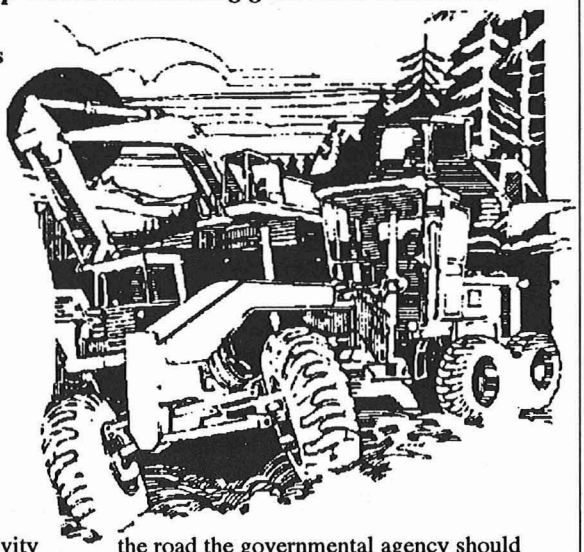
Drainage Management

Management planning is first step toward maintaining good roads and streets



Adequate and proper drainage is the most important aspect of maintaining good roads and streets.

If drainage facilities do not work, for whatever reason, serious problems lie ahead. Developing a strong drainage management plan is the first step toward reducing the severity and expense of water damage.

A good drainage management plan consists of the following elements:

- an inventory system
- needs assessments
- activities list
- prioritization
- cost estimates for each activity
- work schedule
- strategies for obtaining adequate funding (no funds, no work)

For estimating cost, activities must be well defined and equipment, materials and personnel needs determined. In developing the argument and defense for the budget and request for funds, administrators must also know the consequences of deferring maintenance and the probability of traffic delays, road/street closures, increasing user cost, public dissent and citizen complaints. These are the dictates which govern how much work can be done and possibly the length of time an administrator may remain in office.

Prepare a well thought out presentation, argument, and defense. Work toward three possibilities: (1) a preferred budget covering all needs, (2) a budget covering most needs with some low priority deferrals, and (3) a minimum budget of austerity. If one must continually operate in the latter category, they should hire a lobbyist or a public relations person because the transportation needs of the public and the duties of the office are not being carried out.

A quick overview of maintenance functions includes pulling or cleaning ditches, mowing and/or clearing ditch lines as needed, cleaning side drains and cross drains, repairing damaged pipe ends, repairing and replacing damaged pipe sections, cleaning and repairing curb and gutter sections, cleaning and removing debris from catch basins and curb openings, cleaning and repairing storm sewers, repairing damage caused by erosion, installing under drains as needed, and cleaning out sinkholes which receive road/street drainage.

There should be, by ordinance, a clear cut limit as to how far back from the edge of the road the governmental agency should maintain driveways and drainage facilities. Responsibilities of adjoining property owners in mowing ditch lines, installing side drains under driveways, and letting debris from their property interfere with drainage should also be clearly stated in ordinances and enforced.

A little money, effort, preparation, and foresight in drainage maintenance can save a lot of expense down the road, reduce the number of public complaints, and improve the serviceability of the road. The adage still holds: If you want a good road, take care of the water, it was there first.

This article was adapted from ROADTALK, Vol. 4, No. 1, the newsletter of the Tennessee Transportation Assistance Program. ■

Clean Your Ditches

It isn't difficult to find ditches filled with debris on many rural roads. There appears to be more of these clogged water relief facilitates than in past years. One factor is the replacement of our gravel surfaces with chip seals and other improved surfaces. It has always been the accepted maintenance practice on gravel surfaced roads to pull the ditches first. This was done to recover surface gravel to be redistributed over the roadway during the shaping operation. And all was well -- recovered materials opened up the ditch for good drainage.

After the surface is sealed and chipped, however, the blade operative is no longer needed. Hence, the grader is not used on the road at the old frequency. There is also the problem of pulling the ditch material onto the road with few resources and equipment to pick up and remove the ditch material from the roadway. In addition to dump trucks, a way to load the material must be available such as a Bob Cat, front end loader, or an elevating belt loader.

None-the-less, ditches must be pulled. A blocked ditch permits water to travel laterally and undermine the pavement leading to base and surface failure. On graveled roads washboarding, rutting, and surface erosion result.

This article was modified and reprinted from ROADTALK, Vol. 6, No. 2, the newsletter of the Tennessee Transportation Assistance Program. ■

CEUs...
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courses every year. Each course will be held in two locations across the state. Such topics as work zone safety on rural roads, culvert inspections, slope maintenance and slide protection, preparation for claims litigation.

According to the IACET: One Continuing Education Unit (CEU) is ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction.

The CEU serves as a measure of knowledge and accomplishment by private industry and many agencies at the Federal, State and local levels. The concept of CEU's had it's beginning in 1968.

The most common uses of CEU's are to maintain technical certifications and professional licenses, to evaluate employees for job hiring and promotion, and to serve as a standard measure of individual continuing education experiences.

Participants of the NH T² Center's CEU program are encouraged to maintain their own records of CEU credits. You will be issued a Certificate of Training indicating the course title and number of CEU's for this purpose. If your certificate should become lost, stolen or destroyed; the National Highway Institute (6300 Georgetown Pike, McLean, VA 22101) will verify the CEU's earned from their official records upon receipt of your written request. Currently, there is no fee for these services.

IF YOU HAVE ANY QUESTIONS CALL OUR TOLL FREE NUMBER 1-800-423-0060. ■