

Activity 145 Illumination Maintenance

Description

Activity 145 involves repairing and maintaining illumination systems for roadways, tunnels, bridges, bicycle/pedestrian paths, and exterior illuminated signs to preserve or restore proper operation. It includes all work on lighting fixtures, wiring, poles and bases, conduits, junction boxes, control components, and roadway illumination components that are part of a signalized intersection. It also includes payment of related power costs.

General Instructions

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

Refer to Activity 137 for maintenance of illumination in rest areas or Activity F03 for maintenance of illumination at building sites, except for illumination on the entrance/exit ramps to the facility.

Charge Activity 165 for work involving illumination that is needed only for operation of moveable bridges.

Refer to Activity 305 when performing work on construction projects or for other jurisdictions or entities. Obtain proper approval before performing any of this work.

If the electrical service, that provides power for an illumination installation, also provides significant power to facilities covered under other activities, prorate the power cost to the significant activities of use.

Some cities are responsible for maintenance of illumination within or near the cities. Also, some private entities may be responsible for maintenance of illumination installed under a permit from ODOT.

The Manager responsible for maintenance of ODOT illumination systems must be aware of responsibility for maintenance of all illumination on the State Highway system. Do not perform any work on illumination or other installations, that are the responsibility of cities or other entities, without proper request and approval.

Assure that local jurisdictions or private entities are properly billed for their share of the cost of maintenance and energy, as defined in the agreement for each installation.

The Manager responsible for maintaining illumination and the District Manager responsible for that work should develop a maintenance schedule for each illumination system. The schedule could include:

- Frequency of inspection and items to be inspected.

- Frequency of specific routine maintenance and replacement work.
- Priority of maintenance or repair identified or needed outside of the scheduled maintenance.
- If another jurisdiction or entity is responsible for the costs of maintenance and operation of the illumination installation, the process and/or procedure to assure that the responsible party pays the costs involved.
- If the illumination installation also includes facilities that are included in other activities, how to prorate the costs to the proper activities.

The Manager should have a copy of the “As Constructed” plans for each illumination installation and should note, on those drawings, any changes that are made to the installation.

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*.

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

Select equipment suited for the work and situation, which may include a truck with elevated bucket to service overhead devices.

Materials

Materials may include:

- Replacement parts identified in the maintenance schedule or during inspections.
- Miscellaneous supplies for electrical and other repairs.

Work Method

1. Identify work to be accomplished.
2. Implement appropriate traffic control.
3. If the work may cause erosion or sedimentation or may release pollutants or contaminants, implement appropriate methods to control them.
4. Perform work as needed.
5. Remove traffic control.
6. Dispose of waste or excess material at an appropriate location.

Measurement of Accomplishment, Expenditure Account, and Charge Activity

Measurement is number of worker hours involved. Expenditure account type is Highway Electrical EA (use a subjob of 043 or 045 appropriate for the responsible crew). Charge the appropriate Bridge EA when maintaining illumination in tunnels or enclosed undercrossings. When performing work on an interstate bridge where ODOT will recover part of the costs from another agency, charge the appropriate EA to allow that cost recovery. Designate a subjob of 843 or 845, as appropriate, if the work involves bicycle path facilities.

- Charge all work to TEAMS Activity 145.