### MAINTENANCE PLANNING GUIDELINES

2006

**ACTIVITY:** Drainage (R316)

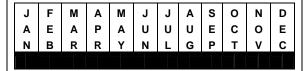
**ACTION:** Channel Control

#### 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 and/or install channel control devices such as dikes, deflectors, riprap, gabion baskets, or other control measures.

**SCHEDULING:** As needed.



### **RECOMMENDED EQUIPMENT:**

- Dump Trucks
- Backhoe
- Excavator
- Loader
- Dragline
- Traffic Control Equipment; (See EPG 616.23 Traffic Control for Field Operations)

# 6. Clean up work area.

required.

7. Install erosion control devices as necessary

2. Call Dig Rite and check for MoDOT utilities.

8. Seed and mulch as necessary.

4. Remove debris from channel.

5. Install channel control devices.

**RECOMMENDED PROCEDURE:** 

1. Obtain Corps of Engineers permit, as

3. Place traffic control devices as needed.

9. Remove traffic control devices.

### **RECOMMENDED MATERIAL:**

- Riprap
- Gabion Baskets, Ajax, & Rock
- Fill Dirt
- Seed
- Mulch

**SAFETY:** Wear all appropriate PPE. Refer to the Safety Policies, Rules & Regulations – Employee Handbook.

**OTHER CONSIDERATIONS:** Requires planning well in advance to obtain Corps of Engineers permit.

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

## R316 - Channel Control



(1) Indian Creek -- Howell County Roadway Embankment Scour Upstream End



(2) Indian Creek – Upstream Full Flow Condition



(3) Indian Creek – Upstream of Triple Box Culvert at Route AM



(4) Ajax Blocks



(5) Ajax Installation with Silt Blanket



(6) Ajax Installation - Continued



(7) Completed Installation of Ajax Blocks



(8) Ajax Blocks Performing Under Full Flow Conditions



(9) Erosion under structure



(10) Preliminary Grading for Gabions