

## **3.10 Drainage Guidelines for Resurfacing Projects**

### **3.10.1 General**

The Department's drainage requirements for a resurfacing project are different from a reconstruction project. With the understanding that every project is unique, there are typical guidelines that should be considered for resurfacing projects. These guidelines are outlined in this section and are discussed below.

### **3.10.2 Adequate Cross Slope for Proper Drainage**

The designer should ensure that the cross slope of the proposed overlay is constructed to current roadway design standards and consistent with the Department's current specifications. Adequate information should be shown on the plans to allow the proper construction of the roadway cross slope. This may include typical sections, gutterline profiles, superelevation grade lists, etc. A typical detail for the normal crown and superelevated section should be included on the plans.

It is recommended that pavement elevations be verified by survey prior to the final overlay to ensure the proper cross slopes have been established. Pavement milling or bituminous wedge courses may be required.

### **3.10.3 Modifications to the Existing Drainage System**

Catch basin tops may need to be reset. If curbing is to be removed, the existing Type "C" inlets should be converted to Type "C-L" inlets. The designer should ensure that the slope is well established to intercept the pavement runoff. Catch basins and other pertinent drainage structures should not be removed if they connect subdrains.

### **3.10.4 Drainage Computations**

Detailed storm drainage computations are typically not required for resurfacing projects. However the condition of the existing pipes should be determined by visual inspection to ensure that they do not warrant replacement. Guidelines discussed in Chapter 4 of this manual should be reviewed to perform culvert inspections and condition surveys. Pipes and drainage structures should be cleaned as necessary.

### **3.10.5 Existing Problems or Concerns**

Existing drainage problems should be investigated, documented and addressed. The district drainage engineer and the maintenance garage responsible for the area should be contacted to determine if there are any areas of concern such as flooding, icing conditions, evidence of erosion at outlets or any other drainage conditions that may be remedied under the scope of the project.