

Tips to Help Maintain and Keep the Roads in Good Condition

1. Keep the water away from the road

Good drainage is vital. Keep water off and away from roads. A saturated road base is a weak road base. Surface water combined with traffic creates potholes and cracking. If improperly channeled, water will cause erosion and break down the edge of pavement. Whether a muddy road or a frost heave, water is trouble.

Proper surface drainage prevents water from infiltrating through the road surface. Shoulders protect the pavement edge and allows water to flow into the ditches. Good drainage moves water to the ditches and away from the road.

Ditches carry water away from the road. Keep ditches clean and protected from erosion. Water left in the ditches leaches into the base material. Use culverts, or water turn outs, at frequent intervals to move the water in the ditches away from the road.

Culverts channel water from one side of the road to the other. They reduce erosion by controlling flow, and water velocity.

2. Build on a firm foundation

Roads wear out from the top but fail from below. Without adequate support, roads deteriorate rapidly. Good roads require a foundation of stable materials.

3. Use the best materials available

The supply of natural, good quality material is being depleted. Blended or crushed gravel is a less expensive alternative. Use good quality materials. Using inferior materials requires excessive maintenance over the life of the road.

4. Compact well

Compact the base, subbase, and surface materials. An improperly compacted road will fail. Water will enter the road and through air voids left in the

materials.

Compaction expels the air between the materials, making them more dense. Crushed or angular particles become more stable with compaction than rounded particles of a similar size. Moisture is needed for good compaction.

5. Design for winter maintenance

Roads designed for winter maintenance will be adequate the rest of the year. Consider the following: if the road is wide enough to allow a plow and bus to meet, it should be wide enough in every condition.

Grades should be at least one percent for drainage and no more than 10%. Steep roads are difficult to travel, especially in the winter.

6. Build for traffic loads and volume

Design roads to accommodate the largest vehicle that will use the road. Roads built only to serve residential traffic will breakdown if it starts carrying heavy loads. Design roads, like bridges, with the expected type of volume in mind.

7. Pave only roads that are ready

Do not pave an improperly prepared road. Build roads using well-compacted layers of free-draining aggregate.

8. Build from the bottom up

Before correcting a problem, look at the cause. A top dressing of gravel, a seal, or a pavement overlay will not improve poor base and drainage. It may be necessary to remove old materials and rebuild the road.

9. Protect the investment

Roads and bridges require regular maintenance.

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Maintenance preserves the investment and prevents costly rehabilitation.

- **Roadway surfaces:** blade and shape; patch; resurface; dust control; and snow and ice removal.
- **Drainage:** clean and repair culverts, and ditches.
- **Roadside:** cut bushes; trees and grass; repair and prevent roadside erosion.
- **Bridges:** clear channels; repair rails, decks and structure; clean and paint.
- **Traffic services:** sign maintenance, and cut vegetation.
- **Special projects:** restore or improve, emergency work such repairing washouts, and retaining walls.

10. Keep good records

Good records makes roadwork easier. Good records make budgeting easier. Record work as it done.

Source:

10 Basic Tips to Help Maintain and Keep Your Roads in Good Shape, The Link, KTC, Tech Transfer Center, Vol. 24, No. 1, Spring 2008, p. 5-7, 10

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lings for that segment is at least 50 points.

If your property has one or more grid segments that did not have 50 points of April 1, 2008, you are not required to plant trees to achieve 50 points. However, you may not cut any existing trees or saplings in those segments.

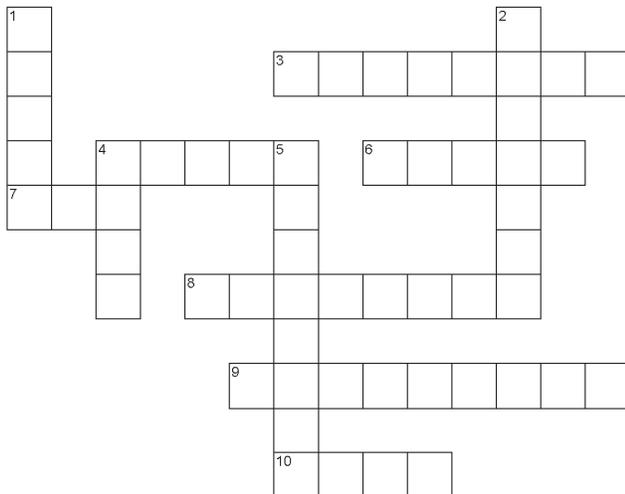
This is a summary of the CSPA's major provisions. Before planning or undertaking any construction, excavation or filling within the protected shoreland, contact the DES Wetlands Bureau at: **(603) 271-2147 www.des.nh.gov/cspa**.

Source:

http://www.des.nh.gov/news/envnews_archives/news032008.pdf accessed 6/5/08 pages 4-5

Crossword

Test your knowledge, items from this newsletter.



www.CrosswordWeaver.com

Across:

3. A dust control product.
4. Governor _____ welcomed the Mutual Aid Conference.
6. This document is expected in 2008.
7. When signs are over 50 sq. ft. use ___ post(s).
8. An issue on asphalt roads
9. This sign support enhances roadside safety.
10. Enacted to protect water quality

Down:

1. Signs should be placed on the _____ side of the road.
2. Carries water away from the road.
4. Before correcting a problem _____ at the cause.
5. A Section 106 review is for _____ resources.