

MAINTENANCE PLANNING GUIDELINES

2006

ACTIVITY: Drainage (R319)

ACTION: Clean & Repair Pipe & Box Culverts
B. Box Culverts

MAJOR & MINOR

DEFINITION: The time and expenses incurred from removing and replacing pipe culverts. Includes time and expenses incurred for installing a new lining in an existing culvert.

PURPOSE: To clean, repair, and fill voids of box culverts and restore roadway drainage.

SCHEDULING: As needed.

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
- Loader, Backhoe, or Excavator
- Concrete Mixer
- Compressor/Breakers
- Water Tank w/Trash Pump
- Traffic Control Equipment, Reference (See EPG 616.23 [Traffic Control for Field Operations](#)).

RECOMMENDED PROCEDURE:

1. Call Dig Rite and MoDOT to check for utilities.
2. Place traffic control devices as needed.

CLEAN OUT

1. Remove drift and debris as needed.

REPAIR

1. Remove bad concrete, form, and pour concrete.

FILL VOIDS

1. Fill large voids and eroded outlet areas with quarry run rock and if needed grout with concrete.
2. Internal voids along the barrel sides and bottom should be mudjacked.
3. Remove traffic control devices.

RECOMMENDED MATERIAL:

- Concrete
- Water
- Quarry Run Rock
- Form Material
- Cement
- Agricultural Lime

SAFETY: Call before you dig to locate utilities (1-800-DIG-RITE). Use care when climbing on steep slopes, especially quarry run rock on slopes. Wear all appropriate PPE. Refer to the [Safety Policies, Rules & Regulations – Employee Handbook](#).

OTHER CONSIDERATIONS: Check if Corps of Engineers permit is needed.

REFERENCES: N/A