

# UTILITY POLICY NO. 2014-1

## ADJUSTING UTILITY STRUCTURES FOR MILL-FILL PAVING PROJECTS

Initial Policy Development Date: November 21, 2014

Last Revision Date: December 21, 2015

### **Purpose:**

The purpose of this policy is to establish uniform criteria for how and when MaineDOT will request utility facility owners to lower their underground utility structures in preparation for mill-fill paving projects.

### **Project Information:**

Utility coordinators should consider the project scope in combination with existing utility structure conditions before requesting a utility to lower their structures. Paragraphs 1 and 2 below present scope and existing condition considerations which may impact the decision to lower/adjust utility structures:

- 1) What is the scope of the paving project?
  - Is the grinding operation intended to re-establish cross-slope?
  - Is the grinding operation to a specific uniform depth across the highway?
  
- 2) What is the existing condition of the utility structure?
  - Does the structure top slope match the planned final grade? If not, it may need to be adjusted to match planned final grade.
  - Does the structure need to be rebuilt due to age and how does that affect preparation for the paving operations? It may be useful to remove the structure top down to the repair level, place steel plating over the structure for grinding/paving operations, then rebuilding the structure top before final lift paving.

These questions need to be answered before the utility coordinator can decide what effort is needed from the utility. In every case, MaineDOT has the authority to request that the utility perform the necessary adjustment or reconstruction of their structures in preparation for our paving project. In addition, field conditions may change between initial coordination and final construction. It is advisable that utility coordinators make the utilities aware that, although not expected, they may need to make additional unplanned adjustments as required by final construction. This expectation should be part of coordination discussions and presented in the 104 Special Provision.

## Utility Structure Adjustment Approaches:

There may be site specific issues which do not allow the approaches described below. In general however, based on the project specific information outlined above, utility coordinators should request that the utilities adjust their structures, if necessary, in accordance with the following guidelines:

- **Grinding up to 2 inches in Depth**

Where MaineDOT is grinding up to 2 inches, it may be left to the contractor's discretion to use asphalt or rubber ramps around utility structures. Unless there are specific public safety concerns with exposed structures, the rims may remain exposed until paving operations. *Note: if the project includes cross slope or profile adjustment or where two or more layers of pavement are planned (including shim) the utility structures must be lowered prior to grinding as described in the "Grinding over 2 Inches in Depth" section below.* The contractor may wish to warn the traveling public and minimize vehicle damage by placing barrels or cones over the exposed structure rim locations. Before using barrels or cones, the contractor must address the use in the Contractor's Traffic Control Plan and the Contractor's representative and the Department's Resident should judge whether their use is applicable and will not create a hazard for the traveling public. Alternately, the contractor may place asphalt or rubber ramps if paving operations cannot be completed in a reasonable amount of time.

In all cases, gas and water gate valve boxes should be lowered before grinding operations to prevent damaging the valve box; except where the utility allows grinding through the valve box. Facility owners will be required to raise the gas and/or water gate valve boxes before paving operations. If paving operations cannot be completed in a reasonable amount of time, the contractor may use barrels or cones, or place asphalt or rubber ramps as described above. The contractor should be encouraged to pave the highway as soon as possible to minimize vehicle damage issues as a result of exposed utility structures.

- **Grinding over 2 inches in Depth**

Grinding over 2 inches, where cross slope or profile adjustments and corrections are made or where two or more layers of pavement are planned (including shim), the facility owners are required to lower their utility structures. The utility will be required to place steel plating over their structures before grinding/paving operations begin. The facility owners will then rebuild the structure top before final lift paving. The contractor may wish to warn the traveling public and minimize vehicle damage by placing barrels or cones over the exposed structure rim locations. Before using barrels or cones, the contractor must address the use in the Contractor's Traffic Control Plan and the Contractor's representative and the Department's Resident should judge whether their use is applicable and will not create a hazard for the traveling public. Alternately, the contractor may place asphalt or rubber ramps if final lift paving operations cannot be completed in a reasonable amount of time.

As described above, gas and water gate valve boxes should be lowered before grinding operations to prevent damaging the valve box (except where allowed by the utility). The facility owners will then raise the valve box before final lift paving. If paving operations

cannot be completed in a reasonable amount of time, the contractor may use barrels or cones, or place asphalt or rubber ramps as described above. The contractor should be encouraged to perform final lift paving as soon as possible to minimize vehicle damage issues as a result of exposed utility structures.