

Activity 121 Minor Culvert and Inlet Cleaning

Description

Activity 121 involves the cleaning of soil, rock, and debris from the following minor drainage facilities to restore proper operation including:

- Culverts and storm sewers less than 6 feet (1.8 meters) in diameter or width.
- Box culverts less than 6 feet (1.8 meters) in width.
- Siphons less than 6 feet (1.8 meters) in width.
- Catch basins and inlets.
- Manholes.

It also involves loading, hauling, testing, and disposing of excess material.

General Instructions

Perform this activity to maintain these facilities at the level allowed by the performance budget and as described in the *Desired Conditions of Maintenance Features on State Highways*.

Refer to Activities 160 and 162 for:

- Maintenance of culverts, storm sewers, siphons, and box culverts that are 6 feet (1.8 meters) or greater in diameter or width.
- Maintenance of drains, catch basins, and inlets on bridges.
- Maintenance of overhead flumes.

Maintain the above listed drainage facilities in the condition necessary to accommodate their design capacity, including:

- Inspect each drainage facility, to ensure its proper operation, especially during periods of heavy rainfall or runoff. Inspect each drainage facility preferably at least annually. During inspections, also identify damage to be repaired under Activity 123. Charge inspection to Activity 121, 129, or 047 as appropriate.
- During inspections, also look for any changes in drainage patterns that may affect the operation or capacity of the existing structure.
- Mark drainage facilities that may become hidden or may be damaged by other maintenance operations.
- Assure that debris, vegetation, etc. does not or will not block the flow of water, especially during periods of heavy rainfall or runoff. Control or remove vegetation that may impair the operation of the structure.
- Remove soil, rock, and debris from drainage facilities as needed. A pressurized water apparatus, such as a vactor-jet rodder, can be used to open plugged facilities and remove unwanted material.
- If a drainage facility needs repair or replacement, refer to Activity 123.
- If pump or lift stations are part of the drainage system, schedule and perform needed maintenance under Activity 129 to assure proper operation.
- If catch basins, inlets, or manholes are designed to contain oil or other surface contaminants, the Transportation Maintenance Manager must be aware of the

location of those facilities and must appropriately clean those facilities to prevent release of the oil or other surface contaminants into waterways.

- If the material in the drainage facility may contain material that is harmful to the environment, work with the District Manager and the Region Environmental Coordinator to properly test the material and determine the appropriate removal and disposal of the material.

Work under this activity may involve areas that contain endangered species. Refer to the *Resource Area Maps* and comply with all restrictions for work in those areas. Seek assistance from the District Manager and the Region Environmental Coordinator as needed.

Controlling Erosion, Sedimentation, and Pollutants or Contaminants

Plan and implement methods to control erosion, sedimentation, and pollutants or contaminants, including those discussed in the Control of Erosion, Sedimentation, and Pollutants or Contaminants section of this Guide and the *ODOT Routine Road Maintenance Water Quality and Habitat Guide Best Management Practices*.

As appropriate, implement and maintain devices and processes including those described in the *Field Manual for Erosion and Sediment Control*.

If needed, test material for materials that may be harmful to the environment. Assure that waste or excess material is disposed of in an appropriate location.

Temporary Protection and Direction of Traffic

Plan, implement, and maintain traffic control as addressed in the *Traffic Control on State Highways for Short Term Work Zones* handbook.

Equipment

Equipment includes:

- Truck.
- Vactor jet rodder (for removing debris from structure interiors), with water truck if needed.

Materials

Materials include:

- Devices to control erosion and sedimentation.
- Material to sample and/or test potentially harmful material.

Work Method

1. Implement appropriate traffic control.
2. Implement appropriate measures to control erosion and sedimentation.
3. If harmful material is suspected, sample and test as needed before further disturbing or removing the suspected material.
4. Remove and dispose of debris from the drainage structure and adjacent area as needed.

5. Inspect the drainage structure for damage or needed repairs. As appropriate, schedule or arrange for needed repairs.
6. Remove traffic control.
7. Dispose of removed material in an appropriate location.

Measurement of Accomplishment, Expenditure Account, and Charge Activity

Measurement is number of installations serviced. Expenditure account type is Highway EA. Designate a subjob of 800 if the work involves bicycle path facilities.

- Charge TEAMS Activity 121 when machine cleaning drainage structures.
- Charge TEAMS Activity 351 when maintaining drainage structures to maintain or restore fish passage.
- Charge TEAMS Activity 521 when hand cleaning drainage structures.