#### MAINTENANCE PLANNING GUIDELINES

2006

**ACTIVITY:** Drainage (R316)

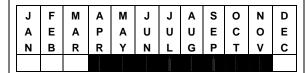
**ACTION:** Repair Paved Ditches & Slopes

### **MAJOR & MINOR**

**DEFINITION:** The time and expenses incurred for the installation, repair and maintenance of roadway drainage ditches, structures, and all slide repairs. This includes installing and maintaining pavement drainage systems.

**PURPOSE:** To maintain drainage by the repair of broken or settled sections of paved ditches, slopes and related drain basins.

**SCHEDULING:** Schedule when sections cannot be repaired by mudjacking or backfilling, when temperature is above freezing.



# **RECOMMENDED EQUIPMENT:**

- Compressor/Breakers
- Loader or Backhoe
- Backhoe Mounted Stinger
- Trucks
- Traffic Control Equipment; (See EPG 616.23 Traffic Control for Field Operations).

#### **RECOMMENDED MATERIAL:**

- Ready-Mix Concrete
- Shotrock
- Seed
- Mulch
- Silt Fence, Straw Bales, Rock (for Berms), Triangular Silt Dyke, Coir Fiber Logs
- Sod

**Erosion Control Blankets** 

# **RECOMMENDED PROCEDURE:**

- 1. Call Dig Rite and check for MoDOT utilities, if digging or earthwork is involved.
- 2. Place traffic control devices as needed.
- 3. Break settled or damaged sections, and fill and shape damaged sections with clean shotrock.
- 4. Pour grout mix into shotrock and shape surface.
- 5. Drain basins should be repaired by removing damaged sections, forming and pouring new concrete to match existing grades.
- 6. Remove traffic control devices.

NOTE: Other alternative methods for repairing paved ditches and slopes are becoming available, please see attached pictures.

**SAFETY:** Call before you dig to locate utilities (**1-800-DIG-RITE**). Watch for traffic when operating equipment on the roadway. Wear all appropriate PPE. Refer to the Safety Policies, Rules & Regulations – Employee Handbook.

**OTHER CONSIDERATIONS: N/A** 

**REFERENCES:** Missouri Standard Specifications for Highway Construction Section; 609.10 802, 803, 805, 806. Missouri Standard Plans, 806.10.