

St. Clair County Road Commission Match Money Program

Every year, ditching is performed by the Road Commission on local roads under the direction of the townships using Match Money funds.

Using Match Money funds the following work has been accomplished:

In 2008, 9.73 miles of ditching was done,

In 2007, 10.06 miles of ditching was done, and

In 2006, 9.92 miles of ditching was completed.

While road drainage is also funded through the Road Commission's primary and local budgets, it is only with the townships' participation that we have been able to achieve the accomplishments reported. We are grateful for the townships' support as they assist us in the ongoing struggle to fund the necessary maintenance of the St. Clair County transportation system.

St. Clair County Road Commission

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Road Drainage



St. Clair County Road Commission



Road Drainage

Whether it is concrete, asphalt or gravel, when a road fails, inadequate drainage is often the cause. Shoulders damaged by heavy rain or floods can allow water to stand on the road or seep back into the base, saturating it. Surface cracks allow water to penetrate and weaken the base. Too much water remaining on the surface, or in the base and sub-grade combine with traffic action to cause potholes, cracks, and pavement failures.

To reduce water damage it is necessary to maintain a good drainage system. One dollar spent on drainage will save two dollars on maintenance.

Ditches

The major function of a road ditch is to carry water away from the roadway into streams or other natural waterways. To fulfill this function ditches must be properly shaped for safety, maintenance, water flow and erosion control. The ditch should be at least one foot below the bottom of the gravel base. A road ditch is not designed to accommodate surrounding surface water for land drainage unless the road ditch is also a county drain or natural watercourse.

Ditches should extend the shoulders with smooth transition to a shallow front slope. Sides that are too steep may cause vehicles to roll over and will impede maintenance.

It is very important that water flow through ditches and not stand. Standing water may saturate the sub-surface material beneath the roadway preventing the road from draining during the next storm. Standing water also reduces the ditch's capacity to handle runoff. The next storm could wash out the roadway.

The flow of water through ditches should not erode the ditch itself or weaken the shoulder. Vegetation in ditches is necessary to help keep the soil in place and minimize erosion.

Drainage Systems

Attention to proper drainage design and maintenance on rural roads cannot be over-emphasized. A proper drainage system has four elements—roadway, shoulders, ditches, and culverts—that working together, prevent water from infiltrating the road surface, remove water from the driving lanes to the side ditches, and carry water away from the roadway. Even roads with all the proper drainage design elements will flood, wash out, and develop cracks and potholes if maintenance is neglected.