

MAINTENANCE PLANNING GUIDELINES

2006

ACTIVITY: Roadway Shoulders
(R225)
MAJOR & MINOR

ACTION: Repair Concrete Shoulders & Approaches

DEFINITION: The time and expenses incurred to expand installation and maintenance of asphalt concrete and aggregate roadway shoulder, approaches and clear zones.

PURPOSE: Eliminate potholes and shoulder drop-off to adjacent shoulder or pavement.

SCHEDULING: As needed, or 50°F and above.

J	F	M	A	M	J	J	A	S	O	N	D
A	E	A	P	A	U	U	U	E	C	O	E
N	B	R	R	Y	N	L	G	P	T	V	C

RECOMMENDED EQUIPMENT:

- Trucks
- Dowell Drill
- Concrete Saw
- Wheel Saw
- Backhoe or Loader
- Traffic Control Equipment;
(See EPG 616.23 [Traffic Control for Field Operations](#))

RECOMMENDED PROCEDURE:

1. Place traffic control devices as needed.
2. Use wheel saw in middle of repair to relieve stress or make the piece smaller to aid removal.
3. Saw patch perimeter with diamond blade concrete saw.
4. Remove concrete.
5. Prepare subgrade.
6. Place forms.
7. Align, drill, and install greased dowels.
8. Dampen subgrade and forms.
9. Place and vibrate concrete.
10. Screed and finish surface.
11. Edge, texture and date patch.
12. Spray with curing compound.
13. Cure to strength.
14. Remove forms and repair inslope.
15. Remove loose material.
16. Pour liquid asphalt around edges.
17. Remove traffic control devices.

RECOMMENDED MATERIAL:

- 8-½ Bag Ready Mix
- Calcium Chloride
- 1” Epoxy Coated Dowel Bars Spaced 5 Per Wheel Path on 12” ctrs
- Liquid Emulsified Asphalt
- Curing Compound

SAFETY: Extreme care should be exercised when working adjacent to traffic. Wear all appropriate PPE. Refer to [Safety Policies, Rules & Regulations – Employee Handbook](#).

OTHER CONSIDERATIONS: Concrete should be from a calibrated ready-mix plant.

REFERENCES: Missouri Standard Specifications for Highway Construction; Section [613.10](#). Missouri Standard Plan [613.00](#).