain drainage structures.

Who should attend?

- Local road managers and municipal officials.
- City, town, and state employees who work on roads.
- Town administrators, selectmen, and other town officials.
- Others who work with municipalities.

What is the Learning Format?

- Classroom instruction and discussion.
- Small group discussion.

Registration:

- Register online at www.t2.unh.edu/training, or
- call T² at 603-862-2826 or 800-423-0060 (in NH), or
- e-mail t2.center@unh.edu, or
- fax the form to 603-862-0620.

Address check to: UNH Technology Transfer Center

Mail to: UNH Technology Transfer Center
33 Academic Way
Durham, NH 03824

"Very good session and very informative!"

What will the workshop cover?

- Roadway and drainage fundamentals.
- Types and functions of drainage features.
- Typical drainage problems.
- Maintenance for good drainage.

Cost: \$60.00, includes instruction, materials, refreshments, and lunch. This workshop is eligible for Professional Development Hours (PDH's), as well as Continuing Education Units (CEUs), You do not need CEUs for the UNH Roads Scholar Program. This cost is shared by the FHWA, the NHDOT, and your registration fee. To cancel a registration, call the UNH T² Center as soon as possible. Credits are given for cancellations made at least 3 business days before the workshop. You may send substitutions to the workshop without prior notice.

(detach here)

Drainage, Drainage, Drainage Course Registration Form

Workshop Date: _____ **Workshop Location:** _____

Name: _____ Cell / Emergency phone: _____

Name: _____ Cell / Emergency phone: _____

Name: _____ Cell / Emergency phone: _____

Name: _____ Cell / Emergency phone: _____

Name: _____ Cell / Emergency phone: _____

Affiliation: _____ Phone: _____

Address: _____ Email: _____

Town/City: _____ State: _____ Zip: _____

***We only accept UP TO FIVE registrations from the same organization for each date of a workshop.**

Register early!



Butch Leel is the Technical Support Assistant at the UNH T² Center. He worked with the NHDOT for 31 years. Butch is a Master Roads Scholar.

Dennis Ford is a Maintenance Supervisor for the NHDOT District 2. He has been working for District 2 for 28 years.



DIRECTIONS

Concord: *The Holiday Inn at 172 N Main St.* **From Rte. 4:** Travel North on Rte. 4. Enter the Epsom roundabout and take 2nd exit to stay on Rte. 4. Merge onto US-202 W/US-4 W toward Concord. Travel for 5.1 miles and turn left onto N. Main St./US-202/US-3/Daniel Webster Hwy. The Inn is 0.3 miles up the road.

From I-93: Travel on I-93 and merge onto US-202 W/US-4 W via exit 15W toward N. Main St./US-3/Downtown. Travel for 0.5 miles and turn left onto N. Main St./US-202/US-3/Daniel Webster Hwy. The Inn is 0.3 miles down the road.

SCHEDULE

8:00 - 8:30	<i>Registration and refreshments</i>
8:30 - 9:30	<i>Workshop</i>
9:30 - 9:45	<i>Break</i>
9:45 - 11:30	<i>Workshop</i>
11:30-12:30	<i>Lunch</i>
12:30-2:00	<i>Workshop</i>
2:30	<i>Evaluations & Certificates</i>



Technology Transfer Center

New Hampshire LTAP at UNH

Cases for Drainage

Inadequate drainage is the most frequent cause of roadway failure. Here are some examples:

- Water beneath a pavement weakens its base and sub-base. Even a minor base weakness can cause the pavement to crack, allowing water into the base from above. This gives water further opportunity to cause damage.
- Deterioration of the base increases with time at an increasing rate of speed. Therefore, it is very important to properly drain older roads because they have been exposed to the elements for a longer amount of time than newer roads.

Attention to proper drainage in roadway design, construction, and maintenance can not be emphasized enough. Elements of a proper drainage system must be properly designed, constructed, and maintained. The instructors will describe and explain all aspects of drainage in this workshop.

