

761—112.6(306A) Drainage requirements. This rule establishes drainage requirements for all locations where access is requested to the primary highway system.

112.6(1) Entrances must be constructed so that they do not adversely affect primary highway drainage or drainage of the adjacent property. The drainage and the stability of the highway subgrade must not be impaired by driveway construction or roadside development. Construction of an entrance shall not cause water to flow across the primary highway pavement or to pond on the shoulders or in the ditch, or result in erosion within the primary highway right-of-way limits.

112.6(2) Drainage collected by ditches, gutters or pipes on private property shall not be discharged into the primary highway drainage system unless expressly approved by the department. An applicant may be required to submit a drainage study to the department that justifies the drainage system proposed and the pipe or sewer sizes to be used. The applicant shall not interfere with the natural course of drainage.

112.6(3) When the construction of an entrance necessitates crossing a highway ditch that has been constructed to carry drainage, a drainage structure shall be installed in the ditch by the applicant at the applicant's expense. The low point of the ditch shall dictate the location for culvert placement unless otherwise specified by the department. Under no circumstances shall existing ditches or gutters be filled without adequate alternate provisions for drainage.

a. The department's engineering staff will assist in determining the size and length of culverts and aprons. A culvert shall be of adequate size to handle drainage, but in most situations the culvert shall not be less than 18 inches in diameter. Where shallow ditches exist, the department may approve small arched culverts or culvert sizes less than 18 inches in diameter. Culvert pipe shall comply with departmental standard specifications as they exist at the time of installation.

b. Length of culvert pipe shall be sufficient to accommodate the entrance slopes. The finished surface elevation of an entrance over a culvert pipe, or the location where a culvert would normally be placed, should be sloped away from the primary highway pavement, preferably an extension of the 4 percent shoulder slope, to prevent surface water from draining onto the highway pavement.

c. Drainage structures located within the primary highway right-of-way shall be maintained by the department except for concrete box culverts and bridges constructed by a permit holder under authority of an entrance permit. These structures shall be maintained by the permit holder.

112.6(4) Where drainage is carried along an existing curb, the entrance shall be constructed with a rise in elevation of at least 6 inches from the street gutter at the entrance to a point 6 feet behind the gutter to prevent runoff from spilling onto private property. The flow line of the gutter through the entrance shall be restored.