#### MAINTENANCE PLANNING GUIDELINES

2006

ACTIVITY: Edge Rut Repair (R22E)

**MAJOR & MINOR** 

**ACTION:** Edge Rut Repair (LM)

**DEFINITION:** The time and expenses incurred for placing aggregate or bituminous mixture in edge ruts.

**PURPOSE:** To repair pavement edge drop-offs by placing aggregate or bituminous mixtures in edge ruts.

**SCHEDULING:** As needed throughout the year. Refer to Incident Response Plan for priorities.



### **RECOMMENDED EQUIPMENT:**

- Motor Grader or Tractor w/Blade
- Loader
- Dump Truck w/Rut Filler Attachment
- Roller
- Box Sled or Evener
- Shouldering Machine Attachment
- Grademaster
- Retriever
- Distributor
- Pull Broom
- Traffic Control Equipment; (See EPG 616.23 Traffic Control for Field Operations)

## RECOMMENDED MATERIAL:

- Rotomilled Material
- Aggregate
- Asphalt
- Pre Mix Material
- Liquid Asphalt Tack Grade

#### **RECOMMENDED PROCEDURE:**

- 1. Place traffic control devices as needed.
- 2. Apply liquid asphalt into rutted area, if necessary.
- 3. Fill in edge rut with material.
- 4. Level material to grade.
- 5. Compact material.
- 6. Clean shoulder and edge of pavement, as necessary.
- 7. Remove traffic control devices.

**SAFETY:** Wear all appropriate PPE. Exercise caution when rolling near shoulder edge. Refer to Safety Policies, Rules & Regulations – Employee Handbook

**OTHER CONSIDERATIONS:** Sections that require continual maintenance, such as on the inside of curves, should be cut down, base material placed, and the surface paved with bituminous mix. Do not overfill edge rut. Maintain positive shoulder drainage.

**REFERENCES:** Missouri Standard Specification Sections 401, 1004 and 1015.

# **R22E Edge Ruts**



(1) Roadway Prior to Edge Rut Repair



(2) Edge Rut Repair Train



(3) 2' Head Roto Grader



(4) 2' Roto Grader (Back View)



(5) Motor Grader Blade



(6) Oil Distributor



(7) Hot-Mix Lay Down



(8) Box Blading Hot Mix Asphalt



(9) Box Blade and Roller Operation



(10) Final Product



(11) Outside Shoulder Edge Prior to Edge Rut Repair



(12) Applying 2" Aggregate to Outside Edge of Shoulder



(13) Applying 2" Aggregate on Shoulder



(14) Blading 2" Aggregate with Motograder



(15) Blading 2" Aggregate with Motograder



(16) Sweeping Shoulder



(17) Outside Edge of Shoulder – Finished Product